Manz AG
Reutlingen

Short-form audit report
Annual financial statements and management report
31 December 2021

Translation from the German language

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Translation from the German language

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Note:

We have issued the audit opinion presented below in compliance with legal and professional requirements subject to the conditions described in the enclosed "Engagement Terms, Liability and Conditions of Use".

Translation of the German independent auditor's report concerning the audit of the annual financial statements and management report prepared in German

B. Reproduction of the auditor's report

We issued the following qualified auditor's report on the annual financial statements, the management report and the ESEF documents:

"Independent auditor's report

To Manz AG

Report on the audit of the annual financial statements and of the management report

Qualified opinions

We have audited the annual financial statements of Manz AG, Reutlingen, which comprise the balance sheet as at 31 December 2021, and the income statement for the fiscal year from 1 January to 31 December 2021, and notes to the financial statements, including the accounting policies presented therein. In addition, we have audited the management report of Manz AG for the fiscal year from 1 January to 31 December 2021. In accordance with the German legal requirements, we have not audited the content of the combined statement on corporate governance pursuant to Sec. 289f HGB ["Handelsgesetzbuch": German Commercial Code] which is published on the website stated in the management report and is part of the management report.

In our opinion, on the basis of the knowledge obtained in the audit,

- with the exception of the possible effects of the matter described in section "Basis for the qualified opinions", the accompanying annual financial statements comply, in all material respects, with the requirements of German commercial law applicable to business corporations and give a true and fair view of the assets, liabilities and financial position of the Company as at 31 December 2021 and of its financial performance for the fiscal year from 1 January to 31 December 2021 in compliance with German legally required accounting principles, and

- with the exception of the possible effects of the matter described in section “Basis for the qualified opinions”, the attached management report as a whole provides an appropriate view of the Company’s position. With the exception of the possible effects of this matter, the management report is in all material respects consistent with annual financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the management report does not cover the content of the combined Corporate Governance Statement referred to above.

Pursuant to Sec. 322 (3) Sentence 1 HGB, we declare that, with the exception of the qualifications of the opinions on the annual financial statements and on the management report, our audit has not led to any reservations relating to the legal compliance of the annual financial statements and of the management report.

Basis for the qualified opinions

A significant project of Manz AG is the CIGSFab project with the Chinese client Chongquin Shenhua Thin Film Solar Technology Co., Ltd., for the delivery of a solar module production line. By letters dated 10 June 2021, 11 November 2021 and 18 February 2022, Manz AG terminated the contract on the delivery of the solar module production line making reference to the relevant regulations of the contract between Manz AG and Chongquin Shenhua Thin Film Solar Technology Co., Ltd., because the completion of the solar module production line has been interrupted since the installation of machines upon customer request in December 2020 and has not been resumed ever since. In addition, Manz AG has asserted all claims for the services rendered to date. The claims asserted relate to outstanding payments from the contract and accrued additional expenses. The client has rejected these claims and refuses payment or has asserted claims of its own against Manz AG. As of 31 December 2021, Manz AG recognized work in process plus prepayments and less payments received (“CIGS inventories”) of EUR 7.3m.

Due to ongoing negotiations and the outstanding agreement with the client as well as the uncertain liquidity situation of the client, there is a risk of material misstatement of the CIGS inventories recognized. The Managing Board made an assessment regarding the recoverability of the CIGS inventories on the basis of historical, public information which was available to them. Suitable evidence of the future liquidity situation of the client could not be presented. Therefore, the information on recoverability provided to us does not constitute sufficient and appropriate audit evidence for the assessment of creditworthiness and liquidity situation of the client. We were also unable to obtain reasonable assurance regarding the recoverability of the recognized CIGS inventories by performing alternative procedures. We are therefore unable to rule out that an impairment of the recognized CIGS inventories should have been performed with corresponding effects on the net income/net loss for the year and the equity.

This matter may also have a negative effect on the presentation of the development of business, including the business result and the Company’s position, and the presentation of opportunities and risks of future development in the management report.

In accordance with Article 10 (2) c) ii) of the EU Audit Regulation, we summarize our audit response to this risk as follows:

As part of our audit procedures to assess the recoverability of CIGS inventories, we discussed the current status of negotiations regarding the claims that have been asserted with Manz AG’s Managing Board and inspected Manz AG’s written communication with the client. In so doing, we particularly examined the contractual basis of the termination of the contract by Manz AG.

Furthermore, we analyzed the contractual basis taking into account the assessment of the external legal advisors of Manz AG and a lawyer confirmation obtained regarding the legal claim and the ability to enforce this claim. To assess the creditworthiness and liquidity situation of the client, we analyzed the historical, public information provided by the Managing Board.

We conducted our audit of the annual financial statements and of the management report in accordance with Sec. 317 HGB and the EU Audit Regulation (No 537/2014, referred to subsequently as “EU Audit Regulation”) and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the “Auditor’s responsibilities for the audit of the annual financial statements and of the management report” section of our auditor’s report. We are independent of the Company in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Art. 10 (2) f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Art. 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the annual financial statements and on the management report.

Key audit matters in the audit of the annual financial statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the annual financial statements for the fiscal year from 1 January to 31 December 2021. These matters were addressed in the context of our audit of the annual financial statements as a whole, and in forming our opinion thereon; we do not provide a separate opinion on these matters.

In addition to the matter described in section “Basis for the qualified opinions”, we determined the following matters to be a key audit matter, which are disclosed in our auditor’s report:

1. Impairment of shares in affiliates and equity investments

<u>Reasons why the matter was determined to be a key audit matter:</u>

For the purpose of impairment testing, the Company’s executive directors determine the net realizable values for all shares in affiliates and equity investments on an annual basis using a capitalized earnings method.

The result of the valuations depends chiefly on the future cash inflows estimated by the executive directors as well as the discount rate used. Due to the materiality of the shares in affiliates and equity investments as well as the fact that impairment testing involves a large degree of judgment and uncertainties, we determined the impairment testing of shares in affiliates and equity investments to be a key audit matter.

<u>Auditor’s response:</u>

We verified the methodology and clerical accuracy of the valuation model used.

We checked on a test basis that the planning used for the impairment tests is in line with the business plan of the Company approved by the Managing Board and ratified by the Supervisory Board. In addition, we examined the growth rates for income and expenses used to roll forward the planning by comparing with internal data. We also analyzed the budgetary planning of individual equity investments with regard to adherence to the planning in the past and obtained evidence substantiating the individual assumptions used in the budgetary planning.

We assessed the individual components used to determine the discount rate with the involvement of our internal experts by analyzing the peer group, comparing market data with external evidence and examining the clerical accuracy of the calculation.

Our audit procedures regarding the impairment of shares in affiliates and equity investments did not lead to any reservations.

Reference to related disclosures:

The disclosures by the Company on the impairment of shares in affiliates and equity investments can be found in the notes to the financial statements in the section “Accounting policies”.

2. Accounting for construction contracts

Reasons why the matter was determined to be a key audit matter:

A significant part of the Company’s business activities is processed via construction contracts. Revenue from construction contracts is recognized in accordance with the completed contract method when all primary and significant secondary obligations have been fulfilled. We consider the accounting for construction contracts and especially the resulting revenue recognition to be an area posing a significant risk of material misstatement and thus a key audit matter, as the recognition of revenue from individual projects in the appropriate period has a material impact on the presentation of the Company’s financial performance. Additionally, the valuation of inventories at net realizable value requires the executive directors to exercise judgment and make estimates and assumptions. This particularly applies to the total contract costs, remaining costs to completion, total contract revenue including amendments as well as contract risks.

Auditor’s response:

As part of our audit procedures, we obtained an understanding of the Company’s internally established methods and processes of project management in the bid and execution phase of construction contracts.

As part of our substantive audit procedures, we evaluated the executive directors' estimates and assumptions based on a risk-based selection of a sample of contracts for projects. Our audit procedures included, among others, a review of the contracts and their terms and conditions including contractually agreed termination rights, penalties for delay and breach of contract as well as damages.

We further performed inquiries of project management with respect to the development of the projects, the reasons for deviations between planned and actual costs, the current estimated costs to complete the projects and the assessments of the executive directors on probabilities that contract risks will materialize.

In addition, we analyzed billable revenues as of the reporting date and the corresponding cost of sales to be recognized in the income statement in order to evaluate whether income was recognized in the appropriate period. Furthermore, we obtained evidence from third parties for selected projects (e.g., project acceptance documentation, evidence on the transfer of risk and contractual terms and conditions).

Our audit procedures did not lead to any reservations relating to the accounting for construction contracts.

Reference to related disclosures:

We refer to the disclosures in the notes to the financial statements in the "Accounting policies" section with regard to the accounting policies applied in accounting for constructing contracts.

Other information

The executive directors and the Supervisory Board are responsible for the declaration pursuant to Sec. 161 AktG ["Aktiengesetz": German Stock Corporation Act] on the German Corporate Governance Code, which is part of the statement on corporate governance. In all other respects, the executive directors are responsible for the other information. The other information comprises the statement on corporate governance referred to above.

Our opinions on the annual financial statements and on the management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the annual financial statements, with the management report or our knowledge obtained in the audit, or

- otherwise appears to be materially misstated.

Responsibilities of the executive directors and the Supervisory Board for the annual financial statements and the management report

The executive directors are responsible for the preparation of the annual financial statements that comply, in all material respects, with the requirements of German commercial law applicable to business corporations, and that the annual financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with German legally required accounting principles. In addition, the executive directors are responsible for such internal control as they, in accordance with German legally required accounting principles, have determined necessary to enable the preparation of annual financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the annual financial statements, the executive directors are responsible for assessing the Company's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting, provided no actual or legal circumstances conflict therewith.

Furthermore, the executive directors are responsible for the preparation of the management report that, as a whole, provides an appropriate view of the Company's position and is, in all material respects, consistent with the annual financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the management report.

The Supervisory Board is responsible for overseeing the Company's financial reporting process for the preparation of the annual financial statements and of the management report.

Auditor’s responsibilities for the audit of the annual financial statements and of the management report

Our objectives are to obtain reasonable assurance about whether the annual financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the management report as a whole provides an appropriate view of the Company’s position and, in all material respects, is consistent with the annual financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor’s report that includes our opinions on the annual financial statements and on the management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sec. 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual financial statements and this management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the annual financial statements and of the management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit of the annual financial statements and of arrangements and measures (systems) relevant to the audit of the management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems of the Company.

- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Conclude on the appropriateness of the executive directors’ use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor’s report to the related disclosures in the annual financial statements and in the management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor’s report. However, future events or conditions may cause the Company to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the annual financial statements, including the disclosures, and whether the annual financial statements present the underlying transactions and events in a manner that the annual financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with German legally required accounting principles.

- Evaluate the consistency of the management report with the annual financial statements, its conformity with [German] law, and the view of the Company’s position it provides.

- Perform audit procedures on the prospective information presented by the executive directors in the management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the annual financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other legal and regulatory requirements

Report on the assurance on the electronic rendering of the annual financial statements and the management report prepared for publication purposes in accordance with Sec. 317 (3a) HGB

Opinion

We have performed assurance work in accordance with Sec. 317 (3a) HGB to obtain reasonable assurance about whether the rendering of the annual financial statements and the management report (hereinafter the "ESEF documents") contained in the attached file "Manz_AG_JA+LB_ESEF-2021-12-31 (SHA-256-checksum: 52aa706d82a7404caee399d 1d4e175739cd1c0150a46653bf39f0093a4091220" and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance work extends only to the conversion of the information contained in the annual financial statements and the management report into the ESEF format and therefore relates neither to the information contained within these renderings nor to any other information contained in the file identified above.

In our opinion, the rendering of the annual financial statements and the management report contained in the file identified above and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format. Beyond this assurance opinion and our audit opinions on the accompanying annual financial statements and the accompanying management report for the fiscal year from 1 January to 31 December 2021 contained in the "Report on the audit of the annual financial statements and of the management report" above, we do not express any assurance opinion on the information contained within these renderings or on the other information contained in the file identified above.

Basis for the opinion

We conducted our assurance work on the rendering of the annual financial statements and the management report contained in the file identified above in accordance with Sec. 317 (3a) HGB and the IDW Assurance Standard: Assurance on the Electronic Rendering of Financial Statements and Management Reports Prepared for Publication Purposes in Accordance with Sec. 317 (3a) HGB (IDW AsS 410) (10.2021). Our responsibility in accordance therewith is further described in the "Auditor's responsibilities for the assurance work on the ESEF documents" section. Our audit firm applies the IDW Standard on Quality Management 1: Requirements for Quality Management in the Audit Firm (IDW QS 1).

Responsibilities of the executive directors and the Supervisory Board for the ESEF documents

The executive directors of the Company are responsible for the preparation of the ESEF documents including the electronic rendering of the annual financial statements and the management report in accordance with Sec. 328 (1) Sentence 4 No. 1 HGB.

In addition, the executive directors of the Company are responsible for such internal control as they have determined necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements of Sec. 328 (1) HGB for the electronic reporting format.

The Supervisory Board is responsible for overseeing the process for preparing the ESEF documents as part of the financial reporting process.

Auditor’s responsibilities for the assurance work on the ESEF documents

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material intentional or unintentional non-compliance with the requirements of Sec. 328 (1) HGB. We exercise professional judgment and maintain professional skepticism throughout the assurance work. We also:

- Identify and assess the risks of material intentional or unintentional non-compliance with the requirements of Sec. 328 (1) HGB, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance opinion.

- Obtain an understanding of internal control relevant to the assurance on the ESEF documents in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls.

- Evaluate the technical validity of the ESEF documents, i.e., whether the file containing the ESEF documents meets the requirements of Commission Delegated Regulation (EU) 2019/815, in the version in force at the date of the financial statements, on the technical specification for this file.

- Evaluate whether the ESEF documents enable an XHTML rendering with content equivalent to the audited annual financial statements and to the audited management report.

Further information pursuant to Art. 10 of the EU Audit Regulation

We were elected as auditor by the annual general meeting on 7 July 2021. We were engaged by the Supervisory Board on 10 November 2021. We have been the auditor of Manz AG without interruption since fiscal year 2019.

We declare that the opinions expressed in this auditor’s report are consistent with the additional report to the Supervisory Board pursuant to Art. 11 of the EU Audit Regulation (long-form audit report).

In addition to the financial statement audit, we have provided to the audited company the following services that are not disclosed in the audited annual financial statements or in the audited management report:

In addition to the audit, we performed permitted audit-related services in connection with the formal audit of the remuneration report required by Sec. 162 (3) AktG.

Other matter – use of the auditor's report

Our auditor's report must always be read together with the audited annual financial statements and the audited management report as well as the assured ESEF documents. The annual financial statements and the management report converted to the ESEF format – including the versions to be published in the *Bundesanzeiger* [German Federal Gazette] – are merely electronic renderings of the audited annual financial statements and the audited management report and do not take their place. In particular, the ESEF report and our assurance opinion contained therein are to be used solely together with the assured ESEF documents made available in electronic form.

German Public Auditor responsible for the engagement

The German Public Auditor responsible for the engagement is Mr. Steffen Maurer.

Stuttgart, 30 March 2022

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Maurer	Ilg
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

MANZ AG, REUTLINGEN

BALANCE SHEET FOR DECEMBER 31, 2021

A S S E T S

	12/31/2021 euros		12/31/2020 euros
A. NON-CURRENT ASSETS			
I. Intangible assets			
1. Internal generated industrial property, rights and similar rights and assets	18.886.917,08		16.957.408,60
2. Concessions, industrial and similar rights and assets and licences in such rights and assets	1.144.295,88		1.107.408,40
		20.031.212,96	18.064.817,00
II. Tangible assets			
1. Land, land rights and buildings including buildings on third party land	262.865,00		229.098,00
2. Technical equipment and machines	424.557,00		580.571,00
3. Other equipment, factory and office equipment	571.348,00		571.004,00
		1.258.770,00	1.380.673,00
III. Financial assets			
1. Shares in affiliated companies	29.654.682,07		41.789.377,95
2. Loans to affiliated companies	0,00		916.695,19
3. Participations	4.049.210,91		7.260.265,11
		33.703.892,98	49.966.338,25
		54.993.875,94	69.411.828,25
B. CURRENT ASSETS			
I. Inventories			
1. Raw materials, consumables and supplies	7.816.515,32		4.106.333,14
2. Unfinished goods	251.105.643,28		274.067.245,58
3. Finished goods and merchandise	681.685,78		704.507,34
4. Prepayments	50.852.872,53		66.089.808,31
5. Payments received on account of orders	-213.590.236,74		-240.285.858,17
		96.866.480,17	104.682.036,20
II. Receivables and other assets			
1. Trade receivables	6.235.688,29		1.080.925,95
2. Receivables from affiliated companies	123.399,45		249.445,12
3. Other assets	6.375.984,45		1.369.037,06
		12.735.072,19	2.699.408,13
III. Cash in hand, bank balances and checks		20.305.797,77	56.772.625,81
		129.907.350,13	164.154.070,14
C. PREPAID EXPENSES		770.426,95	416.193,21
		185.671.653,02	233.982.091,60

L I A B I L I T I E S

	12/31/2021 euros		12/31/2020 euros
A. EQUITY			
I. Issued capital		7.756.804,00	7.744.088,00
II. Capital reserves		26.294.940,98	41.294.940,98
III. Revenue reserves		1.470.601,00	1.470.601,00
IV. Retained earnings		-6.463.797,86	-6.143.414,72
		29.058.548,12	44.366.215,26
B. PROVISIONS			
1. Provisions for pensions and similar obligations	3.165.552,00		3.062.687,00
2. Tax provisions	1.120.600,98		827.300,98
3. Other provisions	9.087.965,23		6.289.678,67
		13.374.118,21	10.179.666,65
C. LIABILITIES			
1. Liabilities to banks	0,00		1.793,62
2. Advanced payments received on account of order	77.028.031,18		117.258.866,49
3. Trade payables	17.597.200,62		11.849.052,76
4. Liabilities to affiliated companies	46.166.856,49		43.525.876,34
5. Other liabilities	2.384.091,73		6.717.987,98
- thereof from taxes: EUR 2.184.996,09 (previous year: EUR 6.170.823,50):			
		143.176.180,02	179.353.577,19
D. DEFERRED INCOME		62.806,67	82.632,50
		185.671.653,02	233.982.091,60

MANZ AG, REUTLINGEN

INCOME STATEMENT FOR DECEMBER 2021

		2021 euros		2020 euros
1.	Revenues		178.339.053,57	78.711.710,19
2.	Increase or decrease in finished goods and unfinished goods		-22.984.423,86	39.081.326,03
3.	Other capitalized internal work		7.262.316,74	5.645.604,17
4.	Other operating income - thereof from currency translation: EUR 41.182,20 (previous year: EUR 207.138,97)		2.582.672,22	5.088.781,44
5.	Cost of materials			
	a) Cost of raw materials, consumables and supplies and of purchased goods	-85.505.237,51		-54.326.878,76
	b) Cost of purchased services	-18.317.837,10		-16.971.274,28
			-103.823.074,61	-71.298.153,04
6.	Personnel expenses			
	a) Wages and salaries	-34.564.430,15		-31.280.459,50
	b) Social security, post-employment and other employee benefit costs - thereof for pension provisions: EUR 75.456,95 (previous year: EUR 49.800,18)	-6.018.444,30		-5.443.818,34
			-40.582.874,45	-36.724.277,84
7.	Depreciation and Amortisation			
	a) Depreciation/Amortisation for intagible fixed assets and property, plant and equipment		-5.676.645,02	-4.875.761,36
8.	Other operating expenses - thereof expenses acc. to section Art. 67 (1) and (2) EGHGB: EUR 51.196,00 (previous year: EUR 51.210,00) - thereof from currency conversion: EUR 358.365,44 (previous year: EUR 246.633,57)		-22.233.071,84	-19.875.538,88
9.	**Operating result**		-7.116.047,25	-4.246.309,29
10.	Other interest and similar income - thereof from affiliated companies: EUR 20.480,89 (Vorjahr: EUR 121.026,48) - thereof from compunding: EUR 7.994,69 (previous year: EUR 9.173,21)		392.561,60	131.420,71
11.	Depreciation of financial assets and of securities held as current assets		-7.339.265,11	-4.440.000,00
12.	Interest and similar expenses - thereof to affiliates: EUR 583.340,00 (previous year: EUR 483.131,55) - thereof from compounding: EUR 228.480,92 (previous year: EUR 240.618,39)		-930.215,42	-754.791,99
13.	**Financial result**		-7.876.918,93	-5.063.371,28
14.	Income taxes		0,00	0,00
15.	**Earnings after taxes**		-14.992.966,18	-9.309.680,57
16.	Other taxes		-327.416,96	-350.062,30
17.	**Loss for the year**		-15.320.383,14	-9.659.742,87
18.	Loss carried forward from the previous year		-6.143.414,72	-6.483.671,85
19.	Withdrawals from capital reserves		15.000.000,00	10.000.000,00
20.	**Retained earnings**		-6.463.797,86	-6.143.414,72

Manz AG, Reutlingen notes for financial year 2021

General information

Manz AG has its headquarters in Reutlingen and is registered in the commercial register of the Stuttgart District Court (HRB 353989).

The existing annual financial statements have been prepared in accordance with the provisions of sections 242 et. seqq. and 264 et. seqq. of the German Commercial Code (HGB) and with the relevant provisions of the German Stock Corporation Act (AktG) and the Articles of Incorporation. The company is subject to the regulations applicable to large stock corporations. The profit and loss account is prepared according to the total cost method.

Accounting and Valuation Methods

Presentation, structure, approach, and valuation of the annual financial statements are consistent with the previous year's principles.

Internally generated intangible fixed assets are valued in accordance with section 255 (2a) HGB with the expenses incurred in their development (development costs). If the development is not yet completed, no depreciation will be charged. The useful life is measured according to its product life cycle or its expected synergy effects, as far as they can be reliably estimated. Otherwise, the useful life is assumed at ten years in accordance with section 253 (3) HGB.

Acquired **intangible assets** are carried at acquisition cost and, if they are subject to wear and tear, are reduced by scheduled depreciation over their useful life. Depreciation is based on useful lives of three to five years.

Property, plant, and equipment are stated at acquisition or manufacturing cost and, insofar as they are depreciable, are depreciated by the standard straight-line depreciation method. Scheduled depreciation is based on useful lives of between three and thirteen years. Low-value assets with acquisition or manufacturing costs up to EUR 800.00 are fully depreciated in the year of acquisition.

In the case of **financial assets**, shares in affiliated companies and investments are carried at the lower costs of acquisition or fair value if permanent impairment is to be assumed. Loans are valued at nominal value or the lower fair value.

Inventories of **raw materials, consumables, and supplies** are capitalized at the lower of average or past cost prices or at daily prices on the balance sheet date.

Work in progress and finished goods are valued at manufacturing cost on the basis of individual calculations based on current operating accounts. In addition, directly attributable material costs, production charges, and special expenses, and manufacturing and material overhead, as well as proportionate administrative costs, are also taken into account. No interest on borrowings is included in the cost of sales.

There were no losses in all cases; i.e., deductions were made for the costs still to be incurred from the estimated sales prices.

Merchandise is carried at the lower acquisition costs or market prices; made prepayments at the nominal amount.

All identifiable risks in **inventories** resulting from above-average storage periods, reduced usability, and lower replacement costs are taken into account through appropriate devaluations.

The **prepayments received on orders** are always offset against the stock of unfinished products. If the amount of the advance payments received exceeds the manufacturing costs of inventories, it is reported under prepaid liabilities received.

Demands and other assets are stated at their nominal value. All risky items are accounted for by recognizing appropriate individual valuation allowances; the general credit risk has been accounted for by making appropriate valuation allowances on the trade accounts receivable balance, reduced by value-added tax, which is still outstanding at the balance sheet date.

Liquid assets plus **deferred income** are recognized at their nominal value.

Differences between the commercial and tax valuations of assets, liabilities, and deferred income, as well as the inclusion of eligible loss and interest carry forwards, are recognized as a surplus of **deferred tax liabilities** if a tax burden is to be assumed in future financial years. Due to the existing loss history and the associated non-recoverability of the tax loss carry forwards, no excess on the assets side is capitalized. Deferred tax assets are offset by existing deferred tax liabilities as long as they correspond to each other. Loss carry forwards are taken into account to the extent that offsets against taxable income appear feasible within the next five years.
Deferred taxes are measured on the basis of the applicable corporate income tax rate and in accordance with the corporate tax rates. The tax rate for the past financial year was 29.13 %, including corporation tax, solidarity surcharge, and trade income tax.

The Company introduced a **Performance Share Plan** for members of the Managing Board and other eligible employees for the first time in 2008. Here, stock options are granted with a certain waiting period. The recipient receives a Manz share at the price of EUR 1.00 after expiration of the waiting period. The stock awards expire when the employment is terminated or a termination agreement is concluded. The conditional increase in share capital was approved in 2008, 2011, 2012, 2015 and 2019 in order to service the stock options (see also Conditional Capital I, II, III). As in previous years, the issuance of stock options/awarded stock shares was not accounted for in this commercial balance sheet of Manz AG.

The **pension obligations** are calculated using the projected unit credit method based on the settlement amount calculated according to the "Mortality tables 2018 G" of Prof. Dr. med. Klaus Heubeck. For discounting purposes, the average market interest rate for the past ten years, with a remaining term of 15 years, of 1.87 % (previous year 2.3 %) was used. Expected pension increases of 1.7 % (previous year 1.7 %) and salary increases were taken into account with 2.5 % (previous year 2.5 %).

Other provisions take into account all uncertain liabilities and anticipated losses from pending transactions. These are made up to the settlement amount deemed necessary (including future increases in costs and prices) based on reasonable business judgment. Reserves with a remaining term of more than one year were discounted using the average market interest rate for the past seven financial years, corresponding to their remaining term. The **anniversary provisions** are recognized in accordance with section 253 (1) sentence 2 HGB at the settlement amount required by reasonable commercial judgment. For the discounting, the average market interest rate of the past seven years, with a remaining term of 15 years, of 1.35 % (previous year 1.6 %) was used. The expected fluctuation was taken into account with 9.0 % (previous year 9.0 %). Assets that serve exclusively to fulfill obligations from partial retirement and are beyond the reach of all other creditors are measured at fair value. The assets are offset against the corresponding underlying obligation. If there is a surplus, it is included under the provisions. If the value of the assets exceeds the obligations, the assets are shown on the assets page.

Liabilities are stated at the settlement amount.

Receivables and liabilities denominated in **foreign currencies** with a remaining term of up to one year are valued at the average spot exchange rate on the balance sheet date.

In accordance with section 254 HGB, **derivative financial transactions** are combined with an underlying transaction as a single valuation unit if there is a direct hedging relationship between the financial transaction and the underlying transaction. The so-called "freezing method" is used, under which the offsetting changes in value arising from the hedged risk are not recognized in the balance sheet. Financial transactions for which no valuation unit was formed are valued individually at market prices. Resulting unrealized losses are recognized in profit or loss.

Explanations for the balance sheet

Fixed assets

The development of the individual items of fixed assets is shown in the schedule of assets, stating the depreciations of the financial year.

Internally generated intangible assets

Research and development costs amounted to a total of TEUR 8,420 in the financial year, of which development costs of TEUR 6,796 were capitalized as intangible assets.

