

<b>Buy</b> <b>EUR 9.60</b> (EUR 8.80)  Price EUR 3.84 Upside <b>150.0 %</b>	<b>Value Indicators:</b> EUR DCF: 9.60 FCF-Value Potential 25e: 5.20	<b>Warburg ESG Risk Score: 3.0</b> ESG Score (MSCI based): 3.0 Balance Sheet Score: 5.0 Market Liquidity Score: 1.0	<b>Description:</b> Leading point-of-sale systems with a focus on the gastronomy and bakery sector
	<b>Market Snapshot:</b> EUR m Market cap: 30.7 No. of shares (m): 8.0 EV: 57.0 Freefloat MC: 18.0 Ø Trad. Vol. (30d): 38.62 th	<b>Shareholders:</b> Freefloat 58.60 % Thomas Stümmler 41.40 %	<b>Key Figures (WRe):</b> 2022e Beta: 1.3 Price / Book: 1.4 x Equity Ratio: 56 %

## Mid-term targets issued; Vectron expected to have reached an inflection point

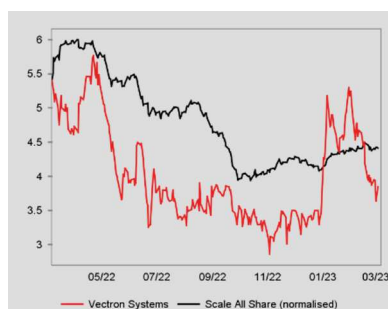
Vectron released a forecast for the 2023-25 timeframe, which exceeds the expectations at the end of this period. We had a chance to speak to the management and gained the impression that the forecast is rather on the conservative side. A slight downer is Vectron's 2023 EBITDA forecast of EUR 1.3 – 2.2m, which is below the estimate of EUR 2.8m. Initially, we assumed that Vectron would reach the breakeven point in the POS and digital services business, and the estimate was reflecting the profit contribution from the acquired acardo. Our assessment is that Vectron has taken a conservative approach and has incorporated a slight yoy-decline in the POS business.

More importantly, the 2024 projection of an EBITDA in the range of EUR 4 – 6.2m is fully in line with our assumption (WRe EUR 5m) and the 2025 projection of an EBITDA in the range of EUR 7.3 – 9.7m exceeds the WR estimate of thus far EUR 7m.

This year's acquisition of digital marketing / couponing specialist acardo is one of the company's growth pillars. We welcomed this step against the background of reducing exposure to the POS business, tapping into a growing adjacent market, the cross-selling potential and the reasonable transaction price. Besides, the roll-out of almost 10 new valuable digital services for its customers in the hospitality sector will drive the company's future growth (e.g. ordering, reservation, payment solutions, self-checkout, couponing etc.). This is generally in line with earlier expectations, as the POS system is still considered to be the central platform for the provision of such services, but the development is happening somewhat later than initially expected. Most of these modules are scheduled to finally launch in 2023, many of them in early Q2. Our impression is that underlying penetration rates into Vectron's customer base (~45k outlets in Germany + 20k abroad) have been set at conservative levels (average penetration for each product <10%).

In recent years, a sometimes not-so-clear plan of how to best address a changing (digitalization of the hospitality sector) and unexpectedly challenging (COVID, inflationary pressure on consumer spending) market environment represented hurdles that had to be overcome and also led to results that fell short of expectations more than once. Vectron is now regarded to be at an inflection point. It has now matured a significant number of additional digital products, which will be introduced during the coming months and provides the basis for the expected future growth. Additionally, the acquisition of acardo paved the way for a return to profitability at group level from FY 2023 onwards. We think there is scope to beat the new mid-term targets and EBITDA margins could approach the 20%-threshold, which is not incorporated into our model. A 2025 EV/EBITDA multiple of <7x (incl. earn-out liability) is considered to be attractive. The PT is increased to EUR 9.60 (150% valuation upside) and does not yet reflect the full potential of Vectron's business model. Visibility should clearly improve by the end of 2023 if subscriptions to the new services develop according to plan. The Buy rating is maintained.