Investments

The composition of shareholdings is shown in the following table:

Shares held in affilitated companies	Participation in %	Equity TEUR	Result TEUR
Manz Batterytech Tübingen GmbH, Tübingen 1)	100,00%	1.521	-2
Manz USA Inc., North Kingstown, USA 1)	100,00%	925	37
Manz Hungary Kft., Debrecen, Ungarn 1)	100,00%	1.725	625
Manz Slovakia, s.r.o., Nove Mesto nad Vahom, Slovakei 1)	100,00%	18.923	1.507
Manz Italy s.r.l., Sasso Marconi, Italien 1)	100,00%	7.041	954
Suzhou Manz New Energy Equipment Co., Ltd., Suzhou, VR China	56,00%	499	-64
Manz Asia Ltd., Hong-Kong, VR China 1)	100,00%	14.083	6.986
Manz China Suzhou Ltd., Suzhou, VR China 1)	100,00%	-2.299	-6.347
Manz India Private Limited, New Delhi, Indien 1)	75,00%	168	37
Manz Chungli Ltd., Chungli, Taiwan 1)	100,00%	50.555	13.133
Manz Taiwan Ltd., Chungli, Taiwan 1)	100,00%	67.555	-4.997

Participations	Participation in %	Equity TEUR	Result TEUR
NICE PV Research Ltd., Peking, VR-China 1)	11,10%	23.946	-56.264
CADIS Engineering, Schwendi	40,00%	2.087	-224
Q.big 3D GmbH, Aalen	24,99%	715	-707
MetOX Technologies, Inc. Huston, USA	3,26%	13.818	-3.929

[1)] The information relates to the annual financial statements according to IFRS; values converted into euros

The following changes occurred for financial assets in financial year 2021:

As of January 26, 2021, Manz (B.V.I.) Ltd, Road Town, British Virgin Islands, was liquidated. The assets, liabilities and equity were transferred to Manz Taiwan Ltd. The shares were held by Manz Taiwan Ltd.

On January 26, 2021, the shares in Talus Manufacturing Ltd. were sold to Lam Research for 44,715 thousand euros. The revenues from the sale accrued to Manz Taiwan Ltd. The shares were held by Manz Taiwan Ltd.

Effective February 03, 2021, Manz AG acquired a 40 % investment in CADIS Engineering GmbH, Schwendi, Germany for acquisition costs of EUR 1,245,366.68. Uncalled contributions in kind of EUR 1.2 million are still outstanding, which are due after the expiry of 30 months after the acquisition of the participation.

A capital reduction of 12,056 thousand euros was carried out on the 100 % investment in Manz Asia Ltd. in the reporting year, which reduced the previous book value of the investment by this amount.

On October 11, 2021, Manz AG acquired a 24.99 % investment in Q.big 3D GmbH, Aalen, Germany. The acquisition costs amounted to EUR 1,005,656.40.

Effective November 30, 2021, Manz AG acquired a 3.26 % investment in MetOX Technologies, Inc, Houston, USA for acquisition costs of EUR 1,798,187.83.

In the 2021 fiscal year, an impairment loss of TEUR 7,260 was recognized on the 11.1 % participation in NICE PV Research Ltd.

In the 2021 fiscal year, an impairment loss of EUR 79 thousand was recognised on the 56% investment in Suzhou Manz New Energy Equipment Ltd.

Inventories

Inventories include prepayments made to affiliated companies in the amount of TEUR 501 (previous year: TEUR 524), as well as prepayments received from affiliated companies in the amount of TEUR 0 (previous year: EUR 0). Payments on account of TEUR 250 (previous year: TEUR 215) do not relate to inventories and are reported under other assets.

Inventories include the large-scale CIGS project for the delivery of a CIGS production line as a work in progress as at 31 December 2021. The customer does not currently plan to commission this plant. Further details can be found in the management report in the chapters on the explanation of target achievement in 2021 and in the risk report.

Receivables and other Assets

Trade receivables, receivables from affiliated companies, and other assets have a remaining term of up to one year, with the following exceptions. This relates to the tenant loan of TEUR 1,291 (previous year: TEUR 796) and the unpledged asset value of pension provisions amounting to TEUR 48, which is also reported under other assets (previous year: TEUR 47).

Receivables from affiliated companies only include trade receivables.

Liquid funds

Cash and cash equivalents include cash on hand and bank balances. In the case of bank balances, there are availability restrictions due to advance payment guarantees in the amount of TEUR 5,000 (previous year: TEUR 5,000).

Equity

Share capital

The subscribed capital of EUR 7,756,804.00 increased by EUR 12,716 compared to the previous year due to the issue of subscription shares as part of the Manz Performance Share Plan 2015 and Conditional Capital II and is divided into 7,756,804 no-par value bearer shares.

Authorized capital

Based on the resolution of the Annual General Meeting of July 7, 2021, the Executive Board of the Company is authorized, pursuant to section 3 (3) of the Articles of Association, to increase the share capital of the Company in the period up to July 6, 2026, with the approval of the Supervisory Board, on a one-off basis or in partial amounts, by a total of up to EUR 3,872,044.00 by issuing a total of up to 3,872,044 new bearer shares (no-par value shares) against cash or non-cash contributions (Authorized Capital 2021).

In principle, the new shares must be offered to shareholders for subscription. The new shares may also be assumed by banks designated by the Managing Board with the obligation to offer them to the shareholders for subscription (indirect subscription right). However, the Managing Board was authorized, with Supervisory Board approval, to exclude shareholders' subscription rights

- in the case of a capital increase against cash contributions, if the issue price of the new shares is not significantly lower within the meaning of section 203 (1) and (2) than the stock market price of the Company's shares of the same class at the time the issue price is determined, which should be as close as possible to the placement of the new shares. section 186 (3) sentence 4 Stock Corporation Act (AktG). This authorization for the exclusion of the subscription right applies only to the extent that shares to be issued in the capital increase do not in total represent a proportionate amount of the capital stock of more than EUR 774,408.00 and overall do not comprise more than 10 % of the capital stock at the time the authorization is exercised. The pro rata amount of the share capital of shares that are issued or sold during the term of this authorization due to other authorizations in direct or analogous application of section 186 (3), sentence 4 Stock Corporation Act (AktG), under exclusion of subscription rights shall be offset against this maximum amount for a subscription right exclusion;

- in the case of a capital increases for contributions in kind for the purpose of acquisition of companies, parts of companies, and holdings in companies of other assets or entering into mergers;

- to the extent that it is necessary to give holders of warrants or convertible bonds, profit-sharing rights, or profit-sharing bonds (or combinations of these instruments) issued by the company or direct or indirect affiliated companies of the company a subscription right to new shares to the same extent as they would be entitled upon exercising their option or conversion right or after fulfilling their conversion obligation;

- to exclude fractional amounts from the subscription right.

The Managing Board is authorized, with Supervisory Board approval, to determine the further details of the implementation of the capital increases based on the authorized capital.

The Supervisory Board will be given authorization to amend the wording of the Articles of Incorporation according to the implementation of the capital increase using authorized capital and after the expiration of the authorization term.

Authorization to issue partial debentures with options or conversion rights or conversion obligations, profit-sharing rights, and profit-sharing bonds (or combinations of these instruments), as well as Conditional Capital I

At the annual general meeting on July 2, 2019, a resolution was passed authorizing the Managing Board, with Supervisory Board approval, to issue bearer warrant or convertible bonds, profit-sharing rights and/or profit-sharing bonds, or a combination of these instruments (collectively referred to as "bonds"), up to a total nominal value of EUR 150 million on one or more occasions until July 1, 2024. In addition, the Managing Board was also authorized to grant holders of warrants option rights and holders of convertible bonds conversion rights for bearer shares of the company with a proportionate amount of capital stock totaling up to EUR 3,100,000.00, in accordance with the detailed terms and conditions of the warrants/convertible bonds.

The statutory subscription right is granted to the shareholders in the way that the bonds are underwritten by a bank or a syndicate of banks with the obligation to offer them for subscription to shareholders. If bonds are issued by a Manz AG group company within the meaning of section 18 Stock Corporation Act (AktG), the Company must accordingly ensure the granting of statutory subscription rights for the shareholders of Manz AG.

The Managing Board is however authorized, with Supervisory Board approval, to exclude fractional amounts from shareholders' subscription rights and also to exclude the shareholders' subscription rights to the extent necessary in order to give holders of already issued bonds with options or conversion rights and/or conversion obligations a subscription right to the extent to which they would be entitled after exercising their options or conversion rights or upon fulfilling their conversion obligation.

Furthermore, the Managing Board is authorized, with Supervisory Board approval, to completely exclude shareholders' subscription rights to bonds issued with an option and/or conversion right or conversion obligation, provided the Managing Board, after dutiful examination, arrives at the view that the issue price of the bonds is not significantly below their hypothetical market value as calculated according to accepted and, in particular, actuarial methods. This authorization to exclude the subscription right applies to bonds issued with an option and/or conversion right or a conversion obligation, carrying an option and/or conversion right or a conversion obligation for shares with a total proportionate amount of the capital stock, which may not exceed 10% of the capital stock, either at the time the authorization becomes effective or – in the event that this amount is lower – at the time this authorization is exercised. The following are offset against the aforementioned ten percent limit:

- new shares that are issued from authorized capital with the subscription right being excluded pursuant to section 186 (3) sentence 4 of the Stock Corporation Act (AktG) during the term of this authorization up to the issue, subject to the exclusion of subscription rights pursuant to section 186 (3) sentence 4 of the German Stock

Corporation Act (AktG), of the bonds carrying an option and/or conversion right or conversion obligation, and

- such shares as are acquired on the basis of an authorization granted at the annual general meeting and are disposed of, with exclusion of the subscription right, pursuant to section 71 (1) no. 8, sentence 5 of the German Stock Corporation Act (AktG), in conjunction with section 186 (3), sentence 4 Stock Corporation Act (AktG) during the term of this authorization up to the issue, subject to the exclusion of subscription rights pursuant to section 186 (3), sentence 4 Stock Corporation Act (AktG), of the bonds carrying an option and/or conversion right or conversion obligation.

Insofar as profit participation rights or participating bonds without option rights or conversion rights / obligations are issued, the Managing Board is authorized to exclude the subscription rights of shareholders with the consent of the Supervisory Board if these profit participation rights or participating bonds are similar to obligations. I.e. no membership rights are conferred in the company, no granting of a share in the liquidation proceeds, and the amount of interest is not calculated on the basis of the amount of net income, retained earnings or dividends. Moreover, in such a case, the interest payment and the issue price of the profit-sharing rights or profit-sharing bonds must reflect current market conditions at the time of issue.

Pursuant to section 3 (4) of the Articles of Incorporation, the capital stock of the company has been conditionally increased by up to EUR 3,100,000.00 through the issue of up to 3,100,000 no-par-value bearer shares (Conditional Capital I). The contingent capital increase will only be carried out to the extent that the holders of option or conversion rights or those obliged to convert from warrant or convertible bonds, profit participation rights or participating bonds issued by the Company or a Group company within the meaning of section 18 of the Stock Corporation Act (AktG) on the basis of issued or guaranteed at the annual general meeting on July 2, 2019 under agenda point 5, exercise their option or conversion rights or, if they are required to convert, fulfill their obligation to convert, unless a cash settlement is granted or treasury shares or shares of another listed company. The new shares are issued at the option or conversion price to be determined in each case in accordance with the authorization resolution described above. The new shares are to participate in profit from the beginning of the financial year in which they are created on the basis of the exercise of options or conversion rights or of the fulfillment of conversion obligations. The Managing Board is authorized, with Supervisory Board approval, to establish the further details of the execution of the conditional capital increase.

Authorization to issue share subscription rights within the scope of the Manz- Share Plan 2015 as well as Conditional Capital II

At the annual general meeting held on July 7, 2015, a resolution was passed authorizing the Managing Board, with Supervisory Board approval, to issue a total of up to 59,000 subscription rights ("Performance Shares") for a total of up to 118,000 shares in the company to executives of affiliated companies as well as Manz's own managers below the executive level and managers of affiliated companies, both domestic and foreign, below the executive level on one or more occasions through June 30, 2020. The Supervisory Board was given authorization to issue a total of up to 56,000 subscription rights ("Performance Shares") for a total of up to 112,000 shares in the company to members of Manz's Managing Board, on one or more occasions, through June 30, 2020.

Subscription rights are to be granted, structured and exercised in accordance with the provisions in the resolution of the Annual General Meeting on July 7, 2015.

The authorization of July 7, 2015 was revoked by resolution passed at the annual general meeting of July 2, 2019, insofar as no subscription rights had yet been issued on the basis of the authorization.

Pursuant to section 3 (5) of the Articles of Incorporation, the company's capital stock has been conditionally increased by up to EUR 217,284.00 through the issue of up to 217,284 no-par value bearer shares (Conditional Capital II). The conditional capital increase serves to secure the rights of the holders of subscription rights ("Performance Shares") granted on the basis of the authorization granted by the Annual General Meeting on July 7, 2015. The shares will be issued at the issue amount established in the authorization adopted at the annual general meeting on Tuesday, July 7, 2015. The contingent capital increase will be carried out only to the extent subscription rights are exercised and the company does not issue either treasury shares or a cash settlement for the purpose of fulfillment of the subscription rights. The new shares will be equivalent to already issued shares of the same class with respect to their dividend entitlement. The Managing Board and, to the extent members of the Managing Board are affected, the Supervisory Board are authorized to establish the further details of the conditional capital increase and its implementation.

Authorization to issue share subscription rights within the scope of the Manz- Share Plan 2019 as well as Conditional Capital III

At the Annual General Meeting held on July 2, 2019, a resolution was passed authorizing the Managing Board, with Supervisory Board approval, to issue a total of up to 95,000 subscription rights for subscription of a total of up to 190,000 shares in the company to executives of affiliated companies of the company, as well as Manz's own managers below the executive level and managers of affiliated companies, both domestic and foreign, below the executive level on one or more occasions through June 30, 2024. The Supervisory Board was authorized to grant one or several times a total of up to 85,000 subscription rights for the purchase of up to 170,000 shares in the company to members of the company's Managing Board until June 30, 2024.

Subscription rights are to be granted, structured and exercised in accordance with the provisions in the resolution of the Annual General Meeting on July 2, 2019.

Pursuant to section 3 (6) of the Articles of Incorporation, the company's capital stock has been conditionally increased by up to EUR 360,000.00 through the issue of up to 360,000 no-par-value bearer shares (Conditional Capital III). The conditional capital increase serves to secure the rights of the holders of subscription rights granted on the basis of the authorization granted by the Annual General Meeting on July 2, 2019. The shares will be issued at the issue amount established in the authorization adopted at the annual general meeting on Tuesday, July 2, 2019. The contingent capital increase will be carried out only to the extent subscription rights are exercised and the company does not issue either treasury shares or a cash settlement for the purpose of fulfillment of the subscription rights. The new bearer shares will be equivalent to already issued shares of the same class with respect to their dividend entitlement. The Managing Board and, to the extent members of the Managing Board are affected, the Supervisory Board are authorized to establish the further details of the conditional capital increase and its implementation.

Furthermore, on June 30, 2020, the Annual General Meeting authorized the Managing Board and - if the shares are issued to members of the Managing Board - the Supervisory Board to use acquired treasury shares of Manz AG to service subscription rights that were or will be issued to members of the Managing Board and executives as part of the Manz Performance Share Plan 2015 resolved by the Annual General Meeting on July 7, 2015 under item 6 of the agenda or as part of the Manz Performance Share Plan 2019 resolved by the Annual General Meeting on July 2, 2019 under item 6 of the agenda (see below under the section "Treasury Shares"). This authorization to reissue clearly defines the group of people to whom the Manz shares can be transferred.

The Manz Performance Share Plan 2015 for Managing Board members and Company executives as well as the Company or its subsidiaries was explained in a report from the Managing Board at the Annual General Meeting on July 7, 2015. Likewise, the Manz Performance Share Plan 2019 for members of the Managing Board and Company executives and its group companies, which was approved during the Annual General Meeting 2019, was explained in a report by the Managing Board to the Manz AG Annual General Meeting on July 2, 2019.

The option to grant Manz AG's own shares to those entitled to subscribe in fulfillment of their subscription rights is a suitable means of counteracting the dilution of capital holdings and voting rights that would occur if the subscription rights were fulfilled with newly created shares based on the contingent capital. To the extent that the Company makes use of this option, there is no need to make use of contingent capital II according to section 3 (5) of the Articles of Incorporation or contingent capital III according to section 3 (6) of the Articles of Incorporation. Whether and to what extent the authorization to issue treasury shares is used to fulfill the subscription rights or whether new shares are issued instead from the contingent capital, is to be decided by the Managing Board and - if a member of the Managing Board exercises the subscription right - by the Supervisory Board, which is guided by the interests of the Company and its shareholders.

Capital reserves

Capital reserves are comprised primarily of contributions from shareholders pursuant to section 272 (2), no. 1 of the German Commercial Code, minus financing costs after taxes. Furthermore, this also includes the value of share-based compensation granted to management (including the Managing Board) as a salary component in the form of equity instruments.

In the context of profit appropriation, EUR 15.0 million (previous year: EUR 10.0 million) were withdrawn from capital reserves and used to balance out net losses.

Earnings reserves

Retained earnings amount to EUR 1,470,601 (previous year: EUR 1,470,601) and fall under section 266 (3) A. III. no. 4 HGB.

Accumulated loss

	EUR
Loss carried forward January 1, 2021	-6.143.414,72
Loss for the year 2021	-15.320.383,14
Allocation from the capital reserves	15.000.000,00
Net loss 2021	-6.463.797,86

Treasury shares

The Annual General Meeting on June 30, 2020 authorized the Executive Board of the Company to acquire treasury shares until June 29, 2025 in accordance with section 71 (1) no. 8 of the German Stock Corporation Act (AktG) up to a total of 10 % of the Company's capital stock existing at the time this authorization takes effect or - if this amount is lower - at the time this authorization is exercised. Whereby at no point in time more than 10 % of the capital stock of the company may be represented by the shares acquired on the basis of this authorization together with other shares of the company, which the company has already acquired and still possesses or which are attributable to it pursuant to sections 71d and 71e Stock Corporation Act (AktG). The provisions in section 71 (2), sentences 2 and 3 Stock Corporation Act (AktG) must be observed.

The acquisition may take place only through the securities exchange or by means of a public purchase order and must satisfy the principle of equal treatment of shareholders (section 53a Stock Corporation Act (AktG)).

The Managing Board was authorized to sell the treasury shares acquired on the basis of the above authorization also in manners other than through the stock exchange or through an offer to other shareholders, under the condition that the sale is for cash and is at a price that is not significantly below the stock-exchange price, at the time of the sale, of company shares with the same features. This authorization of use is restricted to shares with a proportionate amount of capital stock that in total does not exceed 10 % of the capital stock of the Company, neither at the time of coming into effect of this authorization, nor – if such amount is lower – at the time of exercise of the above authorization. The maximum limit of 10 % of the capital stock is reduced by the proportionate amount of the capital stock that is attributable to those shares that are issued or sold during the term of this authorization with exclusion of the subscription rights pursuant to or in accordance with section 186 (3), sentence 4 Stock Corporation Act (AktG). The maximum limit of 10 % of the capital stock is to be further reduced by the proportionate amount of the capital stock represented by those shares that were to be issued in order to service bonds with option or conversion rights and/or option or conversion obligations to the extent that such bonds are issued during the term of this authorization with exclusion of subscription rights in analogous application of section 186 (3), sentence 4 Stock Corporation Act (AktG).

The Managing Board was further authorized to transfer treasury shares acquired on the basis of the above authorization to third parties insofar as this is for the purpose of acquiring companies, parts of companies or interests in companies or other assets, or to carry out business combinations.

The Managing Board and – to the extent there is an obligation with respect to members of the Managing Board – the Supervisory Board were further authorized to use the treasury shares acquired on the basis of the above authorization for the purpose of fulfilling the subscription rights that were or are issued in the framework of the Manz Performance Share Plan 2015 resolved at the regular Annual General Meeting of July 7, 2015, under item 6 of the agenda or in the framework of the Performance Share Plan 2019 adopted at the Annual General Meeting of July 2, 2019, under item 6 of the agenda.

The Managing Board was also authorized to use the treasury shares acquired on the basis of the above authorization for the purpose of fulfillment of the subscription and conversion rights that result from exercising option or conversion rights or fulfilling option or conversion obligations that have been granted or imposed within the framework of issuing convertible or warrant bonds, profit-sharing rights, or profit-sharing bonds (or combinations of these instruments) of the company or its subsidiaries.

The Managing Board was further authorized to transfer own shares acquired on the basis of the above authorization to employees of the Company or employees or members of governing bodies of subordinate affiliates of the Company within the meaning of sections 15 et seqq. Stock Corporation Act (AktG).

In the financial year 2021, the Company did not acquire any treasury shares. In the previous year, there were 64 shares with an average price of EUR 23.14 per share and a market value of EUR 1 thousand.

Provisions

Provisions for Pensions and Similar Obligations

Pension benefit obligations are calculated on the basis of biometric probabilities according to the "2018 G mortality tables" of Prof. Dr. Klaus Heubeck, with the settlement amount determined using the projected unit credit method. Discounting is based on the respective average market interest rate published by the Deutsche Bundesbank for a remaining term of 15 years.

The revaluation of the pension reserves of the former Manz Tübingen GmbH resulted in an under-funding of TEUR 768 as of January 1, 2010. The option right is exercised in accordance with section 67 (1) EGHGB (German Commercial Code) and the required appropriation is distributed over a period of 12 years. In the reporting year, TEUR 51 was added to pension provisions for the last time with an effect on profit or loss, resulting in a reversal of the underfunding as of December 31, 2021.

Unpledged reinsurance policies were taken out in order to cover the risk arising from the pension obligations from the former Manz Tübingen GmbH. For this purpose, an asset value of TEUR 48 is reported under other assets.

The pension reserve amounts to TEUR 3,166 on the reporting date.

In fiscal year 2021, pension reserves are discounted at the average market interest rate over the past ten years. Pursuant to section 253 (6) HGB, the difference between the calculation of reserves using the average market interest rate of the past ten financial years and the calculation of the reserves using the average market interest rate of the past seven financial years must be determined. The difference within the meaning of section 253, (6) HGB amounts to EUR 202 thousand. This is subject to a distribution restriction.

The **tax provisions** mainly relate to tax provisions for withholding tax in Taiwan and China from receivables from Manz Taiwan Ltd. and Manz China Suzhou Ltd. in the amount of TEUR 1,121 (previous year: TEUR 827).

Other provisions mainly relate to accruals for outstanding invoices of TEUR 3,335 (previous year: TEUR 420), personnel provisions of TEUR 2,293 (previous year: TEUR 3,192), provisions for customer order-related rework in the amount of TEUR 1,479 (previous year 212 thousand) and provisions for warranties in the amount of TEUR 702 (previous year TEUR 1,501).

Other reserves include partial retirement obligations of TEUR 29 (previous year: TEUR 27). Here, the pledged assets to safeguard the claims from the partial retirement model in the amount of TEUR 18 are offset against the reserves for partial retirement obligations. The fair value of the offset asset amounts to TEUR 18 and corresponds to the acquisition costs. The calculated expenses amount to TEUR 0 and the offset income amounts to TEUR 0.

The residual terms of the **liabilities** are shown in detail in the statement of liabilities.

	Status 31.12.2020 EUR	Remaining term up to 1 year EUR	Remaining term over one year EUR	Remaining term > 5 years EUR
Payables to banks	0,00	0,00		
Previous year	*1.793,62*	*1.793,62*	*0,00*	*0,00*
Advance payments received on orders	77.028.031,18	77.028.031,18		
Previous year	*117.258.866,49*	*117.258.866,49*	*0,00*	*0,00*
Trade payables	17.597.200,62	17.597.200,62		
Previous year	11.849.052,76	11.849.052,76	*0,00*	*0,00*
Liabilities to affiliated companies	46.166.856,49	46.166.856,49		
Previous year	43.525.876,34	43.525.876,34	*0,00*	*0,00*
Other liabilities	2.384.091,73	2.380.203,73	3.888,00	0,00
Previous year	*6.717.987,98*	*6.717.987,98*	*0,00*	*0,00*
	143.176.180,02	143.172.292,02	3.888,00	0,00
Previous year	*179.353.577,19*	*179.353.577,19*	0,00	*0,00*

Liabilities to affiliated companies in the amount of TEUR 46,167 (previous year: TEUR 43,526) resulted solely from trade in goods and services.

Notes to the income statement

Revenues

Revenues are recognized in accordance with section 277 (1) HGB and are broken down by business segments and region as follows:

	2021 TEUR	2020 TEUR
By business segment		
Electronics	84.298	15.577
Solar	68.786	5.953
Energy Storage	11.838	48.414
Service	9.038	4.023
Contract Manufacturing	85	467
Sales with affiliated companies	4.294	4.278
	178.339	78.712

	2021 TEUR	2020 TEUR
By region		
Domestic or Germany	100.505	53.731
Other EU countries	3.783	6.870
China	67.754	4.521
Taiwan	1.406	994
USA	2.148	4.599
Other countries	2.743	7.997
	178.339	78.712

In 2017, Manz AG received two major orders with a total volume of 263 million euros, the completion of which was scheduled for July 2019. One major CIGS project for the delivery of a CIGS laboratory line was finally invoiced in the 2021 fiscal year at 39.6 million euros.

Increase or decrease in the stock of finished and unfinished products

This item includes as extraordinary items the write-down of work in progress and finished goods with a total amount of TEUR 589 (previous year (previous year: TEUR 929).

Other operating income

This mainly relates to prior-period income from the reversal of other provisions in the amount of TEUR 1,297 thousand (previous year: TEUR 1,202), insurance reimbursement for transport damage in the amount of TEUR 545 (previous year: TEUR 7), income from the receipt of government grants of TEUR 275 (previous year: TEUR 392) and income relating to other periods from the reduction of the allowance for doubtful accounts of TEUR 6 (previous year: TEUR 110). Income relating to other periods from the receipt of receivables written off is as follows TEUR 0 (previous year: TEUR 191). Income from exchange rate differences amounts to EUR 41 thousand (previous year: TEUR 207). Income from a claim for reimbursement of legal costs in the amount of TEUR 380, which arose in the context of arbitration proceedings with a customer, is also to be considered extraordinary. The total settlement value recognised as other assets amounts to a total of TEUR 3,750. This also includes TEUR 359 in interest income.

Other operating expenses

Other operating expenses include expenses in the amount of TEUR 51 (previous year: TEUR 51) Expenses in accordance with section 67; (1) sentence 1 EGHGB (increase in pension provision) and losses on receivables not relating to the accounting period in the amount of EUR 6 thousand (previous year: TEUR 0).

Write-downs of financial assets

Write-downs of financial assets include a write-down of TEUR 79 on the 56% investment in Suzhou Manz New Energy Equipment Co., Ltd. and a write-down of TEUR 7,260 on the other 11.1% investment in NICE PV Research Ltd.

Other information

Contingent liabilities

On the balance sheet date, Manz AG had guarantees for bank liabilities of subsidiaries in the amount of TEUR 8,000. Bank liabilities of subsidiaries amount to TEUR 6,046 as of the balance sheet date.

A binding letter of support exists in favour of Manz Asia Ltd. This was issued as part of the capital distribution in the amount of TEUR 12,056 from a capital reduction at Manz Asia Ltd. in September 2021 and obligates Manz AG to provide Manz Asia Ltd. with sufficient working capital of up to TEUR 12,000 so that Manz Asia Ltd. can meet financial obligations if necessary.

The contingent liabilities relate to potential future events, the entry of which would lead to an obligation. As of the balance sheet date, these are considered to be unlikely but cannot be ruled out. According to the currently available planning figures of the subsidiaries, there are no indications that the contractual conditions with banks will not be fulfilled.

Other financial obligations

The total amount of payment obligations for rental and leasing contracts amounts to TEUR 17,093 (previous year: TEUR 18,852). The rental and leasing contracts end between 2022 and 2028.

For the 40 % shareholding in CADIS Engineering GmbH acquired on February 3, 2021, uncalled contributions in kind of EUR 1.2 million are still outstanding, which are due after a period of 30 months following the acquisition of the participation.

The deposit not yet called in for the Suzhou Manz New Energy Equipment Co., Ltd. amounts to 12.6 million CNY (equivalent to TEUR 1.745 as of 12-31-2021) and is due is due by

December 31, 2022, in accordance with a resolution passed by the Board of Directors of Manz New Energy Equipment Ltd. in 2021.

Derivative financial instruments

During the year, the Company enters into forward exchange contracts and currency swap transactions to hedge dollar receivables, the total volume of which amounts to EUR 4.7 million at the balance sheet date. The maturities of the individual transactions are between January 31, 2022 and March 15, 2023. As of the balance sheet date December 31, 2021, these forward transactions had positive fair values totaling EUR 0 thousand and negative fair values totaling EUR 225 thousand. The fair values are calculated using recognized valuation models based on discounted cash flow analyses and taking into account current market parameters. Provisions were recognized to the extent that negative market values are not covered by valuation units. In the reporting year, a provision for negative market values was recognized in the amount of EUR 225 thousand.

Payout hold

In accordance with section 268 (8) of the German Commercial Code (HGB), a profit distribution block from capitalization resulted in the following amounts:

		TEUR
Capitalization of internally generated intangible assets		18.887
	Previous year	*16.957*
Difference according to section 253 (6) sentence 1 HGB		202
	Previous year	*269*
Total amount blocked against distribution in the sense of section 268 (8) HGB		19.089
	Previous year	*17.226*

Amount of equity available to cover the amounts within the meaning of section 268 (8) HGB available equity interests.

	2021 TEUR	2020 TEUR
Capital reserves within the meaning of section 272 (2) No. 4	26.295	41.295
Other retained earnings	1.471	1.471
Losses carried forward from the previous year	-6.143	-6.484
Annual loss for the past financial year	-15.320	-9.660
Allocation from the capital reserves	15.000	10.000
Equity available for collateral	21.303	36.622

Members of the Managing Board

Martin Drasch, Dipl. Ing. (FH), Ehningen, -Chairman of the Managing Board-,
Manfred Hochleitner, Dipl. Math., München, -Chief Financial Officer-,
Jürgen Knie, Dipl. Wirt. Ing. (FH), Reutlingen, - Chief Operations Officer-

Members of the Supervisory Board

Prof. Dr. Heiko Aurenz, Dipl. oec., Managing Director of Ebner Stolz Management Consultants GmbH, Stuttgart, Chairman of the Supervisory Board.

Dieter Manz, Dipl. Eng. (FH), Managing Director of Manz GmbH Management Consulting and Investment, Schlaitdorf, Deputy Chair of the Supervisory Board

Prof. Dr.-Ing. Michael Powalla, Director of the Photovoltaics Division and a member of the board of directors of the Center for Solar Energy and Hydrogen Research in Baden-Württemberg (ZSW) and professor of thin-film photovoltaics at the Karlsruhe Institute of Technology (KIT), Institute of Light Technology, Faculty of Electrical Engineering and Information Technology.

Dr. Zhiming Xu, Chief Technical Officer of the Shanghai Electric Automation Group of Shanghai Electric Group Company Ltd., Shanghai, PR China and Managing Director of Shanghai Electric Group Automation Engineering Co, LTD, Shanghai, PR China.

The Chairman of the Supervisory Board Heiko Aurenz is also Chairman of the Supervisory Board of Know How! Company for continuing education, Leinfelden-Echterdingen, Germany; Dep. Chairman of the Supervisory Board of MQ Result AG, Tübingen; Member of the Supervisory Board of Anna-Haag-Mehrgenerationenhaus e. V., Stuttgart; Member of the Supervisory Board of Anna Haag Stiftung gGmbH, Stuttgart; Member of the Supervisory Board of TanDiEM gGmbH, Stuttgart; Member of the Board of Trustees of Stiftung Aufbruch und Chance, Stuttgart and Chairman of the Advisory Board of Bumüller GmbH & Co Backbetriebe KG, Hechingen; Member of the Advisory Board of Herrmann Ultraschalltechnik GmbH & Co. KG, Karlsbad; Member of the Advisory Board of Herrmann Ultraschalltechnik Holding KG, Karlsbad.

The Deputy Chairman of the Supervisory Board Dieter Manz is a member of the Supervisory Board of TecInvest Holding AG, Puchheim. Advisory Board of Adlatus Robotics GmbH, Ulm; Advisory Board of Q.big 3D GmbH, Aalen.

The member of the Supervisory Board Prof. Dr.-Ing. Michael Powalla does not hold any mandates in other statutory supervisory boards or comparable domestic or foreign supervisory bodies of commercial enterprises.

The member of the Supervisory Board Dr. Zhiming Xu is a member of the Supervisory Board of Suzhou Manz New Energy Equipment Co., Ltd., Suzhou, PR China, Vice Chairman of the Supervisory Board of NICE PV Research Ltd, Beijing, PR China, and Chairman of the Supervisory Board of Shanghai Tanzhen Laser Technology Co, Ltd, Shanghai, PR China.

Compensation of the Managing Board

The fundamentals of the compensation system and the amount of the compensation of the Managing Board and Supervisory Board, as well as the former members of the Managing Board, are shown in the compensation report.

The total compensation of the Managing Board for financial year 2021 amounts to TEUR 1,563 (previous year: TEUR 2,250). The non-performance-related benefits amount to TEUR 877 (previous year: TEUR 862). The performance-related benefits amount to TEUR 686 (previous year: TEUR 1,388), of which EUR 0 thousand (previous year: TEUR 20) to discretionary bonuses, TEUR 0 (previous year TEUR 234) to cash bonuses, TEUR 28 (previous year: 0 TEUR) on remuneration from target achievement of non-financial short-term incentives and EUR 658 thousand (previous year EUR 1,134 thousand) to long-term benefits. Long-term benefits are stock awards / subscription rights under the performance share plan. In the year under review, a total of 12,101 (previous year: 48,675) subscription rights were granted to members of the Managing Board, with a corresponding fair value of TEUR 658 (previous year: TEUR 1,134). Furthermore, 5,332 subscription rights (previous year: 0) were exercised in the reporting year at a market value of TEUR 286, which led to an increase in share capital of EUR 5,332.

Managing Board member Martin Drasch has a defined contribution plan. For this purpose, TEUR 12 (previous year: TEUR 12) p.a. are paid into an externally funded pension fund.

Managing Board member Manfred Hochleitner has a defined contribution plan. In fiscal year 2021 for this purpose, TEUR 12 (previous year: TEUR 12) were paid into an externally re-insured provident find.

There is a defined contribution plan for Managing Board member Jürgen Knie. In fiscal year 2021 for this purpose, TEUR 12 (previous year: TEUR 12) were paid into an externally re-insured provident find.

Salaries of former Managing Board members

The widow of the Former Managing Board member, Otto Angerhofer, received a pension payment of TEUR 6 during financial year (previous year: TEUR 10). There is a pension obligation in the amount of TEUR 90 (previous year TEUR 89).

Compensation of the Supervisory Board

The compensation system for the Supervisory Board is also presented in the compensation report.
For the financial year 2021, compensation was paid to members of the Supervisory Board totaling TEUR 192 (previous year: TEUR 189). The Supervisory Board's compensation consists of a fixed component of TEUR 144 (previous year: TEUR 130), and the asset value of TEUR 48 (previous year: TEUR 59).

Employees

The number of employees (full time) during the financial year 2021 averaged 440 (previous year: 440). There were 159 (previous year: 156) employees in production and 281 (previous year: 284) employees in the technical/commercial area. The annual average was 35 (previous year (previous year: 34) trainees employed.

Business not included in the balance sheet

The production and administration buildings of Manz AG are leased (real estate leasing contract). The purpose of the lease is the financing of fixed assets. Risks resulting from real estate lease arise from the leasing rates to be paid (see other financial obligations) and the fixed payment structure. The advantage is the complete elimination of debt financing and the avoidance of the residual value risk. The financial impact is included in other financial obligations.

Consolidated financial statements

As the parent company, Manz AG has prepared consolidated financial statements in accordance with IFRS and a group management report, which is available at the company's headquarters in Reutlingen, or published in the electronic Federal Gazette.

Transactions with related persons

There are no material transactions with related parties and persons that are not conducted at prevailing market terms that are necessary for the assessment of the financial position.

Auditors total fee

The disclosure of the auditors' fee is waived in accordance with section 285 no. 17 final part of sentence of the HGB. At this point, we refer to the consolidated financial statements of the Manz Group.

Information on the Corporate Governance Code

The Managing Board and the Supervisory Board of the Manz AG have submitted their annual declaration of conformity in accordance with section 161 of the Stock Corporation Act (AktG). The joint declaration of compliance by the Managing Board and the Supervisory Board is published on the Manz AG website at www.manz.com.

Significant events after the balance sheet date

The extent to which the Russia-Ukraine conflict will affect Manz AG cannot currently be reliably estimated due to considerable uncertainties and the high level of momentum. To date, there have been no direct effects on Manz AG's accounting resulting from the war in Ukraine or the sanctions imposed by Russia. At present, the indirect effects are not foreseeable.

As of January 1, 2022, Manz AG will reorganise its segment structure. The Electronics, Solar and Contract Manufacturing business units will be combined to form the new Industry Solutions division. The Energy Storage business unit will become the new Mobility & Battery Solutions division. The Service business unit will be split between the two new segments.

Disclosures pursuant to section 160 (1) no. 8 Stock Corporation Act (AktG)

As of the balance sheet date 2021, there are the following shareholdings in the Company with more than 3 % of the voting rights, which have been notified in accordance with the WpHG:

1. **Shanghai Electric Germany Holding GmbH (voting rights share 19.64 %).**

Shanghai Electric Germany Holding GmbH holds 19.64% of the voting rights as of 31 December 2021. This corresponds to 1,523,480 of 7,756,804 voting rights.

Notification of voting rights of May 24, 2016

1. Information on the issuer

Manz AG Steigäckerstr. 5 72768 Reutlingen Germany

2. Reason for the communication

X	Acquisition/disposition of shares with voting rights
X	Acquisition/disposition of instruments
	Change in total number of voting rights
	Other reason:

3. Information about the notifying party

Name:	Registered headquarters and country:
The People's Republic of China, acting through the State-owned Asset Supervision Commission (SASAC) of Shanghai People's Government of the People's Republic of China	Shanghai, People's Republic of China

4. Names of shareholders
With 3 % or more voting rights, if different from 3.

Shanghai Electric Germany Holding GmbH

5. Date on which contact with limit occurred

05-23-2016

6. Total proportion of voting rights

	Proportion of voting rights (Total 7.a.)	Share instruments (Total 7.b.1.+ 7.b.2.)	Total shares (Total 7.a. + 7.b.)	Total number of voting rights of the issuer
new	19.67 %	10.43 %	30.1 %	7,744,088
Last communication	(in %)	(in %)	(in %)	/

7. Details regarding existing number of voting rights
Voting rights (sections 21, 22 WpHG)

ISIN	Absolute	in %

	direct (section 21 WpHG)	assigned (section 22 WpHG)	direct (section 21 WpHG)	assigned (section 22 WpHG)
DE000A0JQ5U3		1,523,480	(in %)	19.67 %
Total	1,523,480		19.67 %	

b.1. Instruments in the sense of section 25 (1) no. 1 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Voting rights, absolute	Voting rights in %
Call Option		May 25, 2016 - May 24, 2017	807.490	10.43 %
		Total	807.490	10.43 %

b.2. Instruments in the sense of section 25 (1) no. 2 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Cash compensation or physical settlement	Voting rights, absolute	Voting rights in %
					(in %)
			Total		(in %)

8. Information relating to the notifying party

	The entity required to report (3.) is not controlled, nor does it control other companies with voting rights of the issuer that are relevant for reporting purposes (1.).
X	Complete chain of subsidiaries starting with the highest controlling person or the highest controlling company:

companies	Voting rights in %, if 3 % or higher	Instruments in %, if 5 % or higher	Totals in %, if 5 % or higher
The People's Republic of China, acting through the State-owned Asset Supervision Commission (SASAC) of Shanghai People's Government	(in %)	(in %)	(in %)
Shanghai Electric (Group) Corporation	(in %)	(in %)	(in %)
Shanghai Electric Group Company Limited	(in %)	(in %)	(in %)
Shanghai Electric Hongkong Co. Limited	(in %)	(in %)	(in %)
Shanghai Electric Germany Holding GmbH	19.67 %	10.43 %	30.1 %

9. For power of attorney pursuant to section 22 (3) WpHG
(only possible with assignments pursuant to section 22 (1) sentence 1 no. 6 WpHG)

Date of the Annual General Meeting:	
Total voting rights share after the Annual General Meeting:	% (corresponds to voting rights)

2. Dieter Manz (Share of voting rights 10.00 %)

Notification of voting rights

According to the securities transaction (directors' dealings) notified on 2 July 2021, Dieter Manz holds 10.00 % directly attributable voting rights as of 31 December 2021. This corresponds to 775,942 of 7,756,804 voting rights. After the initial public offering in September 2006, Dieter Manz held 59 % of the voting rights.

Notification of voting rights of August 31, 2018

1. Information on the issuer

Manz AG Steigäckerstr. 5 72768 Reutlingen Germany

2. Reason for the communication

X	Acquisition/disposition of shares with voting rights
	Acquisition/disposition of instruments
	Change in total number of voting rights
X	Other reason: Voluntary communication because of internal family reorganization of shareholdings

3. Information about the notifying party

Name:	Registered headquarters and country:
Mr. Dieter Manz, Date of birth: 11-25-1961	

4. Names of shareholders

With 3 % or more voting rights, if different from 3.

Ulrike Manz;Stephan Manz;Laura Manz

5. Date on which contact with limit occurred:

08-28-2018

6. Total proportion of voting rights

	Proportion of voting rights (Total 7.a.)	Share instruments (Total 7.b.1.+ 7.b.2.)	Total shares (Total 7.a. + 7.b.)	Total number of voting rights of the issuer
new	28.09 %	0 %	28.09 %	7744088
Last communication	25.10 %	0 %	25.10 %	/

7. Details regarding existing number of voting rights
Voting rights (sections 33, 34 WpHG)

ISIN	Absolute		in %	
	direct (section 33 WpHG)	assigned (section 34 WpHG)	direct (section 33 WpHG)	assigned (section 34 WpHG)
DE000A0JQ5U3	953942	1221257	12.32 %	15.77 %
Total	2175199		28.09 %	

b.1. Instruments in the sense of section 38 (1) no. 1 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Voting rights, absolute	Voting rights in %
				(in %)
		Total		(in %)

b.2. Instruments in the sense of section 38 (1) no. 2 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Cash compensation or physical settlement	Voting rights, absolute	Voting rights in %
					(in %)
			Total		(in %)

8. Information relating to the notifying party

X	The entity required to report (3.) is not controlled, nor does it control other companies with voting rights of the issuer that are relevant for reporting purposes (1.).
	Complete chain of subsidiaries starting with the highest controlling person or the highest controlling company:

companies	Voting rights in %, if 3 % or higher	Instruments in %, if 5 % or higher	Totals in %, if 5 % or higher

9. For power of attorney pursuant to section 34 (3) WpHG
(only possible with assignments pursuant to section 34 (1) sentence 1 no. 6 WpHG)

Date of the Annual General Meeting:	
Total voting rights share after the Annual General Meeting:	% (corresponds to voting rights)

10. Other notes:

3. Invesco Advisers, Inc. (formerly Oppenheimer Funds) (Share of voting rights 6.56 %)

Invesco Advisers Inc. holds 6.45% of the voting rights as at 31 December 2021. This corresponds to 500,000 of 7,756,804 voting rights.

Notification of voting rights of August 6, 2018

1. Information on the issuer

Manz AG Steigäckerstr. 5 72768 Reutlingen Germany

2. Reason for the communication

X	Acquisition/disposition of shares with voting rights
	Acquisition/disposition of instruments
	Change in total number of voting rights
	Other reason:

3. Information about the notifying party

Name:	Registered headquarters and country:
Oppenheimer Funds, Inc.	Denver, Colorado United States of America

4. Names of shareholders

With 3 % or more voting rights, if different from 3.

Oppenheimer Global Opportunities Fund

5. Date on which contact with limit occurred:

07-27-2018

6. Total proportion of voting rights

	Proportion of voting rights (Total 7.a.)	Share instruments (Total 7.b.1.+ 7.b.2.)	Total shares (Total 7.a. + 7.b.)	Total number of voting rights of the issuer
new	3.07 %	0.00 %	3.07 %	7744088
Last communication	n/a %	n/a %	n/a %	/

7. Details regarding existing number of voting rights
Voting rights (sections 33, 34 WpHG)

ISIN	Absolute		in %	
	direct (section 33 WpHG)	assigned (section 34 WpHG)	direct (section 33 WpHG)	assigned (section 34 WpHG)
DE000A0JQ5U3		237614	(in %)	3.07 %
Total	237614		3.07 %	

b.1. Instruments in the sense of section 38 (1) no. 1 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Voting rights, absolute	Voting rights in %
				(in %)
		Total		(in %)

b.2. Instruments in the sense of section 38 (1) no. 2 WpHG

Type of instrument	Due date/ expiration	Exercise period / term	Cash compensation or physical settlement	Voting rights, absolute	Voting rights in %
					(in %)
			Total		(in %)

8. Information relating to the notifying party

X	The entity required to report (3.) is not controlled, nor does it control other companies with voting rights of the issuer that are relevant for reporting purposes (1.).
	Complete chain of subsidiaries starting with the highest controlling person or the highest controlling company:

companies	Voting rights in %, if 3 % or higher	Instruments in %, if 5 % or higher	Totals in %, if 5 % or higher

9. For power of attorney pursuant to section 34 (3) WpHG
(only possible with assignments pursuant to section 34 (1) sentence 1 no. 6 WpHG)

Date of the Annual General Meeting:	
Total voting rights share after the Annual General Meeting:	% (corresponds to voting rights)

10. Other notes:

Notification of voting rights

1. Information on the issuer

Name:	Manz AG
Street House no.:	Steigäckerstr. 5
PLZ:	72768
Location:	Reutlingen Germany
Legal Entity Identifier (LEI):	529900B635NV0KEEOR57

2. Reason for the communication

	Acquisition or disposition of shares with voting rights
	Acquisition or disposition of instruments
	Change in total number of voting rights
X	Other reason: Acquisition and merger with Oppenheimer Funds Inc.: see section 10

3. Information about the notifying party

Legal entity: Invesco Ltd. Registered office, State: Hamilton, Bermuda

4. Names of shareholders
With 3 % or more voting rights, if different from 3.

Invesco Oppenheimer Global Opportunities Fund Short Term

5. Date on which contact with limit occurred:

5-24-2019

6. Total proportion of voting rights

	Proportion of voting rights (Total 7.a.)	Share instruments (Total 7.b.1.+ 7.b.2.)	Total shares (Total 7.a. + 7.b.)	Total number of voting rights in accordance with section 41 of the German Securities Trading Act (WpHG)
new	6.46 %	0.00 %	6.46 %	7,744,088
Last communication	n/a %	n/a %	n/a %	/

7. Details regarding existing number of voting rights
Voting rights (sections 33, 34 WpHG)

ISIN	Absolute		in %	
	direct (section 33 WpHG)	assigned (section 34 WpHG)	direct (section 33 WpHG)	assigned (section 34 WpHG)
DE000A0JQ5U3	0	500,000	0.00 %	6.46 %
Total	500,000		6.46 %	

b.1. Instruments in the sense of section 38 (1) no. 1 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Voting rights, absolute	Voting rights in %
			0	0.00 %
		Total	0	0.00 %

b.2. Instruments in the sense of section 38 (1) no. 2 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Cash compensation or physical settlement	Voting rights, absolute	Voting rights in %
				0	0.00 %
			Total	0	0.00 %

8. Information relating to the notifying party

	Notifying party (3.) is neither controlled nor does notifying party control other companies which hold voting rights of the issuer (1.) or to which voting rights of the issuer are attributed.
X	Complete chain of subsidiaries starting with the highest controlling person or the highest controlling company:

companies	Voting rights in %, if 3 % or higher	Instruments in %, if 5 % or higher	Totals in %, if 5 % or higher
Invesco Ltd.	(in %)	(in %)	(in %)
Invesco Holding Company Limited	(in %)	(in %)	(in %)
Invesco Holding Company (US), Inc.	(in %)	(in %)	(in %)
Invesco Group Services, Inc.	(in %)	(in %)	(in %)
Invesco Advisers, Inc.	6.46 %	(in %)	6.46 %

9. For power of attorney pursuant to section 34 (3) WpHG
(only possible with assignments pursuant to section 34 (1) sentence 1 no. 6 WpHG)

Date of the Annual General Meeting:
Total voting rights (6.) after the Annual General Meeting:

Proportion of voting rights	Instruments share	Total shares
(in %)	(in %)	(in %)

10. Miscellaneous information:

Acquisition and merger with Oppenheimer Funds Inc. Further information is available under the following link: https://ir.invesco.com/investor-relations/press-releases/default.aspx?_ga=2.153008441.1018859822.1558359393-832691936.1556037780

4. Ulrike Manz (Share of voting rights 5.00 %)

Notification of voting rights

According to the securities transaction (directors' dealings) notified on 2 July 2021, Ulrike Manz holds 5.00% of the voting rights as of 31 December 2021. This corresponds to 387,989 of 7,756,804 voting rights.After the initial public offering in September 2006, Ulrike Manz held 6 % of the voting rights.

Notification of voting rights of August 31, 2018

1. Information on the issuer

Manz AG Steigäckerstr. 5 72768 Reutlingen Germany

2. Reason for the communication

X	Acquisition/disposition of shares with voting rights
	Acquisition/disposition of instruments
	Change in total number of voting rights
	Other reason:

3. Information about the notifying party

Name:	Registered headquarters and country:
Ms. Ulrike Manz, Date of birth: 08-28-1963	

4. Names of shareholders
With 3 % or more voting rights, if different from 3.

5. Date on which contact with limit occurred:

08-28-2018

6. Total proportion of voting rights

	Proportion of voting rights (Total 7.a.)	Share instruments (Total 7.b.1.+ 7.b.2.)	Total shares (Total 7.a. + 7.b.)	Total number of voting rights of the issuer
new	5.44 %	0 %	5.44 %	7744088
Last communication	2.66 %	0 %	2.66 %	/

7. Details regarding existing number of voting rights
Voting rights (sections 33, 34 WpHG)

ISIN	Absolute		in %	
	direct (section 33 WpHG)	assigned (section 34 WpHG)	direct (section 33 WpHG)	assigned (section 34 WpHG)
DE000A0JQ5U3	421489		5.44 %	(in %)
Total	421489		5.44 %	

b.1. Instruments in the sense of section 38 (1) no. 1 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Voting rights, absolute	Voting rights in %
				(in %)
		Total		(in %)

b.2. Instruments in the sense of section 38 (1) no. 2 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Cash compensation or physical settlement	Voting rights, absolute	Voting rights in %
					(in %)
			Total		(in %)

8. Information relating to the notifying party

X	The entity required to report (3.) is not controlled, nor does it control other companies with voting rights of the issuer that are relevant for reporting purposes (1.).
	Complete chain of subsidiaries starting with the highest controlling person or the highest controlling company:

companies	Voting rights in %, if 3 % or higher	Instruments in %, if 5 % or higher	Totals in %, if 5 % or higher

9. For power of attorney pursuant to section 34 (3) WpHG
(only possible with assignments pursuant to section 34 (1) sentence 1 no. 6 WpHG)

Date of the Annual General Meeting:	
Total voting rights share after the Annual General Meeting:	% (corresponds to voting rights)

10. Other notes:

5. Stephan Manz (Share of voting rights 5.00 %)

Stephan Manz holds 5.00% of the voting rights as of 31 December 2021. This corresponds to 387,989 of 7,756,804 voting rights.

Notification of voting rights of August 31, 2018

1. Information on the issuer

Manz AG Steigäckerstr. 5 72768 Reutlingen Germany

2. Reason for the communication

X	Acquisition/disposition of shares with voting rights
	Acquisition/disposition of instruments
	Change in total number of voting rights
	Other reason:

3. Information about the notifying party

Name:	Registered headquarters and country:
Mr. Stephan Manz, Date of birth: 08-15-1988	

4. Names of shareholders
With 3 % or more voting rights, if different from 3.

5. Date on which contact with limit occurred:

08-28-2018

6. Total proportion of voting rights

	Proportion of voting rights (Total 7.a.)	Share instruments (Total 7.b.1.+ 7.b.2.)	Total shares (Total 7.a. + 7.b.)	Total number of voting rights of the issuer
new	5.16 %	0 %	5.16 %	7744088
Last communication	n/a %	n/a %	n/a %	/

7. Details regarding existing number of voting rights
Voting rights (sections 33, 34 WpHG)

ISIN	Absolute		in %	
	direct (section 33 WpHG)	assigned (section 34 WpHG)	direct (section 33 WpHG)	assigned (section 34 WpHG)
DE000A0JQ5U3	399889		5.16 %	(in %)
Total	399889		5.16 %	

b.1. Instruments in the sense of section 38 (1) no. 1 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Voting rights, absolute	Voting rights in %
				(in %)
		Total		(in %)

b.2. Instruments in the sense of section 38 (1) no. 2 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Cash compensation or physical settlement	Voting rights, absolute	Voting rights in %
					(in %)
			Total		(in %)

8. Information relating to the notifying party

X	The entity required to report (3.) is not controlled, nor does it control other companies with voting rights of the issuer that are relevant for reporting purposes (1.).
	Complete chain of subsidiaries starting with the highest controlling person or the highest controlling company:

companies	Voting rights in %, if 3 % or higher	Instruments in %, if 5 % or higher	Totals in %, if 5 % or higher

9. For power of attorney pursuant to section 34 (3) WpHG
(only possible with assignments pursuant to section 34 (1) sentence 1 no. 6 WpHG)

Date of the Annual General Meeting:	
Total voting rights share after the Annual General Meeting:	% (corresponds to voting rights)

10. Other notes:

6. Laura Manz (Share of voting rights 5.00 %)

Laura Manz holds 5.00% of the voting rights as of 31 December 2021. This corresponds to 387,879 of 7,756,804 voting rights.