Changes in Estimates:				Comment on Changes:			
FY End: 31.12. in EUR m	2022e (old)	+ / -	2023e (old)	+ / -	2024e (old)	+ / -	
Sales	27.0	-6.5 %	42.2	-8.3 %	46.7	-3.6 %	▪ Reduction of 2023 earnings forecast by EUR 0.5m owing to lower guidance which is however considered to be conservative.
EBITDA	-2.6	n.m.	2.8	-16.5 %	5.0	0.1 %	▪ 2025 earnings estimates increased by ~10% ▪ Anticipating clear upside to expectations from 2025 onwards

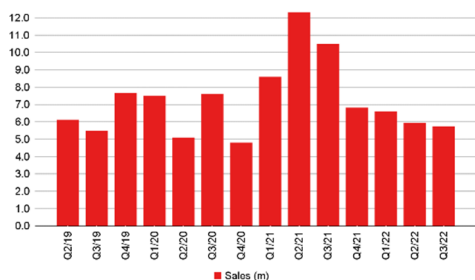


Rel. Performance vs Scale All	
1 month:	-16.4 %
6 months:	4.5 %
Year to date:	3.5 %
Trailing 12 months:	-8.1 %

Company events:	
28.04.23	FY 2022
13.06.23	AGM
31.08.23	Q2

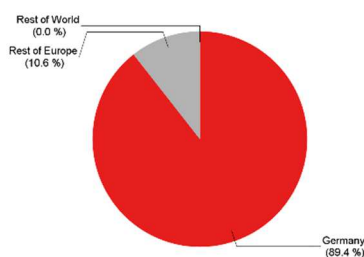
FY End: 31.12. in EUR m	CAGR (21-25e)	2019	2020	2021	2022e	2023e	2024e	2025e
Sales	7.8 %	25.2	25.0	38.2	25.2	38.7	45.0	51.5
Change Sales yoy		1.4 %	-0.7 %	52.9 %	-34.1 %	53.7 %	16.3 %	14.4 %
Gross profit margin		57.8 %	62.7 %	68.8 %	65.4 %	67.0 %	66.4 %	66.5 %
EBITDA	13.0 %	-1.4	-1.7	4.7	-4.0	2.3	5.0	7.7
Margin		-5.5 %	-6.7 %	12.3 %	-15.7 %	6.1 %	11.1 %	14.9 %
EBIT	17.4 %	-1.8	-3.0	3.1	-5.5	0.7	3.3	6.0
Margin		-7.1 %	-12.0 %	8.2 %	-21.8 %	1.7 %	7.3 %	11.5 %
Net income	13.0 %	-1.4	-2.3	2.4	-3.9	-0.2	2.1	4.0
EPS	13.0 %	-0.19	-0.29	0.30	-0.49	-0.03	0.26	0.49
EPS adj.	13.0 %	-0.19	-0.29	0.30	-0.49	-0.03	0.26	0.49
DPS	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dividend Yield		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCFPS		-0.38	-0.31	1.03	-0.50	-0.16	0.28	0.54
FCF / Market cap		-3.4 %	-3.0 %	9.4 %	-13.2 %	-4.2 %	7.4 %	14.4 %
EV / Sales		3.2 x	3.2 x	2.2 x	1.2 x	1.5 x	1.2 x	1.0 x
EV / EBITDA		n.a.	n.a.	17.7 x	n.a.	24.3 x	11.1 x	6.7 x
EV / EBIT		n.a.	n.a.	26.6 x	n.a.	84.6 x	16.9 x	8.7 x
P / E		n.a.	n.a.	36.2 x	n.a.	n.a.	14.8 x	7.7 x
P / E adj.		n.a.	n.a.	36.2 x	n.a.	n.a.	14.8 x	7.7 x
FCF Potential Yield		-1.4 %	-1.4 %	4.5 %	-4.1 %	2.3 %	6.7 %	10.8 %
Net Debt		-0.9	-3.2	-4.0	0.0	6.3	5.0	1.7
ROCE (NOPAT)		n.a.	n.a.	11.8 %	n.a.	n.a.	8.1 %	14.2 %
Guidance:		2023: Revenues EUR 36 – 37,8m; EBITDA EUR 1.3 – 2.2m						