Notification of voting rights of August 31, 2018

1. Information on the issuer

Manz AG Steigäckerstr. 5 72768 Reutlingen Germany

2. Reason for the communication

X	Acquisition/disposition of shares with voting rights
	Acquisition/disposition of instruments
	Change in total number of voting rights
	Other reason:

3. Information about the notifying party

Name:	Registered headquarters and country:
Ms. Laura Manz, Date of birth: 07-03-1990	

4. Names of shareholders
With 3 % or more voting rights, if different from 3.

5. Date on which contact with limit occurred:

08-28-2018

6. Total proportion of voting rights

	Proportion of voting rights (Total 7.a.)	Share instruments (Total 7.b.1.+ 7.b.2.)	Total shares (Total 7.a. + 7.b.)	Total number of voting rights of the issuer
new	5.16 %	0 %	5.16 %	7744088
Last communication	n/a %	n/a %	n/a %	/

7. Details regarding existing number of voting rights
Voting rights (sections 33, 34 WpHG)

ISIN	Absolute		in %	
	direct (section 33 WpHG)	assigned (section 34 WpHG)	direct (section 33 WpHG)	assigned (section 34 WpHG)
DE000A0JQ5U3	399879		5.16 %	(in %)
Total	399879		5.16 %	

b.1. Instruments in the sense of section 38 (1) no. 1 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Voting rights, absolute	Voting rights in %
				(in %)
		Total		(in %)

b.2. Instruments in the sense of section 38 (1) no. 2 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Cash compensation or physical settlement	Voting rights, absolute	Voting rights in %
					(in %)
			Total		(in %)

8. Information relating to the notifying party

X	The entity required to report (3.) is not controlled, nor does it control other companies with voting rights of the issuer that are relevant for reporting purposes (1.).
	Complete chain of subsidiaries starting with the highest controlling person or the highest controlling company:

companies	Voting rights in %, if 3 % or higher	Instruments in %, if 5 % or higher	Totals in %, if 5 % or higher

9. For power of attorney pursuant to section 34 (3) WpHG
(only possible with assignments pursuant to section 34 (1) sentence 1 no. 6 WpHG)

Date of the Annual General Meeting:	
Total voting rights share after the Annual General Meeting:	% (corresponds to voting rights)

10. Other notes:

7. Janus Henderson Investors (Share of voting rights 3.44 %)

Janus Henderson Investors holds 3.44% of the voting rights as at 31 December 2021. This corresponds to 266,534 of 7,756,804 voting rights.

Notification of voting rights of July 12, 2021

1. Information on the issuer

Name:	Manz AG
Street House no.:	Steigäckerstr. 5
PLZ:	72768
Location:	Reutlingen Germany
Legal Entity Identifier (LEI):	529900B635NV0KEEOR57

2. Reason for the communication

	Acquisition or disposition of shares with voting rights
	Acquisition or disposition of instruments
	Change in total number of voting rights
X	Other reason: Voluntary Group notification, due to group restructuring

3. Information about the notifying party

Legal entity: Janus Henderson Group Plc Registered Office, State: St. Helier, Jersey

4. Names of shareholders
with 3 % or more voting rights, if different from 3.

TR European Growth Trust Plc

5. Date on which contact with limit occurred:

07-01-2021

6. Total proportion of voting rights

	Proportion of voting rights (Total 7.a.)	Share instruments (Total 7.b.1.+ 7.b.2.)	Total shares (Total 7.a. + 7.b.)	Total number of voting rights in accordance with section 41 of the German Securities Trading Act (WpHG)
new	3.44 %	0.00 %	3.44 %	7748632
Last communication	3.13 %	0.00 %	3.13 %	/

7. Details regarding existing number of voting rights
a. Voting rights (sections 33, 34 WpHG)

ISIN	Absolute		in %	
	direct (section 33 WpHG)	assigned (section 34 WpHG)	direct (section 33 WpHG)	assigned (section 34 WpHG)
DE000A0JQ5U3	0	266534	0.00 %	3.44 %
Total	266534		3.44 %	

b.1. Instruments in the sense of section 38 (1) no. 1 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Voting rights, absolute	Voting rights in %
			0	0.00 %
		Total	0	0.00 %

b.2. Instruments in the sense of section 38 (1) no. 2 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Cash compensation or physical settlement	Voting rights, absolute	Voting rights in %
				0	0.00 %
			Total	0	0.00 %

8. Information relating to the notifying party

	Notifying party (3.) is neither controlled nor does notifying party control other companies which hold voting rights of the issuer (1.) or to which voting rights of the issuer are attributed.
X	Complete chain of subsidiaries starting with the highest controlling person or the highest controlling company:

companies	Voting rights in %, if 3 % or higher	Instruments in %, if 5 % or higher	Totals in %, if 5 % or higher
Janus Henderson Group Plc	(in %)	(in %)	(in %)
Janus Henderson UK (Holdings) Limited	(in %)	(in %)	(in %)
Henderson Global Investors Limited	3.44 %	(in %)	(in %)

9. For power of attorney pursuant to section 34 (3) WpHG
(only possible with assignments pursuant to section 34 (1) sentence 1 no. 6 WpHG)

Date of the Annual General Meeting:

Total proportion of voting rights (6.) after the Annual General Meeting:

Proportion of voting rights	Instruments share	Total shares
(in %)	(in %)	(in %)

10. Miscellaneous information:

The following companies are no longer subsidiaries of Janus Henderson Group plc and therefore no voting rights are attributed to them: Henderson Group Holdings Asset Management Limited; HGI Asset Management Group Limited, Henderson Global Group Limited, Henderson Holdings Group Limited, Henderson Global Investors (Holdings) Limited.

8. Universal-Investment-Gesellschaft mbH (Share of voting rights 3.17 %)

Universal-Investment-Gesellschaft mbH holds 3.17% of the voting rights as of 31 December 2021. This corresponds to 245,939 of 7,756,804 voting rights.

Notification of voting rights of July 6, 2021

1. Information on the issuer

Name:	Manz AG
Street House no.:	Steigäckerstr. 5
PLZ:	72768
Location:	Reutlingen Germany
Legal Entity Identifier (LEI):	529900B635NV0KEEOR57

2. Reason for the communication

X	Acquisition or disposition of shares with voting rights
	Acquisition or disposition of instruments
	Change in total number of voting rights
X	Other reason: Correction of an announcement by Universal-Investment-GmbH, see 10.

3. Information about the notifying party

Legal entity: Montagu Private Equity LLP Registered office, country: London, United Kingdom

4. Names of shareholders
with 3 % or more voting rights, if different from 3.

5. Date on which contact with limit occurred:

01-07-2021

6. Total proportion of voting rights

	Proportion of voting rights (Total 7.a.)	Share instruments (Total 7.b.1.+ 7.b.2.)	Total shares (Total 7.a. + 7.b.)	Total number of voting rights in accordance with section 41 of the German Securities Trading Act (WpHG)
new	3.17 %	0.00 %	3.17 %	7,748,632
Last communication	n/a %	n/a %	n/a %	/

7. Details regarding existing number of voting rights
a. Voting rights (sections 33, 34 WpHG)

ISIN	Absolute		in %	
	direct (section 33 WpHG)	assigned (section 34 WpHG)	direct (section 33 WpHG)	assigned (section 34 WpHG)
DE000A0JQ5U3	0	245,939	0.00 %	3.17 %
Total	245,939		3.17 %	

b.1. Instruments in the sense of section 38 (1) no. 1 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Voting rights, absolute	Voting rights in %

			0	0.00 %
		Total	0	0.00 %

b.2. Instruments in the sense of section 38 (1) no. 2 WpHG

Type of instrument	Due date/ expiration	Exercise period / term	Cash compensation or physical settlement	Voting rights, absolute	Voting rights in %
				0	0.00 %
			Total	0	0.00 %

8. Information relating to the notifying party

	Notifying party (3.) is neither controlled nor does notifying party control other companies which hold voting rights of the issuer (1.) or to which voting rights of the issuer are attributed.
X	Complete chain of subsidiaries starting with the highest controlling person or the highest controlling company:

companies	Voting rights in %, if 3 % or higher	Instruments in %, if 5 % or higher	Totals in %, if 5 % or higher
Montagu Private Equity LLP	(in %)	(in %)	(in %)
MLLP Holdings Ltd.	(in %)	(in %)	(in %)
MPE (General Partner V) Ltd.	(in %)	(in %)	(in %)
MPE (GP V) LP	(in %)	(in %)	(in %)
Alpha LuxCo 1 SARL	(in %)	(in %)	(in %)
Alpha LuxCo 2 SARL	(in %)	(in %)	(in %)
Universal- Beteiligungs- und Servicegesellschaft mbH	(in %)	(in %)	(in %)
Universal-Investment-Gesellschaft mbH	3.17 %	(in %)	(in %)
-	(in %)	(in %)	(in %)
Montagu Private Equity LLP	(in %)	(in %)	(in %)
MLLP Holdings Ltd.	(in %)	(in %)	(in %)
Montagu V Nominees Ltd.	(in %)	(in %)	(in %)
Alpha LuxCo 1 SARL	(in %)	(in %)	(in %)
Alpha LuxCo 2 SARL	(in %)	(in %)	(in %)
Universal- Beteiligungs- und Servicegesellschaft mbH	(in %)	(in %)	(in %)
Universal-Investment-Gesellschaft mbH	3.17 %	(in %)	(in %)

9. For power of attorney pursuant to section 34 (3) WpHG
(only possible with assignments pursuant to section 34 (1) sentence 1 no. 6 WpHG)

Date of the Annual General Meeting:

Total proportion of voting rights (6.) after the Annual General Meeting:

Proportion of voting rights	Instruments share	Total shares
(in %)	(in %)	(in %)

10. Miscellaneous information:

With this and parallel correction notifications, the status of the notifying party as the last the position of the notifying party as the ultimate parent company of the Universal Group

pursuant to parent company of the Universal Group pursuant to section 35 (1) WpHG since 2017. has been followed up. Further explanations and all notifications concerned can be found at: www.universal-investment.com/de/stimmrechtsmitteilungen

The following notifications pursuant to the Securities Trading Act (WpHG) were communicated in financial year 2021:

January 29, 2021

Reportable securities transaction (Directors' dealings)

1. Information about persons performing managerial duties and persons closely related to them

a) Name

Title:	Prof. Dr.
Given name:	Heiko
Surname(s):	Aurenz

2. Reason for the notification

a) Position / Status

Position:	Supervisory Board

b) Initial report

3. Information about the issuer, the participant in the market for emission certificates, the auction platform, the auctioneer, or the auction supervision

a) Name

Manz AG

b) LAW

529900B635NV0KEEOR57

4. Details of the business / businesses

a) Description of the financial instrument, type of instrument, identifier

Product:	Share
ISIN:	DE000A0JQ5U3

b) Type of business

Sales

c) Price(s) and Volume

Price(s)	Volume
EUR 51.20	EUR 75264.00

d) Aggregate information

Price	Aggregate volume
EUR 5120	EUR 75264.00

e) Business date

2021-01-28; UTC+1

f) Business location

Name:	Stuttgart stock exchange
MIC:	XSTU

June 01, 2021

Reportable securities transaction (Directors' dealings)

1. Information about persons performing managerial duties and persons closely related to them

a) Name

Title:	
Given name:	Martin
Surname(s):	Drasch

2. Reason for the notification

a) Position / Status

Position:	Managing Board

b) Initial report

3. Information about the issuer, the participant in the market for emission certificates, the auction platform, the auctioneer, or the auction supervision

a) Name

Manz AG

b) LAW

529900B635NV0KEEOR57

4. Details of the business / businesses

a) Description of the financial instrument, type of instrument, identifier

Product:	Share
ISIN:	DE000A0JQ5U3

b) Type of business

Acquisition through exercise of subscription rights granted as part of Executive Board compensation (performance shares)

c) Price(s) and Volume

Price(s)	Volume
EUR 1.00	EUR 4544.00

d) Aggregate information

Price	Aggregate volume
EUR 1.00	EUR 4544.00

e) Business date

2021-05-31; UTC+2

f) Business location

Outside of a trading center

July 02, 2021

Reportable securities transaction (Directors' dealings)

1. Information about persons performing managerial duties and persons closely related to them

a) Name

Title:	
Given name:	Dieter
Surname(s):	Manz

2. Reason for the notification

a) Position / Status

Position:	Supervisory Board

b) Initial report

3. Information about the issuer, the participant in the market for emission certificates, the auction platform, the auctioneer, or the auction supervision

a) Name

Manz AG

b) LAW

529900B635NV0KEEOR57

4. Details of the business / businesses

a) Description of the financial instrument, type of instrument, identifier

Product:	Share
ISIN:	DE000A0JQ5U3

b) Type of business

Sales

c) Price(s) and Volume

Price(s)	Volume
EUR 60.00	EUR 10680000.00

d) Aggregate information

Price	Aggregate volume
EUR 60.00	EUR 10680000.00

e) Business date

2021-07-01; UTC+2

f) Business location

Outside of a trading center

July 02, 2021

Reportable securities transaction (Directors' dealings)

1. Information about persons performing managerial duties and persons closely related to them

a) Name

Title:	
Given name:	Ulrike
Surname(s):	Manz

2. Reason for the notification

a) Position / Status

Person is closely related to:	
Title:	
Given name:	Dieter
Surname(s):	Manz
Position:	Supervisory Board

b) Initial report

3. Information about the issuer, the participant in the market for emission certificates, the auction platform, the auctioneer, or the auction supervision

a) Name

Manz AG

b) LAW

529900B635NV0KEEOR57

4. Details of the business / businesses

a) Description of the financial instrument, type of instrument, identifier

Product:	Share
ISIN:	DE000A0JQ5U3

b) Type of business

Sales

c) Price(s) and Volume

Price(s)	Volume
EUR 60.00	EUR 2010000.00

d) Aggregate information

Price	Aggregate volume
EUR 60.00	EUR 2010000.00

e) Business date

2021-07-01; UTC+2

f) Business location

Outside of a trading center

August 06, 2021

Reportable securities transaction (Directors' dealings)

1. Information about persons performing managerial duties and persons closely related to them

a) Name

Title:	
Given name:	Jürgen
Surname(s):	Knie

2. Reason for the notification

a) Position / Status

Position:	Managing Board

b) Initial report

3. Information about the issuer, the participant in the market for emission certificates, the auction platform, the auctioneer, or the auction supervision

a) Name

Manz AG

b) LAW

529900B635NV0KEEOR57

4. Details of the business / businesses

a) Description of the financial instrument, type of instrument, identifier

Product:	Share
ISIN:	DE000A0JQ5U3

b) Type of business

Acquisition through exercise of subscription rights granted as part of compensation (performance shares)

c) Price(s) and Volume

Price(s)	Volume
EUR 1.00	EUR 788.00

d) Aggregate information

Price	Aggregate volume
EUR 1.00	EUR 788.00

e) Business date

2021-08-06; UTC+2

f) Business location

Outside of a trading center

May 12, 2021

Notification of voting rights according to section 40 WpHG

1. Information on the issuer

Name:	Manz AG
Street House no.:	Steigäckerstr. 5
PLZ:	72768
Location:	Reutlingen Germany
Legal Entity Identifier (LEI):	529900B635NV0KEEOR57

2. Reason for the communication

X	Acquisition or disposition of shares with voting rights
	Acquisition or disposition of instruments
	Change in total number of voting rights
	Other reason:

3. Information about the notifying party

Legal entity: Janus Henderson Group Plc Registered Office, State: St. Helier, Jersey

4. Names of shareholders
with 3 % or more voting rights, if different from 3.

TR European Growth Trust Plc

5. Date on which contact with limit occurred:

05-04-2021

6. Total proportion of voting rights

	Proportion of voting rights (Total 7.a.)	Share instruments (Total 7.b.1.+ 7.b.2.)	Total shares (Total 7.a. + 7.b.)	Total number of voting rights in accordance with section 41 of the German Securities Trading Act (WpHG)
new	3.13 %	0.00 %	3.13 %	7744088
Last communication	2.97 %	0.00 %	2.97 %	/

7. Details regarding existing number of voting rights
a. Voting rights (sections 33, 34 WpHG)

ISIN	Absolute		in %	
	direct (section 33 WpHG)	assigned (section 34 WpHG)	direct (section 33 WpHG)	assigned (section 34 WpHG)
DE000A0JQ5U3	0	242180	0.00 %	3.13 %
Total	242180		3.13 %	

b.1. Instruments in the sense of section 38 (1) no. 1 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Voting rights, absolute	Voting rights in %
			0	0.00 %
		Total	0	0.00 %

b.2. Instruments in the sense of section 38 (1) no. 2 WpHG

Type of instrument	Due date/ expiration	Exercise period / term	Cash compensation or physical settlement	Voting rights, absolute	Voting rights in %
				0	0.00 %
			Total	0	0.00 %

8. Information relating to the notifying party

	Notifying party (3.) is neither controlled nor does notifying party control other companies which hold voting rights of the issuer (1.) or to which voting rights of the issuer are attributed.
X	Complete chain of subsidiaries starting with the highest controlling person or the highest controlling company:

companies	Voting rights in %, if 3 % or higher	Instruments in %, if 5 % or higher	Totals in %, if 5 % or higher
Janus Henderson Group plc	(in %)	(in %)	(in %)
Henderson Group Holdings Asset Management Limited	(in %)	(in %)	(in %)
HGI Asset Management Group Limited	(in %)	(in %)	(in %)
Henderson Global Group Limited	(in %)	(in %)	(in %)
Henderson Holdings Group Limited	(in %)	(in %)	(in %)
HGI Group Limited	(in %)	(in %)	(in %)
Henderson Global Investors (Holdings) Limited	(in %)	(in %)	(in %)
Henderson Global Investors Limited	3.13 %	(in %)	(in %)

9. For power of attorney pursuant to section 34 (3) WpHG
(only possible with assignments pursuant to section 34 (1) sentence 1 no. 6 WpHG)

Date of the Annual General Meeting:

Total proportion of voting rights (6.) after the Annual General Meeting:

Proportion of voting rights	Instruments share	Total shares
(in %)	(in %)	(in %)

10. Miscellaneous information:

May 12, 2021

Notification of voting rights according to section 40 WpHG

1. Information on the issuer

Name:	Manz AG
Street House no.:	Steigäckerstr. 5
PLZ:	72768
Location:	Reutlingen Germany
Legal Entity Identifier (LEI):	529900B635NV0KEEOR57

2. Reason for the communication

X	Acquisition or disposition of shares with voting rights
	Acquisition or disposition of instruments
	Change in total number of voting rights
	Other reason:

3. Information about the notifying party

Legal entity: TR European Growth Trust PLC Registered office, country: London, United Kingdom

4. Names of shareholders

with 3 % or more voting rights, if different from 3.

5. Date on which contact with limit occurred:

05-04-2021

6. Total proportion of voting rights

	Proportion of voting rights (Total 7.a.)	Share instruments (Total 7.b.1.+ 7.b.2.)	Total shares (Total 7.a. + 7.b.)	Total number of voting rights in accordance with section 41 of the German Securities Trading Act (WpHG)
new	3.13 %	0.00 %	3.13 %	7744088
Last communication	2.97 %	0.00 %	2.97 %	/

7. Details regarding existing number of voting rights

a. Voting rights (sections 33, 34 WpHG)

ISIN	Absolute		in %	
	direct (section 33 WpHG)	assigned (section 34 WpHG)	direct (section 33 WpHG)	assigned (section 34 WpHG)
DE000A0JQ5U3	242180	0	3.13 %	0.00 %
Total	242180		3.13 %	

b.1. Instruments in the sense of section 38 (1) no. 1 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Voting rights, absolute	Voting rights in %
			0	0.00 %
		Total	0	0.00 %

b.2. Instruments in the sense of section 38 (1) no. 2 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Cash compensation or physical settlement	Voting rights, absolute	Voting rights in %
				0	0.00 %
			Total	0	0.00 %

8. Information relating to the notifying party

X	Notifying party (3.) is neither controlled nor does notifying party control other companies which hold voting rights of the issuer (1.) or to which voting rights of the issuer are attributed.
	Complete chain of subsidiaries starting with the highest controlling person or the highest controlling company:

companies	Voting rights in %, if 3 % or higher	Instruments in %, if 5 % or higher	Totals in %, if 5 % or higher

9. For power of attorney pursuant to section 34 (3) WpHG
(only possible with assignments pursuant to section 34 (1) sentence 1 no. 6 WpHG)

Date of the Annual General Meeting:

Total proportion of voting rights (6.) after the Annual General Meeting:

Proportion of voting rights	Instruments share	Total shares
(in %)	(in %)	(in %)

10. Miscellaneous information:

July 06, 2021

Notification of voting rights according to section 40 WpHG

1. Information on the issuer

Name:	Manz AG
Street House no.:	Steigäckerstr. 5
PLZ:	72768
Location:	Reutlingen Germany
Legal Entity Identifier (LEI):	529900B635NV0KEEOR57

2. Reason for the communication

X	Acquisition or disposition of shares with voting rights
	Acquisition or disposition of instruments
	Change in total number of voting rights
	Other reason:

3. Information about the notifying party

Legal entity: Universal-Investment-Gesellschaft mit beschränkter Haftung (limited liability company) Registered office, country: Frankfurt am Main, Germany

4. Names of shareholders
with 3 % or more voting rights, if different from 3.

5. Date on which contact with limit occurred:

07-01-2021

6. Total proportion of voting rights

	Proportion of voting rights (Total 7.a.)	Share instruments (Total 7.b.1.+ 7.b.2.)	Total shares (Total 7.a. + 7.b.)	Total number of voting rights in accordance with section 41 of the German Securities Trading Act (WpHG)
new	3.17 %	0.00 %	3.17 %	7748632
Last communication	2.98 %	0.00 %	2.98 %	/

7. Details regarding existing number of voting rights
a. Voting rights (sections 33, 34 WpHG)

ISIN	Absolute		in %	
	direct (section 33 WpHG)	assigned (section 34 WpHG)	direct (section 33 WpHG)	assigned (section 34 WpHG)
DE000A0JQ5U3	0	245939	0.00 %	3.17 %
Total	245939		3.17 %	

b.1. Instruments in the sense of section 38 (1) no. 1 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Voting rights, absolute	Voting rights in %
			0	0.00 %
		Total	0	0.00 %

b.2. Instruments in the sense of section 38 (1) no. 2 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Cash compensation or physical settlement	Voting rights, absolute	Voting rights in %
				0	0.00 %
			Total	0	0.00 %

8. Information relating to the notifying party

X	Notifying party (3.) is neither controlled nor does notifying party control other companies which hold voting rights of the issuer (1.) or to which voting rights of the issuer are attributed.
	Complete chain of subsidiaries starting with the highest controlling person or the highest controlling company:

companies	Voting rights in %, if 3 % or higher	Instruments in %, if 5 % or higher	Totals in %, if 5 % or higher

9. For power of attorney pursuant to section 34 (3) WpHG
(only possible with assignments pursuant to section 34 (1) sentence 1 no. 6 WpHG)

Date of the Annual General Meeting:

Total proportion of voting rights (6.) after the Annual General Meeting:

Proportion of voting rights	Instruments share	Total shares
(in %)	(in %)	(in %)

10. Miscellaneous information:

July 12, 2021

Notification of voting rights according to section 40 WpHG

1. Information on the issuer

Name:	Manz AG
Street House no.:	Steigäckerstr. 5
PLZ:	72768
Location:	Reutlingen Germany
Legal Entity Identifier (LEI):	529900B635NV0KEEOR57

2. Reason for the communication

	Acquisition or disposition of shares with voting rights
	Acquisition or disposition of instruments
	Change in total number of voting rights
X	Other reason: Voluntary Group notification, due to group restructuring

3. Information about the notifying party

Legal entity: Janus Henderson Group Plc Registered Office, State: St. Helier, Jersey

4. Names of shareholders
with 3 % or more voting rights, if different from 3.

TR European Growth Trust Plc

5. Date on which contact with limit occurred:

07-01-2021

6. Total proportion of voting rights

	Proportion of voting rights (Total 7.a.)	Share instruments (Total 7.b.1.+ 7.b.2.)	Total shares (Total 7.a. + 7.b.)	Total number of voting rights in accordance with section 41 of the German Securities Trading Act (WpHG)
new	3.44 %	0.00 %	3.44 %	7748632
Last communication	3.13 %	0.00 %	3.13 %	/

7. Details regarding existing number of voting rights
a. Voting rights (sections 33, 34 WpHG)

ISIN	Absolute		in %	
	direct (section 33 WpHG)	assigned (section 34 WpHG)	direct (section 33 WpHG)	assigned (section 34 WpHG)
DE000A0JQ5U3	0	266534	0.00 %	3.44 %
Total	266534		3.44 %	

b.1. Instruments in the sense of section 38 (1) no. 1 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Voting rights, absolute	Voting rights in %
			0	0.00 %
		Total	0	0.00 %

b.2. Instruments in the sense of section 38 (1) no. 2 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Cash compensation or physical settlement	Voting rights, absolute	Voting rights in %
				0	0.00 %
			Total	0	0.00 %

8. Information relating to the notifying party

	Notifying party (3.) is neither controlled nor does notifying party control other companies which hold voting rights of the issuer (1.) or to which voting rights of the issuer are attributed.
X	Complete chain of subsidiaries starting with the highest controlling person or the highest controlling company:

companies	Voting rights in %, if 3 % or higher	Instruments in %, if 5 % or higher	Totals in %, if 5 % or higher
Janus Henderson Group Plc	(in %)	(in %)	(in %)
Janus Henderson UK (Holdings) Limited	(in %)	(in %)	(in %)
Henderson Global Investors Limited	3.44 %	(in %)	(in %)

9. For power of attorney pursuant to section 34 (3) WpHG
(only possible with assignments pursuant to section 34 (1) sentence 1 no. 6 WpHG)

Date of the Annual General Meeting:

Total proportion of voting rights (6.) after the Annual General Meeting:

Proportion of voting rights	Instruments share	Total shares
(in %)	(in %)	(in %)

10. Miscellaneous information:

The following companies are no longer subsidiaries of Janus Henderson Group plc and therefore no voting rights are attributed to them: Henderson Group Holdings Asset Management Limited; HGI Asset Management Group Limited, Henderson Global Group Limited, Henderson Holdings Group Limited, Henderson Global Investors (Holdings) Limited.

September 03, 2021

Notification of voting rights according to section 40 WpHG

1. Information on the issuer

Name:	Manz AG
Street House no.:	Steigäckerstr. 5
PLZ:	72768
Location:	Reutlingen Germany

Legal Entity Identifier (LEI):	529900B635NV0KEEOR57

2. Reason for the communication

X	Acquisition or disposition of shares with voting rights
	Acquisition or disposition of instruments
	Change in total number of voting rights
X	Other reason: Correction of an announcement by Universal-Investment-GmbH, see 10.

3. Information about the notifying party

Legal entity: Montagu Private Equity LLP
Registered office, country: London, United Kingdom

4. Names of shareholders
with 3 % or more voting rights, if different from 3.

5. Date on which contact with limit occurred:

07-01-2021

6. Total proportion of voting rights

	Proportion of voting rights (Total 7.a.)	Share instruments (Total 7.b.1.+ 7.b.2.)	Total shares (Total 7.a. + 7.b.)	Total number of voting rights in accordance with section 41 of the German Securities Trading Act (WpHG)
new	3.17 %	0.00 %	3.17 %	7,748,632
Last communication	n/a %	n/a %	n/a %	/

7. Details regarding existing number of voting rights
a. Voting rights (sections 33, 34 WpHG)

ISIN	Absolute		in %	
	direct (section 33 WpHG)	assigned (section 34 WpHG)	direct (section 33 WpHG)	assigned (section 34 WpHG)
DE000A0JQ5U3	0	245,939	0.00 %	3.17 %
Total	245,939		3.17 %	

b.1. Instruments in the sense of section 38 (1) no. 1 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Voting rights, absolute	Voting rights in %
			0	0.00 %
		Total	0	0.00 %

b.2. Instruments in the sense of section 38 (1) no. 2 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Cash compensation or physical settlement	Voting rights, absolute	Voting rights in %
				0	0.00 %
			Total	0	0.00 %

8. Information relating to the notifying party

	Notifying party (3.) is neither controlled nor does notifying party control other companies which hold voting rights of the issuer (1.) or to which voting rights of the issuer are attributed.
X	Complete chain of subsidiaries starting with the highest controlling person or the highest controlling company:

companies	Voting rights in %, if 3 % or higher	Instruments in %, if 5 % or higher	Totals in %, if 5 % or higher
Montagu Private Equity LLP	(in %)	(in %)	(in %)
MLLP Holdings Ltd.	(in %)	(in %)	(in %)
MPE (General Partner V) Ltd.	(in %)	(in %)	(in %)
MPE (GP V) LP	(in %)	(in %)	(in %)
Alpha LuxCo 1 SARL	(in %)	(in %)	(in %)
Alpha LuxCo 2 SARL	(in %)	(in %)	(in %)
Universal- Beteiligungs- und Servicegesellschaft mbH	(in %)	(in %)	(in %)
Universal-Investment-Gesellschaft mbH	3.17 %	(in %)	(in %)
-	(in %)	(in %)	(in %)
Montagu Private Equity LLP	(in %)	(in %)	(in %)
MLLP Holdings Ltd.	(in %)	(in %)	(in %)
Montagu V Nominees Ltd.	(in %)	(in %)	(in %)
Alpha LuxCo 1 SARL	(in %)	(in %)	(in %)
Alpha LuxCo 2 SARL	(in %)	(in %)	(in %)
Universal- Beteiligungs- und Servicegesellschaft mbH	(in %)	(in %)	(in %)
Universal-Investment-Gesellschaft mbH	3.17 %	(in %)	(in %)

9. For power of attorney pursuant to section 34 (3) WpHG
(only possible with assignments pursuant to section 34 (1) sentence 1 no. 6 WpHG)

Date of the Annual General Meeting:

Total proportion of voting rights (6.) after the Annual General Meeting:

Proportion of voting rights	Instruments share	Total shares
(in %)	(in %)	(in %)

10. Miscellaneous information:

With this and parallel correction notifications, the status of the notifying party as the last the position of the notifying party as the ultimate parent company of the Universal Group pursuant to parent company of the Universal Group pursuant to section 35 (1) WpHG since 2017. has been followed up. Further explanations and all notifications concerned can be found at: www.universal-investment.com/de/stimmrechtsmitteilungen

September 06, 2021

Notification of voting rights according to section 40 WpHG

1. Information on the issuer

Name:	Manz AG
Street House no.:	Steigäckerstr. 5

PLZ:	72768
Location:	Reutlingen Germany
Legal Entity Identifier (LEI):	529900B635NV0KEEOR57

2. Reason for the communication

	Acquisition or disposition of shares with voting rights
	Acquisition or disposition of instruments
	Change in total number of voting rights
X	Other reason: Omission of attribution of subsidiaries by issuing a declaration of independence pursuant to section 35 WpHG, see 10.

3. Information about the notifying party

Legal entity: Montagu Private Equity LLP Registered office, country: London, United Kingdom

4. Names of shareholders
with 3 % or more voting rights, if different from 3.

5. Date on which contact with limit occurred:

08-19-2021

6. Total proportion of voting rights

	Proportion of voting rights (Total 7.a.)	Share instruments (Total 7.b.1.+ 7.b.2.)	Total shares (Total 7.a. + 7.b.)	Total number of voting rights in accordance with section 41 of the German Securities Trading Act (WpHG)
new	0.00 %	0.00 %	0.00 %	7,754,214
Last communication	3.17 %	0.00 %	3.17 %	/

7. Details regarding existing number of voting rights
a. Voting rights (sections 33, 34 WpHG)

ISIN	Absolute		in %	
	direct (section 33 WpHG)	assigned (section 34 WpHG)	direct (section 33 WpHG)	assigned (section 34 WpHG)
	0	0	0.00 %	0.00 %
Total	0		0.00 %	

b.1. Instruments in the sense of section 38 (1) no. 1 WpHG

Type of instrument	Due date / expiration	Exercise period / term	Voting rights, absolute	Voting rights in %
			0	0.00 %
		Total	0	0.00 %

b.2. Instruments in the sense of section 38 (1) no. 2 WpHG

Type of instrument	Due date/ expiration	Exercise period / term	Cash compensation or physical settlement	Voting rights, absolute	Voting rights in %

				0	0.00 %
			Total	0	0.00 %

8. Information relating to the notifying party

X	Notifying party (3.) is neither controlled nor does notifying party control other companies which hold voting rights of the issuer (1.) or to which voting rights of the issuer are attributed.
	Complete chain of subsidiaries starting with the highest controlling person or the highest controlling company:

companies	Voting rights in %, if 3 % or higher	Instruments in %, if 5 % or higher	Totals in %, if 5 % or higher

9. For power of attorney pursuant to section 34 (3) WpHG
(only possible with assignments pursuant to section 34 (1) sentence 1 no. 6 WpHG)

Date of the Annual General Meeting:

Total proportion of voting rights (6.) after the Annual General Meeting:

Proportion of voting rights	Instruments share	Total shares
(in %)	(in %)	(in %)

10. Miscellaneous information:

Due to the issuance of declarations of independence, no voting rights are attributable to the Montagu Group from the Universal Group since 08-19-2021. The holdings of the Universal group have not changed in a way relevant to the threshold. The reportable holdings of Universal-Investment GmbH as of Aug. 19, 2021 are as follows: 3.38 %/0 %/3.38 %.

Publication about the total number of voting rights, according to section 41 WpHG

June 08, 2021

1. Information on the issuer

Manz AG Steigäckerstr. 5 72768 Reutlingen Germany

2. Type of corporate action

	Type of corporate action	Status on / effective date
X	**Issue of subscription shares** (section 41 (2) WpHG)	
	Other capital measure (section 41 (1) WpHG)	

3. New total number of voting rights:

7748632

June 09, 2021

Correction of a publication from 06-08-2021

1. Information on the issuer

Manz AG Steigäckerstr. 5 72768 Reutlingen Germany

2. Type of corporate action

	Type of corporate action	Status on / effective date
X	**Issue of subscription shares** (section 41 (2) WpHG)	06-08-2021
	Other capital measure (section 41 (1) WpHG)	

3. New total number of voting rights:

7748632

August 09, 2021

Publication about the total number of voting rights

1. Information on the issuer

Manz AG Steigäckerstr. 5 72768 Reutlingen Germany

2. Type of corporate action

	Type of corporate action	Status on / effective date
X	**Issue of subscription shares** (section 41 (2) WpHG)	08-09-2021

	Other capital measure (section 41 (1) WpHG)	

3. New total number of voting rights:

7,754,214

August 24, 2021

Publication about the total number of voting rights

1. Information on the issuer

Manz AG Steigäckerstr. 5 72768 Reutlingen Germany

2. Type of corporate action

	Type of corporate action	Status on / effective date
X	**Issue of subscription shares** (Section 41 (2) WpHG)	08-23-2021
	Other capital measure (section 41 (1) WpHG)	

3. New total number of voting rights:

7755407

August 27, 2021

Publication about the total number of voting rights

1. Information on the issuer

Manz AG Steigäckerstr. 5 72768 Reutlingen Germany

2. Type of corporate action

	Type of corporate action	Status on / effective date
X	**Issue of subscription shares** (Section 41 (2) WpHG)	08-27-2021
	Other capital measure (section 41 (1) WpHG)	

3. New total number of voting rights:

7,756,804

Proposed appropriation of profit

The annual financial statements of Manz AG as of December 31, 2021, closed with a net loss of EUR 6,463,797.86 (previous year TEUR 6,143,414.72). The Management Board recommends that this net loss be carried forward to a new account.

Reutlingen, March 30, 2022

Manz AG

Martin Drasch Chief Executive Officer	Manfred Hochleitner	Jürgen Knie

APPENDIX 3a

MANZ AG, REUTLINGEN

DEVELOPMENT OF FIXED ASSETS IN THE FISCAL YEAR 2021

	ACQUISITION AND MANUFACTURING COSTS					ACCUMULATED DEPRECIATION					NET BOOK VALUES	
	Jan. 01, 2021 euros	Additions euros	Repostings euros	Disposals euros	Dec. 31, 2021 euros	Jan. 01, 2021 euros	Additions euros	Disposals euros	Attribution euros	Dec. 31, 2021 euros	Dec. 31, 2021 euros	Dec. 31, 2020 euros
I. INTANGIBLE ASSETS												
1. Internally generated industrial property rights and similar rights and assets	57.459.206,37	6.796.431,47	0,00	50.307,77	64.205.330,07	40.501.797,77	4.816.615,22	0,00	0,00	45.318.412,99	18.886.917,08	16.957.408,60
2. Concessions, industrial property rights and similar right and assets, and licenses for such rights and assets, purchased against payment	13.216.735,26	264.624,93	0,00	0,00	13.481.360,19	12.109.326,86	227.737,45	0,00	0,00	12.337.064,31	1.144.295,88	1.107.408,40
	70.675.941,63	7.061.056,40	0,00	50.307,77	77.686.690,26	52.611.124,63	5.044.352,67	0,00	0,00	57.655.477,30	20.031.212,96	18.064.817,00
II. FIXED ASSETS												
1. Land, similar rights and buildings, including buildings on third-party land	1.537.000,05	75.023,41	0,00	0,00	1.612.023,46	1.307.902,05	41.256,41	0,00	0,00	1.349.158,46	262.865,00	229.098,00
2. Technical equipment and machinery	16.383.068,08	89.785,24	0,00	2.365,67	16.470.487,65	15.802.497,08	245.799,24	2.365,67	0,00	16.045.930,65	424.557,00	580.571,00
3. Other equipment, operating and office equipment	8.030.510,80	348.469,70	0,00	181.706,60	8.197.273,90	7.459.506,80	345.236,70	178.817,60	0,00	7.625.925,90	571.348,00	571.004,00
	25.950.578,93	513.278,35	0,00	184.072,27	26.279.785,01	24.569.905,93	632.292,35	181.183,27	0,00	25.021.015,01	1.258.770,00	1.380.673,00
III. FINANCIAL ASSETS												
1. Shares held in affiliated companies	42.569.377,95	0,00	0,00	12.055.695,88	30.513.682,07	780.000,00	79.000,00	0,00	0,00	859.000,00	29.654.682,07	41.789.377,95
2. Loans to affiliated companies	916.695,19	0,00	0,00	916.695,19	0,00	0,00	0,00	0,00	0,00	0,00	0,00	916.695,19
3. Participations	24.245.265,11	4.049.210,91	0,00	0,00	28.294.476,02	16.985.000,00	7.260.265,11	0,00	0,00	24.245.265,11	4.049.210,91	7.260.265,11
	67.731.338,25	4.049.210,91	0,00	12.972.391,07	58.808.158,09	17.765.000,00	7.339.265,11	0,00	0,00	25.104.265,11	33.703.892,98	49.966.338,25
	164.357.858,81	11.623.545,66	0,00	13.206.771,11	162.774.633,36	94.946.030,56	13.015.910,13	181.183,27	0,00	107.780.757,42	54.993.875,94	69.411.828,25

Manz AG, Reutlingen

Management Report for the Financial Year 2021

1. Business Report

1.1 Company Situation

1.1.1 Corporate Structure and Shareholdings

Founded in 1987, Manz AG is a global high-tech engineering company with a focus on five industries: automotive & e-mobility, battery manufacturing, electronics, energy, and medical technology. With many years of expertise in automation, laser processing, inspection systems and wet chemistry, the company offers manufacturers and their suppliers in these future-oriented industries a broad portfolio of products and solutions. In addition to customized production solutions, this also includes individual machines and modules that can be linked together to form complete, individual system solutions. The company also offers a comprehensive range of services around Manz AG's core technological competencies: From simulation and factory planning to process and prototype development, customer training and after-sales service. Manz AG is a development partner for industrial companies, and in this role helps to support new technologies to market maturity.

As the parent company of the Manz Group, the company held 100 % of the shares in a domestic subsidiary in Tübingen and in five foreign subsidiaries based in Hungary, Italy, the USA, Slovakia and Hong Kong on the reporting date. In addition, 100 % of the shares were held in a second-tier subsidiary in China, two in Taiwan and 75 % in a second-tier subsidiary in India. Manz AG holds shares amounting to 56 % in the subsidiary Suzhou Manz New Energy Equipment Co., Ltd. based in China.

In 2021, a great-grandchild company with a shareholding of 100 %, Manz (B.V.I.) Ltd, Road Town, British Virgin Islands, was liquidated. Its assets and liabilities, as well as equity, accrued to Manz Taiwan Ltd, Chungli, Taiwan.

The 80.5 % interest in Talus Manufacturing Ltd., Taiwan, which is not fully consolidated, was sold to LAM Research.

In 2021, a 40 % interest was acquired in CADIS Engineering GmbH, Schwendi, Germany, and a 24.99 % interest in Q.big 3D GmbH, Aalen, Germany. In addition, Manz AG acquired a 3.26 % interest in MetOX Technologies, Inc. of Houston, USA.

1.1.2 Business model

In the 2021 financial year, Manz AG's operating activities comprised five reporting segments: Electronics, Energy Storage, Solar, Contract Manufacturing, and Service. At the same time, the company placed strategic focus on the automotive industry & electric mobility sectors, battery production, electronics, energy, and medical technology. As part of this development, the organizational structures within the Group were optimized on January 1st, 2022; business units were reorganized and the reporting segments were adjusted accordingly. Starting in the 2022 fiscal year, Manz AG will report in the two reporting segments Mobility & Battery Solutions and Industry Solutions. The main features of the new reporting structure are explained in the opportunities report and the outlook report.

With a clear industry focus, executive management plans to develop Manz AG into one of the leading supplier and integrator of machinery and equipment for battery production, as well as for other components of the electric drive train. With innovative engineering, Manz works on production solutions that contribute to increasing the performance parameters and reducing the costs of the end products. By addressing different growth industries at the same time, synergies can be created and opportunities fully exploited. Manz is also pursuing this goal for other industries with comparable technological requirements.
At the same time, Manz AG is dedicated to the topic of digital transformation in the industry. Using new methods, such as digital twins, a new generation of fully automated production lines is to be developed. In this context, the use of artificial intelligence (AI) enables an innovative type of machine control and production control, with the goal of self-optimizing manufacturing.
In line with the company's claim "engineering tomorrow's production", Manz AG attaches great importance to continuously developing new future technologies and growth fields. To this end, Manz pursues a targeted M&A strategy that includes both majority and minority interests in companies and technologies worldwide.
In addition, Manz AG's business activities are aimed at sustainably increasing its competitiveness and profitability by continuously expanding its modular machine concepts.

1.1.3 Control System and Performance Indicators

At Group level, Manz AG was organized by product and service segments in financial year 2021 for the purpose of corporate management and reported its business activities in the Electronics, Energy Storage, Solar, Contract Manufacturing, and Service segments. In order to decide on the allocation of resources and to control the profitability of the divisions, they were monitored separately by management. The entire Managing Board was kept informed of the business performance in detail by means of regular reports and management meetings. As a result, forward-looking management by the respective Managing Board was possible in a timely manner in financial year 2021. As of January 1, 2022, this control system will be applied to the new reporting structure. Details of the reporting structure applicable from the financial year 2022 are presented in the forecast report.

Principles and Goals of Financial Management

Manz AG’s key performance indicators for corporate development are revenue, earnings before interest, taxes, depreciation and amortization (EBITDA), earnings before interest and taxes (EBIT), and the equity ratio.

In the long-term (5 years), the Managing Board has defined the following target values for the Group:

- Sales: An average annual increase in sales of between 10 % and 20 % is envisaged.
- EBITDA margin: A target value of more than 15 % is defined for the EBITDA margin.
- EBIT margin: Following the application of IFRS 16 from 2019, a target value of 10 % is defined for the EBIT margin.
- Equity ratio: The target corridor for the ratio of equity to total assets is between 40 % and 60 %.
- Gearing: Manz AG has defined gearing as the ratio of net financial liabilities (current and non-current liabilities to banks less cash and cash equivalents) to equity before minority interests of less than 50 % as a target figure.

Group control parameters (IFRS) Manz AG control parameters (HGB)

in %	2021	2020	2021	2020
Revenue (in millions of EUR)	227.1	236.8	178.3	78.7
EBITDA margin	7.7	8.0	-0.9	0.5
EBIT margin	-6.8	3.0	-4.4	-3.4
Equity ratio	35.4	36.7	15.7	19.0
Gearing	12.1	5.5	-0.70	-1.28

Manz AG's financial management system is centrally organized. In order to minimize risks and exploit Group-wide optimization potential, the company bundles decisions on financing, cash investments and exchange rate hedging of subsidiaries within the Group. In this context, the company follows value-based financing principles, in order to secure its liquidity at all times, limit financial risks and optimize the cost of capital. In addition, Manz strives for a well-balanced debt maturity profile. Further information on the management of the individual financial risks can be found in the notes to the consolidated financial statements under "Reporting on financial instruments".

1.1.4 Research and Development

For Manz as a high-tech equipment manufacturer, research and development continued to play an important role in the financial year 2021. With over 200 in the entity and 500 engineers, technicians and scientists at its various development sites, Manz AG focuses on the development of manufacturing, assembly and handling technologies, integrated into modularized individual machines, tools and linked system solutions. The Manz AG interdisciplinary "R & D Council" is intended to enable the internal, cross-segment integration of competencies.

Manz maintains numerous cooperative arrangements with research institutions, universities and colleges. The company is active, for example, in the Lithium-Ion Battery Competence Network (KLiB) and as a committee member of the European Technology and Innovation Platform (ETIP). The goal in each case is to create the conditions within the European Union for the development of European battery production.

In addition, Manz AG has a consulting function in the European project LIPLANET under the umbrella of the "Horizon Europe Project" of the European Commission. This project aims to coordinate European research and pilot lines for the production of lithium-ion battery cells and to ensure better efficiency of European battery research.

At the end of April 2021, Manz received official notification from the BMWi and the Baden-Württemberg State Ministry of Economics for funding of around EUR 70 million over the next six years. This funding is subject to the financing of Manz AG's own share and is provided as part of the Important Projects of Common European Interest ("IPCEI") to promote research and innovation in the battery value chain. The aim of the project, known as "European Battery Innovation (EuBatIn)", is to develop new technologies and processes that go far beyond the current cutting edge of technology and that will enable major improvements in terms of performance, safety and environmental protection. To this end, twelve EU member states will provide a total of up to EUR 2.9 billion in funding for companies in their respective countries in the coming years. Manz Italy Srl is also being funded with a mid-double-digit million EUR amount. With its "Lithium Battery Factory of the Future" project, Manz AG intends to develop efficient machines and processes for the fully automated production of next-generation lithium-ion batteries.

Investments in R&D amounted to EUR 8.4 million in 2021 (previous year: EUR 9.9 million). Based on the increase in total output, the R&D ratio fell to 5.2 % (previous year: 8.0 %). Capitalized development costs alone came to 4.5 % (previous year: 4.6 %).

In the 2021 reporting period, scheduled amortization of capitalized development costs amounted to EUR 4.5 million (previous year: EUR 4.1 million) and impairment losses of EUR 0.3 million (previous year: EUR 0.0 million). The company will also continue to place a clear emphasis on R&D activities in future. In order to consolidate its technological positioning in the relevant target markets and its innovative strength in a sustainable way and over the long term, Manz AG aims to achieve an annual R&D ratio of 5 % on average in its two segments. Including Manz AG's equity ratio in the development costs within the framework of the IPCEI project, in the coming years this figure will average around 15 %.

1.1.5 Employees

Qualified and motivated employees provide the basis of Manz AG's long-term success. As of December 31, 2021, Manz AG had 461 employees (previous year: 437) and 35 trainees (previous year: 39).

1.2 General Conditions

1.2.1 Market and Competitive Environment

1.2.1.1 Economic Environment

Global economic activity in 2021 was again dominated by the COVID-19 pandemic and multi-layered supply bottlenecks. According to the Kiel Institute for the World Economy (IfW), the recovery of the global economy from the corona-induced slump lost momentum in the second half of the year. While increasing corona infections again slowed down the economy in many parts of the world, supply bottlenecks hampered the recovery of industrial production. Overall, the IfW experts expected global production to grow by 5.7 % year-on-year in December 2021 (previous year: -3.1 %). According to the IfW, economic output in the USA increased by 5.6 % in 2021 compared with 2020 (previous year: -3.4 %). According to the IfW, gross domestic product in China could grow by 7.8 % in 2021 (previous year: +2.3 %). Economic output in the European Union is expected to increase by 5.0 % in 2021 (previous year: -6.0 %). The recovery of the German economy was also slowed down once again. According to the Federal Statistical Office, gross domestic product (GDP) in 2021 increased by only 2.7 % compared with 2020, contrary to original assumptions (previous year: - 4.9 %). Thus, GDP in 2021 was still 1,1 % lower than in 2019, the year before the Corona pandemic began.

1.2.1.2 Mechanical Engineering Industry

According to VDMA data from December 2021, production expectations in the machinery and plant engineering sector for 2021 will not be met in full despite well-filled order books. While new orders increased by 34 % in real terms in the first ten months, production rose by a weaker than expected 7.2 % in real terms in the same period. The industry association sees the main reason for this gap between order intake and production in supply chain impairments, with companies experiencing shortages of electronic components and metals in particular. The VDMA economists estimate that production growth for 2021 as a whole will be 7 % year-on-year in price-adjusted terms compared to 2020 (previous year: -11.8 %). This corresponds to a total production value in the mechanical engineering sector of EUR 219 billion.

1.2.1.3 Industries of the Core Segments

Energy Storage

The automotive industry's shift toward electromobility is omnipresent and is being accelerated, in particular, by strict emissions requirements in key sales markets. The move away from the combustion engine poses major challenges for automotive manufacturers and suppliers. The dominant issue in the automotive sector at present is the shortage of semiconductors, which is causing significant production losses and will continue to affect the industry for some time to come, according to experts. According to IHS Markit, global production of pure electric vehicles was expected to reach around 4.6 million in 2021, an increase of 88 % compared to 2020. The battery capacity needed for this, according to IHS Markit, is around 240 gigawatt hours. Pure electric vehicles currently account for around six percent of total automotive production worldwide.
According to the German Association of the Automotive Industry (VDA), the total number of passenger cars produced in Germany in 2021, at 3.1 million units, remained well below the previous year's figure, which was already low due to corona, at -12 % and thus reached the lowest production volume since 1975.
According to the Federal Motor Transport Authority (KBA), new passenger car registrations in Germany fell by 10 % year-on-year to around 2.6 million in 2021. This is the lowest value since 1985. Over the course of the year, around 355,000 all-electric passenger cars (BEVs) were newly registered (+83 percent year-on-year), resulting in a BEV share of around 14 %.

Electromobility is the biggest growth driver for lithium-ion battery (LIB) demand in the coming years. According to IHS-Markit, the total battery capacity required for electric cars (BEVs) will increase from around 380 gigawatt hours (GWh) at present to around 1,840 GWh in 2027. Currently, Europe is still dependent on importing batteries from Asia. For example, according to IHS Markit, around one-third of electric passenger cars (BEVs) manufactured in Europe are still equipped with battery cells produced in Asia. In the next few years, the demand for lithium-ion batteries is to be met locally by setting up numerous battery factories in Europe. By 2027, IHS Markit forecasts that 87 % of electric passenger cars manufactured in Europe will be equipped with battery cells produced in Europe.

Electronics

Cell contacting systems are a central component of the electric drive train of electric cars and plug-in hybrids: Depending on their size and capacity, several battery cells or modules are integrated in each battery-powered e-car and interconnected by cell contacting systems. With its high-tech production systems, Manz covers all essential manufacturing steps for the production of cell contact systems. According to Manz estimates based on IHS Markit, a total of around 106 cell contact systems were produced worldwide in 2021 (+ 37 % compared to the previous year).

In the field of display manufacturing, Manz offers highly efficient production processes with machines and equipment in the areas of wet chemistry, automation, and laser process technology, which are used in the production of TFT-LCDs and OLEDs. In the display sector, according to DSCC, capacity growth for LCD and OLED displays increased by 11 % year-on-year in 2021.

However, manufacturers are trying to expand the increase in required production capacity through process simplification and bottleneck elimination to meet demand. With a market share of over 70 %, LCD TVs clearly account for the largest share.

For the production of printed circuit boards and chip carriers, Manz offers wet-chemical process technology, for example, for exposure or surface processing. The focus is on so-called IC substrates, which allow microprocessors to be packaged in a very small space. Such packages are used in high-performance computers, for example, and other fields of application include smartphones, cars and industry. The market for these substrates grew to around USD 14 billion in 2021 as a whole (up 38 % year-on-year), according to Prismark data from December 2021.

In the field of semiconductor manufacturing, the chip packaging process Fan-Out Panel Level Packaging (FOPLP) is playing an important role due to further miniaturization in the electronics industry. For the realization of the FOPLP with simultaneous coating of the microchips with an additional metal layer, in order to further optimize the performance parameters of the chips (redistribution layer), Manz is the world's only supplier of turnkey production lines. The market for FOPLP grew to USD 73 million in 2021 (+ 49 % compared to 2020), according to Yole Développement.

Solar

Despite various unfavorable market conditions, such as the COVID-19 pandemic, bottlenecks in the supply chains for photovoltaic products and consequently rising prices for solar modules, the photovoltaic market continued on its growth path last year, according to SolarPower Europe. New installed capacity in the EU in 2021 was 25.9 GW. This corresponds to an increase of 34 % compared to the year 2020 (previous year: with 19.3 GW). The EU solar market thus achieved its highest ever level of newly installed capacity, exactly a decade after the previous record of 21.4 GW set in 2011. As in previous years, Germany is once again the largest solar market in Europe with 5.3 GW (20 % market share) of newly installed capacity, followed by Spain (3.8 GW), the Netherlands (3.3 GW), Poland (3.2 GW) and France (2.5 GW). Overall, 25 of the 27 EU member states installed more solar energy in 2021 than the year before.
The total capacity of solar power plants in the EU in 2021 was 164.9 GW, 19 % higher than the previous year's level of 139 GW. Germany (59.9 GW) and Italy (22 GW), the two countries with the highest installed capacity, account for nearly 50 % of the installed capacity of all solar power plants in the EU.
The ambitious plans of the new German government to double installed capacity to 200 GW by 2030 will further increase the central importance of Europe's leading market for the solar industry. SolarPower Europe expects 47.7 GW of new capacity to be installed in Germany by 2025. This is roughly equivalent to the output expected for the following three solar markets (Spain, Netherlands, France) combined. As before, a large part of the solar products needed are imported into the EU, and local production is very small compared to China and other Asian countries. Due to the strong growth in recent years, which was still well above the forecasts of many analysts, there are also new opportunities for European solar production.