## Sales development in EUR m



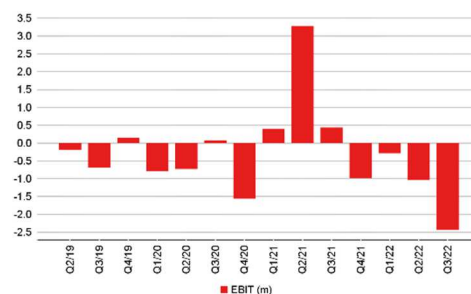
Source: Warburg Research

## Sales by regions 2021; in %



Source: Warburg Research

## EBIT development in EUR m



Source: Warburg Research

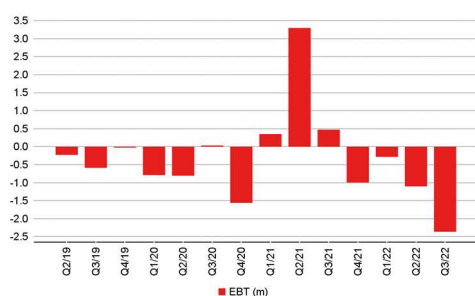
## Company Background

- Vectron is a leading provider of POS systems. The products are positioned in the medium to premium segment. With its high degree of functionality, Vectron is one of the technology and innovation leaders.
- Vectron focuses on the market for proprietary POS systems (30% of the overall market). PC-based systems (bulk of the market) usually require higher maintenance and are primarily used by large chain stores.
- Vectron's market share is particularly high in the food service and bakery industries, where the company is market leader for proprietary systems in the German-speaking area with a market share of ca. 25%.
- Vectron has some 180 employees. About one-third are employed in development and product management as the company aims to maintain its position as technology leader.
- With the acquisition of acardo, Vectron establishes a second pillar in (digital) couponing, which should also provide cross-marketing opportunities with its POS business.

## Competitive Quality

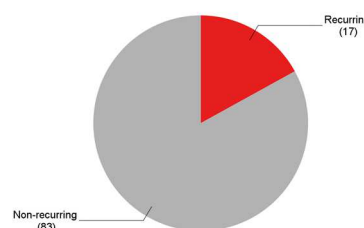
- Factors such as high reliability, ease of operation and low follow-up costs (maintenance/support) are required in the food service and bakery target sectors which are characterised by an atomistic customer structure.
- This explains the high penetration rate of the proprietary POS systems. Given that the large producers of POS systems mainly offer PC-based systems Vectron mainly has to face smaller competitors.
- Vectron differentiates itself from the mainly smaller competitors by rigorously pursuing the further development of the POS systems and thanks to the high additional use offered by wide functionality.
- By focusing on the premium segment, Vectron avoids the typical problems in the lower segment: solely differentiating on price. This is underpinned by gross margins of ca. 55% and ROCEs of well above 10%.
- Growth opportunities presently arise from the digitalisation of the hospitality sector and the new couponing business.

## EBT development in EUR m



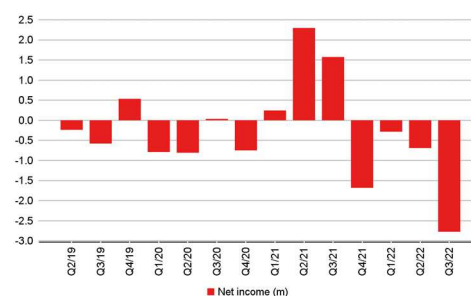
Source: Warburg Research

## Recurring sales 2021; in %



Source: Warburg Research

## Net income development in EUR m



Source: Warburg Research

## DCF model

Figures in EUR m	Detailed forecast period			Transitional period										Term. Value
	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	
Sales	25.2	38.7	45.0	51.5	59.8	68.1	73.6	78.7	83.5	88.5	92.9	97.5	99.5	
Sales change	-34.1 %	53.7 %	16.3 %	14.4 %	16.0 %	14.0 %	8.0 %	7.0 %	6.0 %	6.0 %	5.0 %	5.0 %	2.0 %	2.0 %
EBIT	-5.5	0.7	3.3	5.9	8.4	9.5	10.3	11.0	11.7	12.4	13.0	13.7	13.9	
EBIT-margin	-21.8 %	1.7 %	7.3 %	11.5 %	14.0 %	14.0 %	14.0 %	14.0 %	14.0 %	14.0 %	14.0 %	14.0 %	14.0 %	
Tax rate (EBT)	31.0 %	152.0 %	31.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	
NOPAT	-3.8	-0.4	2.3	4.1	5.9	6.7	7.2	7.7	8.2	8.7	9.1	9.6	9.8	
Depreciation	1.5	1.7	1.7	0.8	1.0	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.0	
in % of Sales	6.0 %	4.3 %	3.8 %	1.6 %	1.6 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	
Changes in provisions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Change in Liquidity from														
- Working Capital	-0.3	1.9	0.8	1.0	1.4	0.7	0.9	0.0	0.7	0.8	0.7	0.7	0.3	
- Capex	0.7	0.8	0.9	1.1	1.3	1.4	1.5	1.7	1.8	1.9	2.0	2.0	2.1	
Capex in % of Sales	2.8 %	2.1 %	2.0 %	2.1 %	2.1 %	2.1 %	2.1 %	2.1 %	2.1 %	2.1 %	2.1 %	2.1 %	2.1 %	
- Other	0.9	0.9	0.9	0.0	19.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Free Cash Flow (WACC Model)	-3.5	-2.3	1.4	2.9	-15.3	5.9	6.3	7.6	7.4	7.8	8.3	8.8	9.4	10
PV of FCF	-3.9	-2.3	1.3	2.4	-12.1	4.2	4.2	4.6	4.1	4.0	4.0	3.8	3.7	56
share of PVs	-6.61 %			31.20 %										75.41 %

### Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	15.00 %	Financial Strength	1.20
Cost of debt (after tax)	2.8 %	Liquidity (share)	1.50
Market return	8.25 %	Cyclicality	1.10
Risk free rate	2.75 %	Transparency	1.40
		Others	1.30
<b>WACC</b>	<b>8.84 %</b>	<b>Beta</b>	<b>1.30</b>

### Valuation (m)

Present values 2034e	18		
Terminal Value	56		
Financial liabilities	12		
Pension liabilities	0		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	15	No. of shares (m)	8.0
<b>Equity Value</b>	<b>76</b>	<b>Value per share (EUR)</b>	<b>9.57</b>

### Sensitivity Value per Share (EUR)

Beta	WACC	Terminal Growth							Beta	WACC	Delta EBIT-margin						
		1.25 %	1.50 %	1.75 %	2.00 %	2.25 %	2.50 %	2.75 %			-1.5 pp	-1.0 pp	-0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+1.5 pp
1.51	9.8 %	7.39	7.54	7.70	7.87	8.05	8.24	8.45	1.51	9.8 %	6.63	7.05	7.46	7.87	8.28	8.69	9.10
1.41	9.3 %	8.08	8.26	8.45	8.66	8.88	9.11	9.36	1.41	9.3 %	7.33	7.77	8.22	8.66	9.10	9.54	9.98
1.35	9.1 %	8.47	8.66	8.87	9.10	9.34	9.60	9.88	1.35	9.1 %	7.72	8.18	8.64	9.10	9.56	10.01	10.47
1.30	8.8 %	8.88	9.09	9.32	9.57	9.83	10.12	10.43	1.30	8.8 %	8.14	8.62	9.09	9.57	10.05	10.52	11.00
1.25	8.6 %	9.32	9.55	9.81	10.08	10.37	10.69	11.04	1.25	8.6 %	8.59	9.09	9.58	10.08	10.58	11.07	11.57
1.19	8.3 %	9.79	10.05	10.33	10.63	10.96	11.31	11.70	1.19	8.3 %	9.08	9.60	10.11	10.63	11.15	11.67	12.18
1.09	7.8 %	10.85	11.17	11.51	11.88	12.29	12.73	13.22	1.09	7.8 %	10.19	10.75	11.32	11.88	12.45	13.01	13.58

- Increasing digitalization drives mid term sales and profitability increase
- High-margin couponing business supports positives earnings development

## Free Cash Flow Value Potential

Warburg Research's valuation tool "FCF Value Potential" reflects the ability of the company to generate sustainable free cash flows. It is based on the "FCF potential" - a FCF "ex growth" figure - which assumes unchanged working capital and pure maintenance capex. A value indication is derived via the perpetuity of a given year's "FCF potential" with consideration of the weighted costs of capital. The fluctuating value indications over time add a timing element to the DCF model (our preferred valuation tool).