2. Explanations of Business Results and Analysis of Results of Operations, Net Assets, Liquidity Position

2.1 Financial Performance

In fiscal year 2021, sales revenues of EUR 178.3 million (previous year: EUR 78.7 million) were generated. The forecast sales increase of 30 % to 40 % for 2021 was exceeded. At EUR 100.5 million, the majority of sales were generated in Germany. Other sales territories were China with EUR 67.8 million, the rest of Europe with EUR 3.8 million, the USA with EUR 2.1 million, Taiwan with EUR 1.4 million and other countries in the world with EUR 2.7 million.

Inventories of work in progress and finished goods decreased by EUR 23.0 million in 2021 (previous year: inventory increase of EUR 39.1 million) and are primarily derived from the completion of orders in the Solar and Electronics segments. By contrast, the increase in work in progress due to the high volume of orders in progress in the Energy Storage business had a positive impact. Total operating performance increased by EUR 39.2 million to EUR 162.6 million in the financial year (previous year: EUR 123.4 million), in line with the rise in sales. Own work capitalized amounted to EUR 7.3 million (previous year: EUR 5.6 million) and exclusively includes capitalized development costs.

The Electronics segment generated sales of EUR 84.3 million in 2021 (previous year: EUR 15.6 million). The forecast sales increase of 300 % to 400 % was thus confirmed. The increase is due to the shifting of orders from 2020 to the 2021 financial year, which was mainly due to the Corona pandemic.

The Solar segment was characterised by the final invoicing of major orders. These included the large CIGS order received in 2017 for the delivery of a CIGS laboratory line. The other of the two large CIGS orders received in 2017, the delivery of a CIGS production line, is expected to be scheduled for 2022. The project is currently on hold, as the customer does not currently plan to put the line into operation. In a draft settlement agreement, Manz AG submitted a claim of around 30 million euros to the Chinese customer on 25 February 2022. In line with expectations, revenues of 68.8 million euros were significantly higher than the previous year's figure of 6.0 million euros.

Most of the new customer orders won in the Energy Storage business segment in the current fiscal year and the previous year were in the processing phase at the end of 2021. Accordingly, sales revenues were low at EUR 11.8 million, compared with EUR 48.4 million in the previous year. The expected increase in sales of at least 20 % still failed to materialize in 2021.

Despite the Corona pandemic continuing to prevail in 2021 and the associated continuation of difficult economic conditions, sales in the Service segment increased from EUR 4.0 million in the previous year to EUR 9.0 million in the year under review.

In the Contract Manufacturing segment, sales revenue fell to EUR 0.1 million in 2021 (previous year: EUR 0.5 million). Sales to affiliated companies amounted to EUR 4.3 million (previous year: EUR 4.3 million).
Other operating income decreased to EUR 2.6 million (previous year: EUR 5.1 million). This mainly includes income from the reversal of other provisions amounting to EUR 1.3 million (previous year: EUR 1.2 million) with a significant share of income from the reversal of warranty provisions amounting to EUR 1.1 million (previous year: EUR 0.6 million), an insurance claim for a transport loss amounting to EUR 0.5 million (previous year: 0.0 million) and government grants received for ongoing research and development projects in the segments of Solar and Energy Storage amounting to EUR 0.3 million (previous year: EUR 0.4 million). A further EUR 0.4 million resulted from a claim for reimbursement of legal costs in connection with arbitration proceedings with a customer in the Energy Storage business segment. The total comparative value amounts to EUR 3.8 million.

The cost of materials increased to EUR 103.8 million in fiscal year 2021 (previous year: EUR 71.3 million) with an increase in total output. The cost of materials ratio rose to 63.8 % (previous year: 57.8 %) due to the use of project-related external production of components and machines for customer orders not yet relevant to sales in the Energy Storage segment. The acquisitions were primarily made at subsidiaries of Manz AG.

In addition to salary increases, personnel expenses increased primarily due to the increase in personnel in connection with the “Lithium Battery Factory of the Future” funding project to EUR 40.6 million (previous year: EUR 36.7 million) due to an increase in the number of employees in technical operations during the fiscal year, which, taking into account the increased total operating performance, led to a drop in the personnel expense ratio in 2021 to 25.0 % (previous year: 29.8 %).

Amortization of intangible assets and depreciation of property, plant and equipment increased to EUR 5.4 million in 2021 (previous year: EUR 4.9 million). Of this amount, EUR 4.5 million (previous year: EUR 4.1 million) was attributable to amortization of capitalized development costs. Impairment losses on capitalized development costs amounted to EUR 0.3 million in 2021 (previous year: EUR 0.0 million).

Other operating expenses amounted to EUR 22.2 million (previous year: EUR 19.9 million). This includes, among other things, expenses for sales commissions to subsidiaries for acquired customer orders of EUR 1.8 million (previous year: EUR 1.9 million), legal and consulting fees of EUR 1.8 million (previous year: EUR 1.8 million), expenses for IT service contracts of EUR 1.7 million (previous year: EUR 0.9 million) and EUR 1.1 million (previous year: EUR 1.1 million) for guarantee commissions, which are mainly attributable to customer projects in the Energy Storage segment. This also includes freight costs for outgoing freight amounting to EUR 0.6 million (previous year EUR 0.6 million).

The financial result was EUR -7.9 million (previous year: EUR -5.1 million). This item mainly includes write-downs on financial assets totaling EUR 7.3 million (previous year: EUR 4.4 million), which includes EUR 0.1 million on the 56 % shareholding interest in Suzhou Manz New Energy Equipment Ltd. and EUR 7.2 million on the 11.1 % shareholding interest in NICE PV Research Ltd. In addition, interest and similar expenses of EUR 0.9 million (previous year: EUR 0.8 million) were incurred in the financial result in 2021. Earnings after taxes worsened by EUR 5.7 million year-on-year to EUR -15.0 million (previous year: EUR -9.3 million).

A net loss of EUR 15.3 million was generated in fiscal year 2021 (previous year: net loss of EUR 9.7 million). A withdrawal from the capital reserve in the amount of EUR 15.0 million, taking into account the loss carried forward from the previous year, results in an accumulated loss of EUR 6.5 million (previous year: EUR -6.1 million).

2.2 Financial Position

As of December 31, 2021, there was a reduction in total assets from EUR 234.0 million to EUR 185.7 million compared with the previous year. The net loss of EUR 15.3 million resulted in a decline in balance sheet equity from EUR 44.4 million to EUR 29.1 million. The subscribed capital increased from EUR 7.7 million to EUR 7.8 million due to the issue of preferred shares to employees with subscription rights and corresponds to 7,756,804 no-par value bearer shares. The equity ratio at the balance sheet date decreased from 19.0 % in the previous year to 15.7 %.

Liabilities to affiliated companies increased from EUR 43.5 million to EUR 46.2 million, resulting from trade payables as of the balance sheet date. Trade payables to third parties increased to EUR 17.6 million (previous year: EUR 11.8 million) and advance payments received on orders fell from EUR 117.3 million in the previous year to EUR 77.0 million. The advance payments received are largely attributable to the major CIGS order for the delivery of CIGS production line, which has not yet been completed, as well as advance payments for projects in the Energy Storage business segment.

Provisions increased from EUR 10.2 million in the previous year to EUR 13.4 million. This primarily includes provisions for invoices not yet received in the amount of EUR 3.3 million (previous year: EUR 0.4 million), provisions for pensions in the amount of EUR 3.2 million (previous year: EUR 3.1 million), provisions for rework of invoiced customer projects in the amount of EUR 1.5 million (previous year: EUR 0.2 million), and tax provisions in the amount of EUR 1.1 million (previous year: EUR 0.8 million). EUR, which relate to withholding tax to be paid on existing receivables from services rendered to Manz Taiwan Ltd. and Manz China Suzhou Ltd.

As of the balance sheet date, fixed assets accounted for 29.6 % of Manz AG's assets and decreased by EUR 14.4 million to EUR 55.0 million (previous year: EUR 69.4 million). The decrease resulted primarily from a decline in financial assets, which accounted for 61.3 % of non-current assets as of the balance sheet date and fell from EUR 50.0 million in the previous year to EUR 33.7 million in the year under review. The reasons for this were the total repatriation of loans to affiliated companies to EUR 0.0 million (previous year: EUR 0.9 million) due to repayments received, a reduction of EUR 12.1 million in the investment in the subsidiary Manz Asia due to a capital reduction carried out, as well as impairment losses of EUR 7.3 million on the 56 % investment in Suzhou Manz New Energy Equipment Ltd. and on the 11.1 % investment in Nice PV Research Ltd. In addition, there were new investments in CADIS Engineering GmbH, Q.big 3D GmbH and MetOX Technologies, Inc. with a total value of EUR 4.1 million.

Current assets decreased by EUR 34.3 million from EUR 164.2 million in the previous year to EUR 129.9 million. Cash and cash equivalents decreased from EUR 56.8 million in the previous year to EUR 20.3 million. Inventories fell from EUR 104.7 million in the previous year to EUR 96.9 million, and the advance payments included therein decreased to EUR 50.9 million as of the balance sheet date (previous year: EUR 66.1 million). Trade receivables increased from EUR 1.1 million to EUR 6.2 million and other assets amounted to EUR 6.4 million (previous year: EUR 1.4 million). This mainly includes a settlement value of EUR 3.8 million that arose as a result of arbitration proceedings with a customer in the Energy Storage business segment. Receivables from affiliated companies amounted to EUR 0.1 million at the balance sheet date (previous year: EUR 0.2 million).

2.3 Liquidity Position

In the fiscal year 2021, the cash flow from operating activities developed to EUR -37.2 million (previous year: EUR +7.3 million) with a net loss of EUR -15.3 million. Non-cash depreciation and amortization of non-current assets amounted to EUR 13.0 million (previous year: EUR 9.3 million), so that cash outflows were mainly due to the increase in receivables and other current assets of EUR 14.4 million (previous year: cash outflow of EUR 0.8 million) and the simultaneous decrease in advance payments received of EUR 40.2 million (previous year: cash inflow of EUR 9.4 million). Cash inflows resulted from the reduction of inventories by EUR 7.8 million (previous year: cash outflow of EUR 9.3 million), from the increase in trade payables, mainly in the Energy Storage segment, by EUR 8.4 million (previous year: cash inflow of EUR 7.4 million), and in other liabilities in the amount of EUR 2.7 million (previous year: cash inflow of EUR 2.7 million).

Cash flow from investing activities amounted to EUR 1.4 million in 2021 (previous year: EUR +9.8 million). The cash outflows included in this item resulted primarily from investing activities for intangible assets, from investing activities for property, plant and equipment in the amount of EUR -7.5 million (previous year: -5.5 million) and for investments in new shareholdings in the amount of EUR -4.1 million. Cash inflows from financial assets totaled EUR 13.0 million (previous year: EUR 15.2 million) and consisted of repayments received from affiliated companies for loans in the amount of EUR 0.9 million (previous year: EUR 4.4 million), as well as the distribution of the capital reduction at Manz Asia in the amount of EUR 12.1 million (previous year: EUR 10.8 million).

Cash flow from financing activities in the 2021 fiscal year was primarily limited to cash outflows from interest payments in the amount of EUR -0.7 million (previous year: EUR -0.5 million), which were primarily made to the affiliated companies Manz Taiwan Ltd. and Manz China Suzhou Ltd.

At the end of the 2021 fiscal year, cash and cash equivalents were positive in the amount of EUR 20.3 million (previous year: EUR 56.8 million). This includes restricted cash of EUR 5.0 million (previous year: EUR 5.0 million) due to cash deposits for advance payment guarantees issued by financial institutions to customers. As of the balance sheet date, Manz AG had an unused credit line with banks in the amount of EUR 5.0 million (previous year: EUR 5.0 million). The conclusion of a syndicated loan agreement is targeted for the first half of 2022.

Based on current business planning, the Managing Board assumes that Manz AG will be able to meet its future payment obligations.

Please refer to the liquidity and financing risks in the Risk Report concerning additional statements regarding liquidity and the types of financing in the Group.

2.4 General Statement on the Economic Situation of the Company

In financial year 2021, a significantly higher total operating performance of EUR 162.6 million was achieved compared to EUR 123.4 million in the previous year. The net loss for the year worsened by EUR -5.6 million to EUR -15.3 million (previous year: EUR -9.7 million), which was mainly influenced by the EUR 2.8 million decrease in the financial result to EUR -7.9 million (previous year: EUR -5.1 million). Furthermore, the cost of materials increased disproportionately from EUR 71.3 million in the previous year to EUR 103.8 million due to the use of external production for customer orders in the Energy Storage segment that are not yet generating sales. The cost of materials ratio rose to 63.8 % (previous year: 57.8 %), while the personnel expense ratio fell to 25.0 % (previous year: 29.8 %).

The total assets fell from EUR 234.0 million in the previous year to EUR 185.7 million. The negative result for the year reduced equity to EUR 29.1 million (previous year: EUR 44.4 million), with an equity ratio of 15.7 % (previous year: 19.0 %). Advance payments received decreased from EUR 117.3 million in the previous year to EUR 77.0 million due to the significant increase in sales realizations in the reporting year, primarily in the Solar and Electronics segments. There was also a reduction in financial assets from EUR 50.0 million to EUR 33.7 million.

Cash and cash equivalents as of December 31, 2021 amounted to EUR 20.3 million (previous year: EUR 56.8 million). There was a cash outflow from operating activities of EUR 37.2 million (previous year: EUR 7.3 million), which was caused, in particular, by the decrease in advance payments received of EUR 40.2 million (previous year: cash inflow of EUR 9.4 million) due to revenue recognition of customer projects, especially in the Solar segment, and was the main reason for a reduction in cash and cash equivalents of EUR 36.5 million at the balance sheet date.

In the past financial year, Manz AG recorded increasing momentum in the e-mobility market and was able to convince numerous well-known, international customers with its many years of experience in the development of innovative production concepts and solutions for the manufacture of lithium-ion batteries. In Manz's view, the cooperation with Britishvolt and the contract awarded by the BMW Group to set up a pilot line for battery production in Parsdorf are outstanding examples of this. With an order backlog of 538.9 million euros, the developments on the market for electric mobility in particular underline the potential for Manz AG.

2.5 Explanation of Target Achievement 2021

Manz AG generated revenues of EUR 178.3 million (previous year: EUR 78.7 million) and a total output of EUR 162.6 million (previous year: EUR 123.4 million) in financial year 2021. In its operating business, Manz generated earnings before interest, taxes, depreciation and amortisation (EBITDA) of -1.4 million euros (previous year: 0.6 million euros) and earnings before interest and taxes (EBIT) of -7.1 million euros (previous year: -4.2 million euros).

Sales in fiscal year 2021 grew by 127 %, significantly exceeding the expected increase of 30 % to 40% due to the completion of major projects in the Electronics and Solar segments. Despite restrictions due to the Corona pandemic, total output experienced an increase of 32 % and is in the lower range of the forecast growth of 30 % to 40 %.

A forecast positive EBITDA margin in the mid-single-digit percentage range was not achieved and stood at -0.9 %. A positive EBIT margin in the low to medium percentage range was also not achieved, at -4.4 %. The main reason for this is the disproportionate increase in the cost of materials, which is due to increased use of external production, primarily at subsidiaries. In the 2021 financial year, this mainly related to customer orders in the Energy Storage business segment that were not yet relevant to revenue. The equity ratio fell from 19.0 % in the previous year to 15.7 % due to the negative net income of EUR -15.3 million generated, and did not lead to any expected increase in the equity ratio to over 20 %. Gearing also declined slightly from -1.28 to -0.70, somewhat missing the expectation for a comparable figure with 2020.

The targeted sales increase of at least 20 % in the Energy Storage segment was not yet achieved in fiscal year 2021 with sales of EUR 11.8 million (previous year: EUR 48.4 million). Customer orders in progress with an order backlog of EUR 298 million will predominantly be relevant to sales in 2022.

As expected, there was a significant increase in revenue in the Solar segment from EUR 6.0 million to EUR 68.8 million due to the realization of sales from large CIGS projects. The scheduling of the major order for the delivery of a CIGS production line is targeted for 2022. The project is currently on hold, as the customer is not currently planning to put the line into operation. In a draft settlement agreement, Manz AG submitted a claim of around 30 million euros to the Chinese customer on 25 February 2022.

As expected, there was a significant increase in revenue in the Solar segment from EUR 6.0 million to EUR 68.8 million due to the realization of revenue from large CIGS projects. The major CIGS project for the delivery of a 44MW CIGS laboratory line was finally invoiced within the framework of a settlement agreement. The scheduling of the major order for the delivery of a CIGS production line worth EUR 217.5 million is targeted for 2022. The project is currently on hold, as the customer does not currently plan to put the system into operation. Manz AG has made a claim of around 30 million euros against the Chinese customer in a draft settlement agreement on 25 February 2022, see risk report.

The expected sales increase of 300 % to 400 % was even exceeded in the Electronics segment with sales of EUR 84.3 million (previous year: EUR 15.6 million). Contract Manufacturing sales decreased from EUR 0.5 million to EUR 0.1 million due to the impact of the Corona pandemic. The previous year's level could, therefore, not be maintained.

2.6 Non-financial Performance Indicators

Manz AG is required to prepare a sustainability report or to submit a non-financial statement in accordance with the European Corporate Social Responsibility Directive and the provisions of sections 315b and 315c in conjunction with section 289c HGB (German Commercial Code). The non-financial consolidated statement is published separately from the consolidated management report in a separate sustainability report. In this context, the Managing Board of Manz AG has decided to use the German Sustainability Code (DNK) as a framework. The sustainability report and the non-financial Group statement can be viewed on our website www.manz.com in the "Investor Relations" section under "Publications" and in the "Company" section under the heading "Sustainability.”

2.7 Corporate Governance Statement

The corporate governance declaration pursuant to sections 289f and 315d of the German Commercial Code (HGB) was prepared jointly for Manz AG and the Manz Group and made publicly available under the title "Corporate Governance Declaration of Manz AG for the 2021 fiscal year" on the company's website at www.manz.com in the "Investor Relations" section under the heading "Corporate Governance – Declaration on Corporate Governance".

2.8 Disclosures pursuant to section 315a (1) HGB and explanatory report pursuant to section 176 (1) Sentence 1 German Stock Corporation Act (AktG) on the disclosures pursuant to section 289a (1), section 315a (1) of the German Commercial Code (HGB)

Composition of subscribed capital

The subscribed capital of Manz AG amounts to EUR 7,756,804.00 and is divided into 7,756,804 no-par value bearer shares with a proportional amount of the share capital of EUR 1.00. All shares are associated with the same rights and duties. Each share grants its holder one vote at the Annual General Meeting. Each share offers the same share of profits. This would exclude treasury shares held by Manz AG, which do not entitle the company to any rights. At the present time, the company does not hold any treasury shares. The rights and obligations of shareholders are, otherwise, governed by the provisions of the German Stock Corporation Act (AktG), in particular, sections 12, 53a et seq., 118 et seq. and 186 German Stock Corporation Act (AktG).

Restrictions that apply to voting rights or the transfer of shares

The Managing Board of Manz AG does not know of any agreements pertaining to restrictions on the use of voting rights or the transfer of shares.

Shareholdings in the capital exceeding 10 % of the voting rights

Based on the notifications received regarding significant voting rights pursuant to sections 33 and 34 German Securities Trading Act (WpHG) and regarding transactions by executives on their own behalf pursuant to Article 19 of the Market Abuse Regulation, the Managing Board is aware of the existence of the following direct or indirect shareholdings in the capital of the company exceeding 10 % of the voting rights:

	Number of voting rights	Percentage of voting rights
Dieter Manz, Schlaitdorf	1,939,899	25.01 %
directly thereof (section 33 WpHG)	775,942	10.00 %
of which attributable (section 34 WpHG)	1,163,857	15.01 %
People's Republic of China, acting through the State-owned Asset Supervision Commission (SASAC) of the People's Government of Shanghai, People's Republic of China Full chain of subsidiaries: Shanghai Electric (Group) Corporation Shanghai Electric Group Company Limited Shanghai Electric Hongkong Co. Limited Shanghai Electric Germany Holding GmbH (shareholder)	1,523,480	19.64 %

Shares with special rights that confer authority to exercise control

The company does not have shares with special rights that confer authority to exercise control.

Type of voting rights control if employees have an interest in the capital and do not exercise their control rights directly

Employees with a stake in Manz AG's capital can exercise the control rights to which they are entitled from the shares directly in accordance with the provisions of the Articles of Incorporation and prevailing laws.

Legal requirements and provisions of the Articles of Incorporation regarding the appointment and dismissal of members of the Managing Board and regarding amendments to the Articles of Incorporation

The appointment and dismissal of members of the Managing Board are governed by sections 84 and 85 German Stock Corporation Act (AktG). Accordingly, members of the Managing Board are appointed by the Supervisory Board for a maximum of five years. Members may be repeatedly appointed or have their term extended, in either case for another period lasting a maximum of five years. Pursuant to section 5 of the company's Articles of Incorporation, the Managing Board may consist of one or more persons. The Supervisory Board appoints the members of the Managing Board pursuant to the provisions of the German Stock Corporation Act and determines their number. The Supervisory Board may appoint a member as chairperson of the Managing Board. In accordance with section 84 German Stock Corporation Act (AktG), the Supervisory Board may revoke the appointment of a member of the Managing Board and the appointment of the Chairman of the Managing Board for good cause.

Amendments to the Articles of Incorporation are governed by sections 133 et seqq. and 179 et seqq. of the German Stock Corporation Act (AktG). In general, amendments require a resolution passed at the Annual General Meeting. A resolution passed at the annual general meeting requires a majority of at least three-quarters of the capital stock represented at the time the resolution is adopted. The Articles of Incorporation may determine a different, but only greater capital majority, for any amendment to the corporate purpose of the company.

Pursuant to section 16 (1) of the company's Articles of Incorporation, resolutions are passed at the Annual General Meeting by a simple majority of the votes cast, unless mandatory provisions of the German Stock Corporation Act stipulate otherwise. Where the German Stock Corporation Act also stipulates that a majority of the represented capital stock is required to pass a resolution, a simple majority of the represented capital fulfills this requirement, as permitted by law.

Authority of the Managing Board to issue or repurchase company shares

The Managing Board may issue new shares only on the basis of resolutions passed at the annual general meeting in respect of an increase in capital stock or in respect of authorized and conditional capital. Purchasing treasury shares is governed by section 71 et seqq. of the German Stock Corporation Act (AktG) and, in certain cases, is permitted by operation of law or as a result of authorization given at the Annual General Meeting.

Authorized capital

Based on the resolution of the Annual General Meeting of July 7, 2021, the Managing Board of the company is authorized, pursuant to section 3 (3) Articles of Incorporation, to increase the share capital of the company in the period up to July 6, 2026, with the approval of the Supervisory Board, on a one-off basis or in partial amounts, by a total of up to EUR 3,872,044.00 by issuing a total of up to 3,872,044 new bearer shares (no-par value shares) against cash or non-cash contributions (Authorized Capital 2021).

In principle, the new shares must be offered to shareholders for subscription. However, the Managing Board was authorized, with the approval of the Supervisory Board, to exclude shareholders' subscription rights.

- in the event of a capital increase for cash consideration, if the issue amount of the new shares is not significantly less, within the meaning of section 203 (1) and (2) and section 186 (3) sentence 4 of the German Stock Corporation Act (AktG), than the stock exchange price of shares of the company of the same type at the time of establishment of the issue price, which is to be as close in time as possible to the time of issue of new shares. This authorization to exclude subscription rights shall only apply to the extent that the shares to be issued as part of the capital increase do not account for more than EUR 774,408.00 of the share capital and do not account for more than 10 % of the share capital at the time the authorization is exercised. The proportionate amount of capital stock of shares which are issued or sold during the period of this authorization based on other authorizations in direct or corresponding application of section 186 (3), sentence 4 of the German Stock Corporation Act (AktG), with exclusion of subscription rights, is to be credited toward this maximum amount for the exclusion of subscription rights;

- in the case of capital increases against contribution in kind for the acquisition of companies, parts of companies or participations in companies or other assets or for the purpose of business combinations;

- to the extent that it is necessary to give owners of warrant or convertible bonds, profit-sharing rights, or profit-sharing bonds (or combinations of these instruments) issued by the company or direct or indirect affiliates of the company a subscription right to new shares to the same extent as they would have upon exercising their option or conversion right or after fulfilling their conversion obligation;

- In order to exclude fractional amounts from subscription rights.

Authorization to issue partial debentures with options or conversion rights or conversion obligations, profit-sharing rights, and profit-sharing bonds (or combinations of these instruments), as well as Conditional Capital I

At the Annual General Meeting on July 2, 2019, a resolution was passed authorizing the Managing Board, with Supervisory Board approval, to issue bearer warrant or convertible bonds, profit-sharing rights and/or profit-sharing bonds, or a combination of these instruments (collectively referred to as "bonds"), up to a total nominal value of EUR 150 million, on one or more occasions until July 1, 2024. In addition, the Managing Board was also authorized to grant owners of warrant bonds option rights and owners of convertible bonds conversion rights for bearer shares of the company with a proportionate amount of capital stock totaling up to EUR 3,100,000.00, in accordance with the detailed terms and conditions of the warrant/convertible bonds.
The statutory subscription right is granted to the shareholders in the way that the bonds are underwritten by a bank or a syndicate of banks with the obligation to offer them for subscription to shareholders. If bonds are issued by one of Manz AG's subsidiaries pursuant to section 18 of the German Stock Corporation Act, the company must ensure that the statutory subscription right is granted accordingly to shareholders of Manz AG.

However, the Managing Board is authorized, with the consent of the Supervisory Board, to exclude subscription rights to the extent necessary to grant the holders of previously issued bonds with option or conversion rights, or conversion obligations, respectively, subscription rights to the extent to which they would be entitled as shareholders after exercising their option or conversion rights or upon fulfillment of their conversion obligations.

Furthermore, the Managing Board is authorized, with Supervisory Board approval, to completely exclude shareholders' subscription rights to bonds issued with an option and/or conversion right or conversion obligation, provided the Managing Board, after dutiful examination, arrives at the view that the issue price of the bonds is not significantly below their hypothetical market value as calculated according to accepted and, in particular, actuarial methods. This authorization to exclude subscription rights applies to bonds issued with option and/or conversion rights or conversion obligations, with option and/or conversion rights or conversion obligations for shares with a pro rata amount of the capital stock which, in total, may not exceed 10 % of the capital stock, either at the time it takes effect or – if this value is lower – at the time this authorization is exercised. On the aforementioned ten percent limit
new shares from authorized capital and treasury shares sold are counted in certain cases.

Where profit-sharing rights or profit-sharing bonds without an option right or conversion right/obligation are issued, the Managing Board is authorized, with Supervisory Board approval, to completely disapply shareholders' subscription rights if these profit-sharing rights or profit-sharing bonds have the characteristics of a debenture, i.e. do not give rise to any membership rights in the company, do not grant a share in the liquidation proceeds and the interest payable is not calculated on the basis of net income for the year, net retained profit or the dividend. Moreover, in such a case, the interest payment and the issue price of the profit-sharing rights or profit-sharing bonds must reflect current market conditions at the time of issue.

Pursuant to section 3 (4) of the Articles of Incorporation, the capital stock of the company has been conditionally increased by up to EUR 3,100,000.00 through the issue of up to 3,100,000 no-par value bearer shares (Conditional Capital I).

Authorization to issue share subscription rights within the scope of the Manz Performance Share Plan 2015 as well as Conditional Capital II

At the annual general meeting held on July 7, 2015, a resolution was passed authorizing the Managing Board, with Supervisory Board approval, to issue a total of up to 59,000 subscription rights ("Performance Shares") for a total of up to 118,000 shares in the company to executives of affiliated companies as well as Manz's own managers below the executive level and managers of affiliated companies, both domestic and foreign, below the executive level on one or more occasions through June 30, 2020. The Supervisory Board was given authorization to issue a total of up to 56,000 subscription rights ("Performance Shares") for a total of up to 112,000 shares in the company to members of Manz's Managing Board, on one or more occasions, through June 30, 2020.

The subscription rights shall be granted, structured and exercised in accordance with the provisions set out in the resolution of the Annual General Meeting of July 7, 2015.

The authorization of July 7, 2015 was revoked by resolution passed at the annual general meeting of July 2, 2019, insofar as no subscription rights had yet been issued on the basis of the authorization.

Pursuant to section 3 (5) of the Articles of Incorporation, the company's capital stock has been conditionally increased by up to EUR 217,284.00 through the issue of up to 217,284 no-par value bearer shares (Conditional Capital II).

Authorization to issue share subscription rights within the scope of the Manz Performance Share Plan 2019 as well as Conditional Capital III

At the Annual General Meeting held on July 2, 2019, a resolution was passed authorizing the Managing Board, with Supervisory Board approval, to issue a total of up to 95,000 subscription rights for subscription of a total of up to 190,000 shares in the company to executives of affiliated companies of the company, as well as Manz's own managers below the executive level and managers of affiliated companies, both domestic and foreign, below the executive level on one or more occasions through June 30, 2024. The Supervisory Board was authorized to grant one or several times a total of up to 85,000 subscription rights for the purchase of up to 170,000 shares in the company to members of the company's Managing Board until June 30, 2024.

The subscription rights shall be granted, structured and exercised in accordance with the provisions set out in the resolution of the Annual General Meeting of July 2, 2019.

Pursuant to section 3 (6) of the Articles of Incorporation, the company's capital stock has been conditionally increased by up to EUR 360,000.00 through the issue of up to 360,000 no-par value bearer shares (Conditional Capital III).

Authorization to purchase and dispose of treasury shares

The Annual General Meeting on June 30, 2020 authorized the Managing Board of the Company to acquire treasury shares until June 29, 2025 in accordance with section 71 (1) No. 8 German Stock Corporation Act (AktG) up to a total of 10 % of the Company's capital stock existing at the time this authorization takes effect or – if this amount is lower – at the time this authorization is exercised. The shares acquired on the basis of this authorization, together with other shares in the company, which the company has already acquired and still holds or which are attributable to the company pursuant to sections 71d and 71e German Stock Corporation Act (AktG), may at no time account for more than 10 % of the company's capital stock. The provisions in section 71 (2), sentences 2 and 3 German Stock Corporation Act (AktG) must be observed.

The acquisition may only be affected via the stock exchange or by means of a public purchase offer addressed to all shareholders and must comply with the principle of equal treatment of shareholders (section 53a German Stock Corporation Act [AktG]).

The Managing Board was authorized to sell the treasury shares acquired on the basis of the above authorization also in manners other than through the stock exchange or through an offer to other shareholders, under the condition that the sale is for cash and is at a price that is not significantly below the stock-exchange price, at the time of the sale, of company shares with the same features. This authorization to use shares is limited to shares representing a proportionate amount of the capital stock which in total may not exceed 10 % of the capital stock of the company, either at the time this authorization becomes effective or – if this amount is lower – at the time this authorization is exercised. The maximum limit of 10 % of the capital stock shall be reduced by the pro rata amount of the capital stock attributable to those shares which are issued or sold during the term of this authorization subject to the exclusion of subscription rights, in accordance with (or pursuant to) section 186 (3) sentence 4 German Stock Corporation Act (AktG). The maximum limit of 10 % of the capital stock shall also be reduced by the pro rata amount of capital stock represented by those shares to be issued to service bonds with option or conversion rights, or option or conversion obligations, respectively, insofar as these bonds are issued during the term of this authorization to the exclusion of subscription rights in analogous application of section 186 (3) sentence 4 German Stock Corporation Act (AktG).

The Managing Board was further authorized to transfer treasury shares acquired on the basis of the above authorization to third parties insofar as this is for the purpose of acquiring companies, parts of companies or interests in companies or other assets, or to carry out business combinations.

The Managing Board and – to the extent there is an obligation with respect to members of the Managing Board – the Supervisory Board were further authorized to use the treasury shares acquired on the basis of the above authorization for the purpose of fulfilling the subscription rights that were or are issued in the framework of the Manz Performance Share Plan 2015 resolved at the Annual General Meeting of July 7, 2015, under item 6 of the agenda or in the framework of the Performance Share Plan 2019 adopted at the Annual General Meeting of July 2, 2019, under item 6 of the agenda.

The Managing Board was also authorized to use the treasury shares acquired on the basis of the above authorization for the purpose of fulfillment of the subscription and conversion rights that result from exercising option or conversion rights or fulfilling option or conversion obligations that have been granted or imposed within the framework of issuing convertible or warrant bonds, profit-sharing rights, or profit-sharing bonds (or combinations of these instruments) of the company or its subsidiaries.

The Managing Board was further authorized to transfer own shares acquired on the basis of the above authorization to employees of the company or employees or members of governing bodies of subordinate affiliates of the company within the meaning of sections 15 et seqq. AktG.

Significant company agreements that are conditional on a change of control as a result of a takeover bid

Patent and expertise license agreement with ZSW

There is a patent and know-how license agreement from the year 2017 between Manz AG and the Center for Solar Energy and Hydrogen Research Baden-Württemberg (Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg, ZSW), which is a foundation under German civil law and a research institution of the state of Baden-Württemberg, under which the ZSW grants Manz AG certain licenses to its patents and know-how with regard to CIS and/or CIGS technology for the manufacture of thin-film solar cells. The patent and know-how license agreement can be terminated by ZSW for good cause if the shareholding of a competitor of ZSW in Manz AG reaches or exceeds 30.0 % of the voting rights within the meaning of sections 33 et seq. German Securities Trading Act (WpHG).

Patent and expertise license agreement with NICE Solar Energy GmbH

Furthermore, between Manz AG and NICE Solar Energy GmbH, now in insolvency (formerly Manz CIGS Technology GmbH), a subsidiary of NICE PV Research Ltd, in which China Energy Investment Corporation Limited (formerly Shenhua Group), Shanghai Electric Group Co. Ltd. and Manz AG hold shares, a patent and know-how license agreement exists from 2017, according to which NICE Solar Energy GmbH (formerly Manz CIGS Technology GmbH) grants Manz AG certain licenses to patents and know-how regarding CIS and CIGS technology for the production of thin-film solar cells. The patent and know-how license agreement can be terminated by NICE Solar Energy GmbH (formerly Manz CIGS Technology GmbH) for cause if a third party directly or indirectly acquires at least 30.0 % of the shares in Manz AG, whereby a direct or indirect acquisition of shares by Shanghai Electric Group Co. Ltd., China Energy Investment Corporation Limited (formerly Shenhua Group) which exceeds the 30.0 % threshold, or such an acquisition by Dieter Manz, does not trigger the right of termination.

Contracts with banks for guarantee credits

The agreements between Manz AG (or its subsidiaries) and a number of domestic and foreign banks regarding the granting of guarantee credits include extraordinary termination rights for the banks in the event of a change of control at Manz AG.

Apart from the agreements mentioned above and in the section below, there are no significant company agreements that are conditional on a change of control as a result of a takeover bid.

Compensation agreements of the company entered into with members of the Managing Board or with employees in the event of a takeover bid

In the event of a change of control, the employment contract of Managing Board member Martin Drasch stipulates that the Managing Board member is entitled to terminate the employment contract with a notice period of three months to the end of a calendar month and to resign from his office as member of the Managing Board with the same deadline. These rights may be exercised only within six months after the change of control has occurred.

A change of control occurs when the company receives a notification from a party subject to a reporting obligation pursuant to section 33 (1) sentence 1 German Securities Trading Act (WpHG) that said party, including the voting rights attributable to it pursuant to section 34 German Securities Trading Act (WpHG), has reached or exceeded 25 % or a higher proportion of the voting rights in the company.

In the event of a termination of the employment contract pursuant to the above provisions, the member of the Managing Board shall receive a severance payment. This consists of the total amount of the fixed salary owed for the remaining term of the employment relationship and the total amount of the cash bonus owed for the remaining term of the employment relationship, whereby the calculation of the amount is to be based as the EBT return on the average of the EBT return in the last financial year preceding the termination and the EBT return expected to be achieved in the current financial year according to the company's planning. The severance payment is limited to the amount corresponding to 150 % of the severance payment cap. The value of two years' annual compensation is deemed to be the severance cap. If the remaining term of the employment relationship at the time the termination takes effect is more than two years, the severance payment, insofar as it is granted for the exceeding period, shall be reduced by 75 % for the purpose of offsetting, on a lump-sum basis, the other income of the Managing Board member to be expected for the period after termination of the employment relationship. In addition, the amounts to be taken into account for the severance payment shall be discounted at a rate of 3 % p.a. to the date on which the severance payment falls due.

Apart from that, the company has no agreements with members of the Managing Board or employees that provide for compensation in the event of a takeover bid.

3. Risks and Opportunities

3.1 Risk Management and Internal Control System

The goal of Manz AG's risk management system is to identify possible risks early on and to initiate appropriate measures to avert any threat of damage. The risk management system records both risks and opportunities. The application of a risk management system integrated into corporate management is aimed at identifying and assessing potential risks throughout the Group in good time and countering them with appropriate measures. Risks cannot be avoided in principle within the scope of business activities, but are minimized or transferred as far as possible.

The company's risk management activities are managed centrally by the risk management officer, are regularly evaluated with regard to their effectiveness and appropriateness and they are the complete responsibility of the CFO. Responsibility for risk monitoring, on the other hand, is organized on a decentralized basis and is the responsibility of both the Divisional Heads and the Managing Directors of the subsidiaries, depending on the risk category and scope. Regular written and oral inquiries are used to detect potential risks in all business segments and, at the same time, they also provide the opportunity to take prompt countermeasures to prevent any negative developments. The Managing Board and the Supervisory Board are presented with an overall report at regular intervals for a comprehensive assessment of the risk situation.

Risks are analyzed and assessed on the basis of a risk management system that is essentially unchanged from the previous year, consisting of a defined group of risk owners, specified risk categories and a risk classification that reflects the risk potential and the urgency of the need for action. Particular attention is paid to risks whose probability of occurrence is high and whose potential damage in the event of occurrence is high. The identification and handling of risks is anchored in the corporate principles and defined as the task of all Manz AG employees. By involving the entire workforce, risks are identified and communicated to the respective risk manager, who must take appropriate action in line with the principles for action defined throughout the Group.

The risks are attributed to the following categories:

- Operational risks
- Strategic risks
- Market risks
- Environmental risks

In addition to this risk management system, as part of the planning process based on continuous technology and market observation, further activities are taking place both for risk identification and mitigation and for identifying opportunities.

The effectiveness and appropriateness of our risk early warning system were assessed by the auditor. He noted that the Managing Board has taken the measures required under section 91 (2) of the Stock Corporation Act (AktG), in particular with regard to the establishment of a monitoring system, in an appropriate manner, and that the monitoring system is capable of identifying developments that endanger the continued existence of the company at an early stage.

Risk Management System for the Accounting Process (section 289(4) and section 315(4) HGB)

The goal of Manz AG's risk management system as it pertains to the accounting process is to identify and assess risks that might conflict with the compliance of the consolidated financial statements with the rules. Risk management encompasses the entirety of the organizational regulations and measures for detecting risks and for dealing with the risks associated with entrepreneurial activity. With regard to the accounting process, Manz has implemented the following structures and processes:

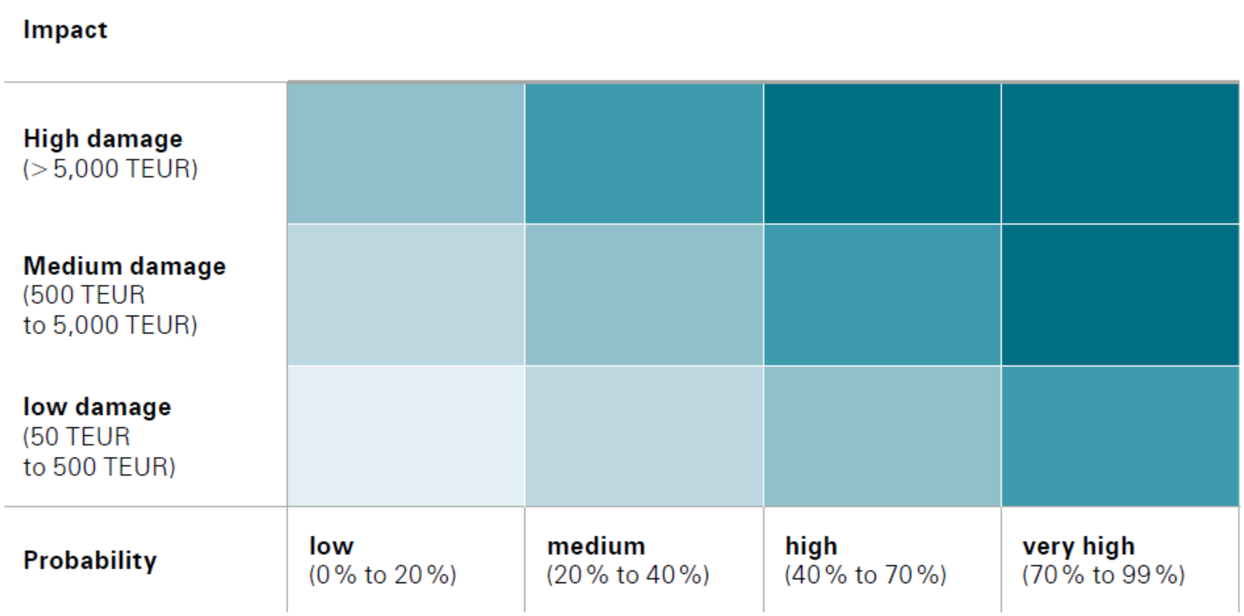
The CFO has total responsibility for the company's internal monitoring and risk management system as it pertains to the accounting process. All of the companies included in the consolidated financial statements are integrated via a defined management and reporting organizational structure. The separate financial statements of Manz AG and its subsidiaries are prepared in accordance with the corresponding national legislation and reconciled in financial statements in accordance with IFRS.

The purpose of the Group' s accounting policies and group accounting, which are regularly adapted to current external and internal developments, is to ensure uniform accounting and valuation on the basis of the regulations applicable to the parent company. Furthermore, companies in the Group are prescribed report packages that they are required to prepare. The SAP SEM-BCS tool is used for the monthly consolidation process. Automatic plausibility checks are already carried out during data collection in order to test the consistency of the data.

Consolidation measures and monitoring of adherence to chronological and process-related requirements are carried out by members of the consolidation department at Group level. Additional monitoring activities at Group level include analyzing, and if necessary, adjusting the separate financial statements submitted by the Group's subsidiaries, in accordance with the reports submitted by the auditors. Key elements of the company's strategy for monitoring risks in the accounting process also include the functional separation between entry, verification, and approval, as well as a clear allocation of responsibilities in the departments in question. The use of SAP as an IT financial system is another important means of systematically preventing errors. Furthermore, the company should use a dual control system at all process levels. If there are special issues of a technical or complex nature, the company also involves external experts. Further monitoring activities include analyzing and conducting plausibility checks on transactions as well as continuously monitoring project calculations.

The illustrated structures, processes and features of the internal control and risk management system ensure that Manz AG's financial reporting is consistent and in accordance with legal requirements, generally accepted accounting principles, international accounting standards and consolidated internal guidelines. The Managing Board considers the established systems, which are reviewed annually for their ability to optimize and develop, to be appropriate. Any potential improvements identified are implemented by the Managing Board in conjunction with Manz AG's employees.

All risks are classified according to the matrix below, which includes both the probability of occurrence, as well as possible effects are quantified.



3.2 Risk Report

The following summary shows the evaluation of the risks, which could occur in the financial year 2022 (forecast period) and could lead to deviations in the development of the revenues and/or results.

Risks		Impact	Probability of occurrence	Change to previous year
Operating risks	Project risks	medium	medium	↘
	Personnel risks	medium	low	→
	Liquidity and financing risks	high	low	→
	Currency risks	medium	high	→
	Risks from IT	medium	low	→
Strategic risks	Risks from the strategic focus on dynamic growth markets	high	medium	→
	Dependence on major customersand industries	high	medium	→
Market risks	Risks in connection with international business activities	high	medium	→
	Risks due to increasing competition	low	medium	→
	Risks arising from rapid technological change and the market launch of new products	high	low	→
Environmental risks	Risks related to pandemics	medium	low	↘
	Risks from the environment and nature	medium	low	→

3.2.1 Operating Risks

Project Risks

Project risks relate primarily to non-standardized major contracts. Here, risks from the possible failure to meet planned costs and schedule, the non-fulfillment of acceptance criteria, from order cancellations and associated non-acceptance of orders and resulting contractual risks, as well as from the possible default of individual key suppliers. By expanding the share of standardized machine components in the product portfolio, which can be modularly customized to modules or entire production equipment according to the customer's requirements, Manz AG intends to reduce the aforementioned project risks overall. In order to keep projects under control, costs, time and quality are coordinated in a gate process between business unit and operations. Design changes to non-standard machines that are necessary and unforeseeable at the beginning of an order could lead to higher costs than expected and thus erode project margins. In order to avoid additional work and associated additional costs for project completion, project and product specifications are to be already clearly and precisely defined in the contract offers through interdepartmental cooperation.

Specific project risks exist primarily with regard to a contract for the delivery of a production line for the manufacture of solar modules with the Chinese customer Chongquin Shenhua Thin Film Solar for the delivery of a CIGS production line. The large-scale CIGS project has a total order volume of EUR 217.5 million. The installation of the equipment was interrupted at the customer's request in 2020 and has not been resumed since. Only minor work has been carried out in the first quarter of 2021. In letters dated 10 June 2021, 11 November 2021 and 18 February 2022, Manz terminated the contract for the delivery of the equipment and at the same time asserted claims of approximately 64 million euros. These claims relate to outstanding payments under the contract (EUR 43 million, contractual payments at FAT and 12 months after FAT) and additional expenses of EUR 21 million. The client has objected to these claims and refuses to pay or asserts claims on its part. Manz has reduced the total claim to around 30 million euros in a draft settlement agreement dated 25 February 2022. In Manz AG's financial statements as of December 31, 2021, the project is reported in inventories in the amount of EUR 7.3 million and valued at manufacturing costs. Due to the outstanding settlement with the customer, there is considerable uncertainty regarding the claims asserted. Based on the contractual agreements as well as legal assessments and the current status of discussions with the customer, Manz AG continues to assume that the inventories are recoverable.

Personnel risks

For the corporate success of a high-tech equipment manufacturer, qualified and motivated managers and employees are of decisive importance. The departure of executives or key employees could have a negative impact on the company's business performance, thereby affecting its net assets, financial position and operational results. At the same time, there is also a risk that the company will not be able to hire a sufficient number of new, suitable executives or additional employees. Manz creates a positive working environment with measures such as various working time models or employee financial participation in the company's success, and is thus able to retain employees and know-how in the company over the long term. As a listed company, Manz AG is more in the focus of potential employees than non-listed companies. This allows Manz AG to better present its offerings to employees, such as flat hierarchies, exciting activities, flexible working hours, and well-equipped workplaces. However, it also brings extra attention in economically challenging times, which can temporarily make it harder to recruit. Another positive aspect of stock market listing is the ability to bind employees more closely to the company through the issue of shares and a corresponding profit share.

Liquidity and financing risks

At present, parent company Manz AG, is financing itself via bank balances and a small the subsidiaries in Slovakia, Hungary, Italy, China and Taiwan are financed primarily through short-term overdraft facilities and, to a lesser extent, long-term loans. As of December 31, 2021, the Manz Group had cash and cash equivalents of EUR 36.1 million (previous year: EUR 69.7 million),

as well as unused cash and guarantee credit lines of EUR 17.8 million (previous year: EUR 16.9 million). In general, in order to reduce liquidity and financing risks, the companies of the Manz Group are encouraged – where possible – to process orders "cash positively". Here, the deposits should exceed the payouts over the entire term of the respective project. If normal in project-based business, a delay on incoming orders or payments has significant effects on liquidity or the relevant company and possibly also on the Group.
In general, there is also a risk in the context of funded development projects that the funding agency may demand repayment due to non-achievement of the agreed project objectives, which may have a negative impact on liquidity.
In addition, funding commitments may be conditional on the existence of other funding beyond the project's own share of costs. This means that funding originally promised may not be forthcoming if the financing of the company's own share is not secured. Manz AG assumes that both the financing of its own share and the achievement of the funded project goals are secured.
In order to promptly identify risks from delayed incoming payments, the Manz Group works with a rolling liquidity forecast that is updated bi-weekly. Based on current corporate planning and an order backlog in accordance with IFRS of EUR 229.1 million (previous year: EUR 202.3 million) as of the reporting date of December 31, 2021, which will lead to future cash inflows, the Managing Board assumes that Manz AG will be able to meet its future payment obligations.

Currency risks

Manz AG's currency risks arise from operating activities. In financial year 2021, these mainly related to transactions of the Asian companies from the sale of machinery. The transaction-related exchange rate risk resulting from the appreciation or depreciation of the U.S. dollar against the New Taiwan dollar, the euro against the New Taiwan dollar, and the euro against the Chinese renminbi, hedging is generally implemented – where necessary and possible – by forward exchange transactions. Furthermore, economic currency risk is generally also reduced by distributing the production locations over several countries (natural hedging).

Information technology risks

A large part of the processes and communication in the Manz Group is IT-supported.
Therefore, the security of corporate data and the avoidance of interruptions to IT-supported business processes have high priority. To this end, IT systems are protected against possible cyber attacks by unauthorized third parties or by malware, and alternative solutions are developed in the event of stability problems.

3.2.2 Strategic Risks

Risks from the strategic focus on dynamic growth markets

As a high-tech equipment manufacturer, Manz AG focuses on rapidly growing future markets with short product life cycles. With its production solutions, Manz contributes to the development of numerous technologies. For instance, components for smartphones and tablet computers, batteries for electrical vehicles, consumer electronics and stationary energy storage systems as well as solar modules are produced on Manz machines. This market positioning in highly competitive and innovation-driven markets entails the risk of a competitive disadvantage due to insufficient flexibility of structures, insufficient know-how or too slow a pace of development. In order to avoid this, the respective segments therefore always endeavor to recognize customer requirements and future technological trends in the industries at an early stage. Based on this knowledge, the company derives innovations with unique selling points in order to stay one step ahead of the competition. The innovation approaches are presented and discussed by the business units in a group-wide strategy meeting every six months and their implementation is approved after a detailed, positive review.

Dependence on major customers and industries

The development of production equipment for industrial companies entails the risk of a concentration in the order volume on individual projects, sectors and customers. For example, Manz AG generated around 34 % of its revenues with three customers in the 2021 financial year. If the loss of a major client cannot be compensated for, negative effects on the Manz Group's results are to be expected. For this reason, Manz pursues the goal of achieving a balanced order structure within its three strategic segments. In this regard, modularly combinable machines and machine components, as well as "small lines" and major projects (> EUR 10 million order volume) should be balanced. The risk of a decline in major customers is to be reduced in principle by broadening the customer base and diversifying project volumes and the business model. In addition, Manz accepts third-party business in the Contract Manufacturing segment, in order to achieve balanced capacity utilization despite the cyclical development of the strategic business segments.

3.2.3 Market Risks

Risks in connection with international business activities

Negative macroeconomic and financial developments in the international sales markets may have negative effects on business development. As a result, refinancing for Manz as a listed company via the capital market could become significantly more difficult. With potential clients of Manz AG in general, there is a risk that the necessary capital for investments in new equipment may not be available based on the markets, some of which are still young. As a result, Manz constantly monitors and analyzes the market and the competition in order to recognize such developments at an early stage and to counteract them. The flexibility of the entire corporate organization, the expansion of the product portfolio, the customer base and global sales capacities, and the focus on growth markets of the three core regions of Asia, Europe and the United States make it possible to react quickly to negative changes in individual markets. On the procurement market side, increasing internationalization can also lead to risks, e.g. bottlenecks may arise as a result of trade wars, such as the current one between China and the USA, as well as the current armed conflicts in Ukraine. On the supplier side, Manz AG also strives to avoid becoming dependent on individual suppliers or procurement markets through flexibility, such as avoiding single-source suppliers.

Risks due to increasing competition

Existing and potential competitors, in particular, Asian manufacturers, could attempt to gain market share in Manz AG's target industries – primarily through an aggressive pricing policy, an imbalance caused by local tax and subsidy policies of states and governments, or import restrictions to support national companies. A further risk is that there are too many new competitors, resulting in an oversupply on the market and, as a consequence, consolidation among companies. This could have a direct impact on the development of the company's market share and thus on Manz AG's sales, revenues and earnings. In order to counteract these risks effectively, the "Market Intelligence" division constantly conducts market and competitive surveys, which are discussed in detail in international sales meetings on a regular basis and serve as a basis for possible countermeasures. Furthermore, the CRM system (Customer Relationship Management System) provides leading indicators for assessing future market development. A detailed analysis of lost projects promptly provides
clarity about the competitive situation. The process of "product invention, development and market launch" also aims to provide strategic innovations for the company's
competitive edge in growth markets and to further strengthen Manz AG's positioning as a high-tech engineering company. With its local facilities in Taiwan and China, the associated production costs that are standard for the local area, and direct customer contacts, Manz counteracts any churn to domestic competitors. Strategic alliances, for example, in the Energy Storage segment with the Chinese company Shenzhen Yinghe Technology Co. Ltd., also aim to focus on streamlining the individual service portfolio, thereby reducing the cost base and increasing the company's competitiveness.

Risks from rapid technological change and from launching new products

Research and development as well as an innovative product portfolio are of crucial importance for the company to maintain its technological positioning in the market. The industries for which Manz AG develops and manufactures its machines and equipment are characterized by rapid technological change. Substitutive or disruptive technologies may occupy substantial parts of an existing market. As a result, Manz AG's competitors may be able to react faster or better to changes in customer requirements by developing corresponding technologies or software, thus gaining a competitive advantage over Manz AG. In these cases, the demand for the products of

Manz AG could be significantly impaired. Furthermore, the Manz Group could develop machines and equipment for which there is little or no demand on the market. There is also a risk that the completion of new products currently under development may prove to be more complex than expected in the future. Problems with, e.g., technical feasibility, quality assurance, failure to meet deadlines, increased costs, etc., could at worst lead to the loss of customers in conjunction with financial losses. Manz AG endeavors to maintain close contact with its clients and thus to recognize new trends at an early stage. Furthermore, in the Business Development segment, we are also working on new application possibilities for the technologies developed by Manz. The proximity to the customer further enhances Manz AG through the constant expansion of the associated service business, in particular with after-sales service. Based on our risk analysis, Manz also pursues the goal of ensuring that projects and products are implemented in line with contractual agreements. Manz AG also counters the fundamental risk involved in developing and launching new products for individual customers by expanding its product portfolio to include machine components which can be customized to form modular assemblies or complete production machines at the customer's request.

3.2.4 Environmental risks

Risks related to pandemics

As an internationally active high-tech equipment manufacturer, Manz AG has production facilities in Germany, China, Taiwan, Slovakia, Hungary, and Italy, as well as further service branches in the USA and India. Activities in regions with less developed healthcare systems could have a negative impact on the company's business in the region in the event of pandemics and the resulting production stops, thus impacting the company's net assets, financial position and results of operations. In this context, pandemics could continue to have a negative impact on the execution of our customer projects in Asia, in particular.

Risk from the environment and nature

Natural disasters – such as earthquakes and floods or other events like fires – can lead to production stoppages, which could have a negative impact on the company’s business development and thus impair its net assets, financial position and results of operations. In addition, there are risks of environmental pollution for which Manz AG could be held liable.

3.3 Opportunities Report

Industry focus with competitive and customer-oriented, innovative technology portfolio

In recent years, the company has laid the foundations for its current growth potential by consistently focusing its technology and product portfolio on the needs and challenges of the automotive industry & electromobility, battery production, electronics, energy and medical technology. With the new brand claim "engineering tomorrow's production" to sharpen its positioning and the realignment of the Group's organization that took place on January 01, 2022, Manz aims to make even better use of the opportunities offered by these dynamic growth markets. In the course thereof, the Group's organizational structure was optimized, the business areas reorganized and the reporting segments adjusted accordingly.
With this realignment, a clear assignment of responsibilities, a significant reduction in interfaces, and a strengthening of both the Group functions and the respective locations, Manz AG will be able to respond more quickly and agilely to its customers' requirements and scale its business activities.

Sustainable competitiveness and profitability through profitable growth

Manz AG's diversified business model forms the basis for the sustained stability and long-term growth we are striving for. With the goal of significantly expanding its customer base and thus further stabilizing its business model, Manz AG is steadily expanding the share of modular machines in its product portfolio, in addition to customized solutions. These modular machines should be intelligently linked to complete, individual system solutions based on a modular system. This step should significantly reduce development risks, effort and duration and thus significantly shortens the amortization of development efforts. At the same time, this should create synergy effects for Manz AG which support the productivity of the entire Group.

In addition, Manz AG is driving forward the development of highly efficient machines and processes for the fully automated production of next-generation lithium-ion batteries with the "Lithium Battery Factory of the Future" project. Thanks to its proven project and development expertise, Manz can thus significantly improve the performance and cost efficiency of production and significantly reduce the time-to-market for customers. This Manz AG project is supported by the German Federal Ministry for Economic Affairs and Energy (BMWi) and the Baden-Württemberg State Ministry of Economics as part of the Important Projects of Common European Interest ("IPCEI") to promote research and innovation in the battery value chain. In addition, Manz Italy Srl also received a funding commitment from the Italian Ministry for Economic Development. As one of the few European engineering companies that already has extensive experience in the entire value chain of lithium-ion battery production, the IPCEI funding will enable Manz to further intensify its development activities and thus continuously expand its own competitiveness.

In addition, cost-conscious management is of central importance for the profitable development of a company. The diversified business model and ongoing measures to optimize costs are aimed at maintaining long-term competitiveness and profitability.

Cross-segment use of technology offers opportunities for synergy effects and flexibility

In developing its production equipment, Manz AG carries out an active technology transfer between the relevant target industries. By applying its comprehensive technological know-how across all industries, the company creates synergies and thus strives to help minimize manufacturing costs for its customers and contribute to their economical production. At the same time, the synergy effects achieved between the segments should increase the Manz Group's productivity and profitability. By leveraging the synergy effects between the segments, Manz AG's business model is also flexibly positioned for new growth trends and sales markets with additional revenue and earnings potential.

Cooperation with strategic partners opens up growth potential

As early as 2020, Manz AG entered into a strategic cooperation with its Chinese partner Shenzhen Yinghe Technology Co. Ltd. The cooperation provides for Manz and Yinghe to jointly offer their customers the best equipment technology from their respective product portfolios as part of a licensing model in the future, in order to be able to better utilize market potential in this way.

Manz AG further developed this successful approach in 2021 and entered into another strategic cooperation in the field of lithium-ion battery systems with GROB-WERKE GmbH & Co. KG. GROB has been a pace-setting pioneer in the construction of production and automation systems for more than 90 years and score top marks with its implementation strength in the conception, planning and commissioning of highly complex and customer-specific plants for mass production, especially for the automotive industry, in the last five years with a strong focus in e-mobility. As part of the partnership, the companies will implement innovative machine standards "made in Europe," combine market and customer access for this purpose, and pool their technological expertise. Together with GROB, Manz is thus able to offer the complete production process for manufacturing lithium-ion battery cells and modules, from coating the electrode material to pack assembly, from a single source and fully integrated. This can offer customers significant competitive advantages in terms of the efficiency, performance and safety of their battery cells and modules.

3.4 Assessment and Summary of the Risk and Opportunity Situation

Manz AG's risk portfolio consists of both risks that can be influenced by the Group and risks that cannot be influenced, such as economic and industry developments. The company regularly monitors and analyses the situation in these areas. Risks that can be influenced are identified at an early stage by appropriate monitoring and control systems and should therefore be avoided. Significant risks, which are likely to have serious negative effects on the ecological or social aspects, cannot be deduced from the business model of Manz AG.

The identification of risks and opportunities has not given rise to any risks that could jeopardize the continued existence of the entire Group or its Group companies for the financial year 2021 or for the forecast period 2022. A going concern risk is derived from the risk-bearing capacity indicator, which takes into account the cumulative expected value of all risks with a probability of occurrence of more than 40 %. If this key figure exceeds half of the previous year's consolidated or individual financial statement equity, this is defined as a going concern risk.

In the financial year 2021, the risk and opportunity situation regarding the impact of the COVID-19 pandemic has continued to improve. The fact that, contrary to expectations, the CIGSfab project was not completed in the Solar business unit had a negative impact. For the other risks, the situation has not changed materially compared to the previous year. However, the extent to which the war in Ukraine will affect the macroeconomic and industry-specific conditions in 2022 is and sector-specific conditions in 2022 cannot be reliably estimated at present due to considerable uncertainties and the high level of dynamism. Risks which do not have any or little relevance according to the risk management system in comparison with the preceding year have not been shown in the current risk report. The risks and their possible effects are known, as are the measures to be introduced. The resulting opportunities are analyzed and, if necessary, implementation is initiated.

Opportunities	Impact	Probability of occurrence
Industry focus with competitive and customer-oriented, innovative technology portfolio	high	high
Sustainable competitiveness and profitability through profitable growth	high	medium
Cross-segmental use of technology offers synergy effects and flexibility	high	high
Strategic cooperations open up growth potential	medium	high

The Managing Board of Manz AG thus fulfills its obligation to inform the Supervisory Board and shareholders about the opportunities and risks of the company. It regards this reporting as an important element of corporate governance in practice.

From today's perspective, there are no existential risks to the future development of Manz AG that could have a material adverse effect on the Group's assets, financial and earnings situation.

4. Forecast Report

4.1 Adjustment of reporting segments

In recent years, the company has laid the foundations for its current growth potential by consistently focusing its technology and product portfolio on the needs and challenges of the automotive industry & electromobility, battery production, electronics, energy and medical technology. With the new brand claim "engineering tomorrow's production" to sharpen its positioning and the realignment of the Group's organization that has now taken place, Manz is aiming to make even better use of the opportunities offered by these dynamic growth markets. As part of this, the Group's organizational structure was optimized effective January 01, 2022, the business segments were reorganized and the reporting segments were adjusted accordingly.

With the realignment that has now been implemented, a clear assignment of responsibilities, a significant reduction in interfaces, and a strengthening of the Group functions and the respective locations, Manz AG will be able to make much better use of the opportunities offered by the growth markets, scale its business activities, and thus achieve the goals it has set itself.

Starting in the 2022 fiscal year, Manz AG will report in the two reporting segments "Mobility & Battery Solutions" and "Industry Solutions". Mobility & Battery Solutions will essentially comprise the business activities of the former Energy Storage segment with a clear focus on the growth market of e-mobility. In the Industry Solutions reporting segment, Manz AG combines the activities of the two business segments Electronics (semiconductor back-end production, fan-out panel level packaging and display technologies) and Industrial Automation (industrial assembly solutions for the manufacture of consumer electronics, power electronics and other components of the electrical drive train).

The following forecasts and statements about Manz AG's anticipated development are made within the framework of these adjusted reporting structures.

4.2 Economic and industry outlook

The Kiel Institute for the World Economy (IfW) sees great uncertainty in the impact of the new omicron variant of the Coronavirus on the economy. In December 2021, the IfW experts expected economic activity to be noticeably subdued in the coming months, but the global economic recovery to reassert itself in the further course of 2022. Overall, global economic growth of 4.5 % is expected for the current year 2022 (previous year: 5.7 %). The IfW's economic researchers expect the US economy to grow by 4.4 % in 2022 (previous year: 5.6 %). Due to the real estate crisis, as well as measures to contain local Covid-19 outbreaks, the economy in China is expected to grow by 4.1 % in 2022 (previous year: 7.8 %). Growth of 3.7% is expected for the European Union in 2022 (previous year: 5.0 %). In Germany, growth is expected to be slightly higher at 4.0 %, although at 2.7 % the increase here in 2021 was lower than the European average.

In its March 2022 forecast, the VDMA expects real growth of 4.0 % in machinery production in 2022 (previous year: 7.0 %). This would take the production value in the mechanical engineering sector to EUR 241 billion in 2022, exceeding the pre-Corona level (2019: EUR 226 billion). The actual development will depend, to a large extent, on the further course of the material bottlenecks and the Corona pandemic, which are also among the major challenges facing the industry in 2022.

The following developments are expected in the markets addressed by the Mobility & Battery Solutions segment:

According to experts, the semiconductor shortage will continue to affect the global automotive industry in the current year and beyond. According to the consultancy Roland Berger, the main causes are a structural imbalance between supply and demand and fundamental problems in supply chains triggered and exacerbated by the Covid-19 pandemic and other external factors.
IHS Markit forecasts global production of around 6.4 million pure electric vehicles in 2022, a 39 % increase compared to 2021. Accordingly, the share of purely electric vehicles will increase to just under 8 % (previous year: around 6 %). In the following years, the share will continue to rise steadily. Based on data from IHS Markit, the share for 2027 is 25 %.

The battery is one of the central components of electric vehicles. In order to meet the growing demand for batteries in the coming years, production capacities are being massively developed and expanded. For the current year, IHS Markit puts the battery capacity needed to produce the aforementioned 6.4 million electric vehicles at around 380 gigawatt hours, an increase of around 56 % compared to 2021.

In the Industry Solutions segment, Manz addresses various markets with its machines. These include systems for the electronics and display industries, as well as assembly lines for other industries, including the manufacture of cell contact systems (CCS) for electric vehicles.

For the global display market in 2022, DSCC expects capacity to grow by 7 % year-on-year (previous year: +11 %). DSCC sees capacity expansion by LCD manufacturers and OLED manufacturers, which are aligning themselves more closely with the IT market, as key growth drivers. While LCD TVs will continue to dominate the market in the coming years with a market share of over 70 %, DSCC expects OLED TVs to experience the highest growth rates, averaging 18 % between 2020 and 2026.

In the segment of printed circuit board production, Prismark expects the highest growth rates of all segments for packaged substrates in 2022 as well. The market is expected to grow to USD 15.6 billion by the end of 2022 (previous year: USD 14 billion).

For the chip packaging process Fan-Out Panel Level Packaging (FOPLP), Yole Développement forecasts the total market to grow to USD 88 million (previous year: USD 73 million). Among the key growth drivers on the application side, Yole counts the increasing demand for high-performance computing (HPC) and high-end smartphones or smartwatches.

Due to the strong growth in the electric vehicle sector, the market for cell contacting systems, which are an essential component for the integration and interconnection of battery cells or modules, will also continue to grow. For 2022, Manz forecasts a total of about 140 million cell contact systems produced (previous year: 106 million), based on figures from IHS Markit.

4.3 Overall Assessment of the Company's Future Development

Due to the overall positive industry outlook in the countries and markets relevant to Manz AG, the Managing Board expects that Manz AG will grow profitably by 80 % to 100 % in revenues and by 60 % to 80 % in total operating revenue, also due to the expected realization of revenues from the major project for the delivery of a CIGS production line in 2022 on basis of an agreement with the customer. Compared with 2021, the Managing Board expects a positive EBITDA margin in the mid single-digit percentage range and an EBIT margin in the low to mid positive single-digit percentage range. The equity ratio is expected to be above 19 %; with regard to gearing, the Managing Board anticipates a comparable figure compared with 2021.

The extent to which the war in Ukraine and the sanctions in Russia will affect the macroeconomic and sector-specific framework conditions in 2022 cannot be reliably estimated at present due to considerable uncertainties and the high dynamics.

At segment level, the Managing Board anticipates at least a tenfold increase in revenues for Mobility & Battery Solutions from the EUR 11.8 million realized in 2021. Subject to the expected finalization of the large-scale CIGS project in 2022, the Managing Board expects revenues in the Industry Solutions segment to increase by 30 % to 50 % (previous year: EUR 166.5 million).

The overall positive expectations for 2022 are underpinned by a positive development in inquiry intensity, order intake and a solid order backlog of EUR 538.9 million as of December 31, 2021 (previous year: EUR 563.5 million).

The Managing Board's goal is to further develop the comprehensive technology portfolio, on the one hand, and to strengthen and expand Manz AG's good market position in both segments, on the other. With its technologies, Manz AG will continue to focus, in particular, on the automotive and e-mobility, battery manufacturing, electronics, energy, and medical technology industries.

Forward-looking statements

This report contains forward-looking statements, which are based on the current assumptions and forecasts of Manz AG's Managing Board. Such statements are subject to both risks and uncertainties. These and other factors could cause the actual results, financial position, developments or performance of the Company to differ materially from the estimates given here. Our company assumes no obligation to update these forward-looking statements or adapt them to future events or developments.

Reutlingen, March 30, 2022

Manz AG

Martin Drasch Chief Executive Officer	Manfred Hochleitner	Jürgen Knie

Engagement Terms, Liability and Conditions of Use

We, Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, conducted our audit of this financial reporting on behalf of the Company. Besides satisfying the legal disclosure requirement (Sec. 325 HGB ["Handelsgesetzbuch": German Commercial Code]) for statutory audits, the audit opinion is addressed exclusively to the Company and was issued for internal purposes only. It is not intended for any other purpose or to serve as a decision-making basis for third parties. The result of voluntary audits summarized in the audit opinion is thus not intended to serve as a decision-making basis for third parties and must not be used for purposes other than those intended.

Our work is based on our engagement agreement for the audit of these financial statements including the General Engagement Terms for "Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften" [German Public Auditors and Public Audit Firms] as issued by the Institute of Public Auditors in Germany ["Institut der Wirtschaftsprüfer": IDW] on 1 January 2017.

To clarify, we point out that we assume no responsibility, liability or other obligations towards third parties unless we have concluded a written agreement to the contrary with the respective third party or liability cannot effectively be precluded.

We make express reference to the fact that we will not update the audit opinion to reflect events or circumstances arising after it was issued, unless required to do so by law.

It is the sole responsibility of anyone taking note of the summarized result of our work contained in this audit opinion to decide whether and in what way this information is useful or suitable for their purposes and to supplement, verify or update it by means of their own review procedures.

[Translator's notes are in square brackets]

General Engagement Terms
for
Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften
[German Public Auditors and Public Audit Firms]
as of January 1, 2017

1. Scope of application

(1) These engagement terms apply to contracts between German Public Auditors (*Wirtschaftsprüfer*) or German Public Audit Firms (*Wirtschaftsprüfungsgesellschaften*) – hereinafter collectively referred to as "German Public Auditors" – and their engaging parties for assurance services, tax advisory services, advice on business matters and other engagements except as otherwise agreed in writing or prescribed by a mandatory rule.

(2) Third parties may derive claims from contracts between German Public Auditors and engaging parties only when this is expressly agreed or results from mandatory rules prescribed by law. In relation to such claims, these engagement terms also apply to these third parties.

2. Scope and execution of the engagement

(1) Object of the engagement is the agreed service – not a particular economic result. The engagement will be performed in accordance with the German Principles of Proper Professional Conduct (*Grundsätze ordnungsmäßiger Berufsausübung*). The German Public Auditor does not assume any management functions in connection with his services. The German Public Auditor is not responsible for the use or implementation of the results of his services. The German Public Auditor is entitled to make use of competent persons to conduct the engagement.

(2) Except for assurance engagements (*betriebswirtschaftliche Prüfungen*), the consideration of foreign law requires an express written agreement.

(3) If circumstances or the legal situation change subsequent to the release of the final professional statement, the German Public Auditor is not obligated to refer the engaging party to changes or any consequences resulting therefrom.

3. The obligations of the engaging party to cooperate

(1) The engaging party shall ensure that all documents and further information necessary for the performance of the engagement are provided to the German Public Auditor on a timely basis, and that he is informed of all events and circumstances that may be of significance to the performance of the engagement. This also applies to those documents and further information, events and circumstances that first become known during the German Public Auditor's work. The engaging party will also designate suitable persons to provide information.

(2) Upon the request of the German Public Auditor, the engaging party shall confirm the completeness of the documents and further information provided as well as the explanations and statements, in a written statement drafted by the German Public Auditor.

4. Ensuring independence

(1) The engaging party shall refrain from anything that endangers the independence of the German Public Auditor's staff. This applies throughout the term of the engagement, and in particular to offers of employment or to assume an executive or non-executive role, and to offers to accept engagements on their own behalf.

(2) Were the performance of the engagement to impair the independence of the German Public Auditor, of related firms, firms within his network, or such firms associated with him, to which the independence requirements apply in the same way as to the German Public Auditor in other engagement relationships, the German Public Auditor is entitled to terminate the engagement for good cause.

5. Reporting and oral information

To the extent that the German Public Auditor is required to present results in writing as part of the work in executing the engagement, only that written work is authoritative. Drafts are non-binding. Except as otherwise agreed, oral statements and explanations by the German Public Auditor are binding only when they are confirmed in writing. Statements and information of the German Public Auditor outside of the engagement are always non-binding.

6. Distribution of a German Public Auditor's professional statement

(1) The distribution to a third party of professional statements of the German Public Auditor (results of work or extracts of the results of work whether in draft or in a final version) or information about the German Public Auditor acting for the engaging party requires the German Public Auditor's written consent, unless the engaging party is obligated to distribute or inform due to law or a regulatory requirement.

(2) The use by the engaging party for promotional purposes of the German Public Auditor's professional statements and of information about the German Public Auditor acting for the engaging party is prohibited.

7. Deficiency rectification

(1) In case there are any deficiencies, the engaging party is entitled to specific subsequent performance by the German Public Auditor. The engaging party may reduce the fees or cancel the contract for failure of such subsequent performance, for subsequent non-performance or unjustified refusal to perform subsequently, or for unconscionability or impossibility of subsequent performance. If the engagement was not commissioned by a consumer, the engaging party may only cancel the contract due to a deficiency if the service rendered is not relevant to him due to failure of subsequent performance, to subsequent non-performance, to unconscionability or impossibility of subsequent performance. No. 9 applies to the extent that further claims for damages exist.

(2) The engaging party must assert a claim for the rectification of deficiencies in writing (*Textform*) [*Translators Note: The German term "Textform" means in written form, but without requiring a signature*] without delay. Claims pursuant to paragraph 1 not arising from an intentional act expire after one year subsequent to the commencement of the time limit under the statute of limitations.

(3) Apparent deficiencies, such as clerical errors, arithmetical errors and deficiencies associated with technicalities contained in a German Public Auditor's professional statement (long-form reports, expert opinions etc.) may be corrected – also versus third parties – by the German Public Auditor at any time. Misstatements which may call into question the results contained in a German Public Auditor's professional statement entitle the German Public Auditor to withdraw such statement – also versus third parties. In such cases the German Public Auditor should first hear the engaging party, if practicable.

8. Confidentiality towards third parties, and data protection

(1) Pursuant to the law (§ [Article] 323 Abs 1 [paragraph 1] HGB [German Commercial Code: *Handelsgesetzbuch*], § 43 WPO [German Law regulating the Profession of Wirtschaftsprüfer: *Wirtschaftsprüferordnung*], § 203 StGB [German Criminal Code: *Strafgesetzbuch*]) the German Public Auditor is obligated to maintain confidentiality regarding facts and circumstances confided to him or of which he becomes aware in the course of his professional work, unless the engaging party releases him from this confidentiality obligation.

(2) When processing personal data, the German Public Auditor will observe national and European legal provisions on data protection.

9. Liability

(1) For legally required services by German Public Auditors, in particular audits, the respective legal limitations of liability, in particular the limitation of liability pursuant to § 323 Abs. 2 HGB, apply.

(2) Insofar neither a statutory limitation of liability is applicable, nor an individual contractual limitation of liability exists, the liability of the German Public Auditor for claims for damages of any other kind, except for damages resulting from injury to life, body or health as well as for damages that constitute a duty of replacement by a producer pursuant to § 1 ProdHaftG [German Product Liability Act: *Produkthaftungsgesetz*], for an individual case of damages caused by negligence is limited to € 4 million pursuant to § 54 a Abs. 1 Nr. 2 WPO.

(3) The German Public Auditor is entitled to invoke demurs and defenses based on the contractual relationship with the engaging party also towards third parties.

(4) When multiple claimants assert a claim for damages arising from an existing contractual relationship with the German Public Auditor due to the German Public Auditor's negligent breach of duty, the maximum amount stipulated in paragraph 2 applies to the respective claims of all claimants collectively.

(5) An individual case of damages within the meaning of paragraph 2 also exists in relation to a uniform damage arising from a number of breaches of duty. The individual case of damages encompasses all consequences from a breach of duty regardless of whether the damages occurred in one year or in a number of successive years. In this case, multiple acts or omissions based on the same source of error or on a source of error of an equivalent nature are deemed to be a single breach of duty if the matters in question are legally or economically connected to one another. In this event the claim against the German Public Auditor is limited to € 5 million. The limitation to the fivefold of the minimum amount insured does not apply to compulsory audits required by law.

(6) A claim for damages expires if a suit is not filed within six months subsequent to the written refusal of acceptance of the indemnity and the engaging party has been informed of this consequence. This does not apply to claims for damages resulting from scienter, a culpable injury to life, body or health as well as for damages that constitute a liability for replacement by a producer pursuant to § 1 ProdHaftG. The right to invoke a plea of the statute of limitations remains unaffected.

10. Supplementary provisions for audit engagements

(1) If the engaging party subsequently amends the financial statements or management report audited by a German Public Auditor and accompanied by an auditor's report, he may no longer use this auditor's report.

If the German Public Auditor has not issued an auditor's report, a reference to the audit conducted by the German Public Auditor in the management report or any other public reference is permitted only with the German Public Auditor's written consent and with a wording authorized by him.

(2) If the German Public Auditor revokes the auditor's report, it may no longer be used. If the engaging party has already made use of the auditor's report, then upon the request of the German Public Auditor he must give notification of the revocation.

(3) The engaging party has a right to five official copies of the report. Additional official copies will be charged separately.

11. Supplementary provisions for assistance in tax matters

(1) When advising on an individual tax issue as well as when providing ongoing tax advice, the German Public Auditor is entitled to use as a correct and complete basis the facts provided by the engaging party – especially numerical disclosures; this also applies to bookkeeping engagements. Nevertheless, he is obligated to indicate to the engaging party any errors he has identified.

(2) The tax advisory engagement does not encompass procedures required to observe deadlines, unless the German Public Auditor has explicitly accepted a corresponding engagement. In this case the engaging party must provide the German Public Auditor with all documents required to observe deadlines – in particular tax assessments – on such a timely basis that the German Public Auditor has an appropriate lead time.

(3) Except as agreed otherwise in writing, ongoing tax advice encompasses the following work during the contract period:

a) preparation of annual tax returns for income tax, corporate tax and business tax, as well as wealth tax returns, namely on the basis of the annual financial statements, and on other schedules and evidence documents required for the taxation, to be provided by the engaging party

b) examination of tax assessments in relation to the taxes referred to in (a)

c) negotiations with tax authorities in connection with the returns and assessments mentioned in (a) and (b)

d) support in tax audits and evaluation of the results of tax audits with respect to the taxes referred to in (a)

e) participation in petition or protest and appeal procedures with respect to the taxes mentioned in (a).

In the aforementioned tasks the German Public Auditor takes into account material published legal decisions and administrative interpretations.

(4) If the German Public auditor receives a fixed fee for ongoing tax advice, the work mentioned under paragraph 3 (d) and (e) is to be remunerated separately, except as agreed otherwise in writing.

(5) Insofar the German Public Auditor is also a German Tax Advisor and the German Tax Advice Remuneration Regulation (*Steuerberatungsvergütungsverordnung*) is to be applied to calculate the remuneration, a greater or lesser remuneration than the legal default remuneration can be agreed in writing (*Textform*).

(6) Work relating to special individual issues for income tax, corporate tax, business tax, valuation assessments for property units, wealth tax, as well as all issues in relation to sales tax, payroll tax, other taxes and dues requires a separate engagement. This also applies to:

a) work on non-recurring tax matters, e.g. in the field of estate tax, capital transactions tax, and real estate sales tax**;**

b) support and representation in proceedings before tax and administrative courts and in criminal tax matters;

c) advisory work and work related to expert opinions in connection with changes in legal form and other re-organizations, capital increases and reductions, insolvency related business reorganizations, admission and retirement of owners, sale of a business, liquidations and the like, and

d) support in complying with disclosure and documentation obligations.

(7) To the extent that the preparation of the annual sales tax return is undertaken as additional work, this includes neither the review of any special accounting prerequisites nor the issue as to whether all potential sales tax allowances have been identified. No guarantee is given for the complete compilation of documents to claim the input tax credit.

12. Electronic communication

Communication between the German Public Auditor and the engaging party may be via e-mail. In the event that the engaging party does not wish to communicate via e-mail or sets special security requirements, such as the encryption of e-mails, the engaging party will inform the German Public Auditor in writing (*Textform*) accordingly.

13. Remuneration

(1) In addition to his claims for fees, the German Public Auditor is entitled to claim reimbursement of his expenses; sales tax will be billed additionally. He may claim appropriate advances on remuneration and reimbursement of expenses and may make the delivery of his services dependent upon the complete satisfaction of his claims. Multiple engaging parties are jointly and severally liable.

(2) If the engaging party is not a consumer, then a set-off against the German Public Auditor's claims for remuneration and reimbursement of expenses is admissible only for undisputed claims or claims determined to be legally binding.

14. Dispute Settlement

The German Public Auditor is not prepared to participate in dispute settlement procedures before a consumer arbitration board (*Verbraucherschlichtungsstelle*) within the meaning of § 2 of the German Act on Consumer Dispute Settlements (*Verbraucherstreitbeilegungsgesetz*).

15. Applicable law

The contract, the performance of the services and all claims resulting therefrom are exclusively governed by German law.