in EUR m	2019	2020	2021	2022e	2023e	2024e	2025e	
Net Income before minorities	-1.4	-2.3	2.4	-3.9	-0.2	2.1	4.0	
+ Depreciation + Amortisation	0.4	1.3	1.6	1.5	1.7	1.7	1.7	
- Net Interest Income	-0.2	-0.1	0.0	-0.2	-0.2	-0.2	-0.2	
- Maintenance Capex	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
+ Other	0.0	0.0	0.0	1.3	0.0	0.0	0.0	
<b>= Free Cash Flow Potential</b>	<b>-1.1</b>	<b>-1.2</b>	<b>3.7</b>	<b>-1.3</b>	<b>1.3</b>	<b>3.8</b>	<b>5.6</b>	
FCF Potential Yield (on market EV)	-1.4 %	-1.4 %	4.5 %	-4.1 %	2.3 %	6.7 %	10.8 %	
WACC	8.84 %	8.84 %	8.84 %	8.84 %	8.84 %	8.84 %	8.84 %	
<b>= Enterprise Value (EV)</b>	<b>79.9</b>	<b>79.8</b>	<b>83.4</b>	<b>30.7</b>	<b>57.0</b>	<b>55.7</b>	<b>51.7</b>	
<b>= Fair Enterprise Value</b>	<b>n.a.</b>	<b>n.a.</b>	<b>42.2</b>	<b>n.a.</b>	<b>15.0</b>	<b>42.5</b>	<b>63.3</b>	
- Net Debt (Cash)	0.0	0.0	0.0	0.0	6.3	5.0	1.7	
- Pension Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
- Other	0.0	0.0	0.0	0.0	20.0	20.0	20.0	
- Market value of minorities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
+ Market value of investments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<b>= Fair Market Capitalisation</b>	<b>n.a.</b>	<b>n.a.</b>	<b>42.2</b>	<b>n.a.</b>	<b>n.a.</b>	<b>17.4</b>	<b>41.5</b>	
Number of shares, average	7.2	8.0	8.0	8.0	8.0	8.0	8.0	
<b>= Fair value per share (EUR)</b>	<b>n.a.</b>	<b>n.a.</b>	<b>5.24</b>	<b>n.a.</b>	<b>n.a.</b>	<b>2.17</b>	<b>5.16</b>	
premium (-) / discount (+) in %						-43.6 %	37.6 %	
<b>Sensitivity Fair value per Share (EUR)</b>								
	11.84 %	n.a.	n.a.	3.94	n.a.	n.a.	0.84	3.19
	10.84 %	n.a.	n.a.	4.30	n.a.	n.a.	1.20	3.74
	9.83 %	n.a.	n.a.	4.74	n.a.	n.a.	1.64	4.39
WACC	<b>8.84 %</b>	<b>n.a.</b>	<b>n.a.</b>	<b>5.24</b>	<b>n.a.</b>	<b>n.a.</b>	<b>2.17</b>	<b>5.16</b>
	7.84 %	n.a.	n.a.	5.95	n.a.	n.a.	2.86	6.21
	6.84 %	n.a.	n.a.	6.82	n.a.	n.a.	3.74	7.52
	5.84 %	n.a.	n.a.	7.99	n.a.	n.a.	4.92	9.27

- Rising value indication with higher business volume...
- ...this is due to a high operating leverage given gross margins of >50%
- EUR 20m earn-out liability for acardo incorporated

Valuation	2019	2020	2021	2022e	2023e	2024e	2025e
Price / Book	5.8 x	3.6 x	3.4 x	1.4 x	1.4 x	1.3 x	1.1 x
Book value per share ex intangibles	1.88	2.89	3.05	2.56	-0.98	-0.71	-0.21
EV / Sales	3.2 x	3.2 x	2.2 x	1.2 x	1.5 x	1.2 x	1.0 x
EV / EBITDA	n.a.	n.a.	17.7 x	n.a.	24.3 x	11.1 x	6.7 x
EV / EBIT	n.a.	n.a.	26.6 x	n.a.	84.6 x	16.9 x	8.7 x
EV / EBIT adj.*	n.a.	n.a.	26.6 x	n.a.	84.6 x	16.9 x	8.7 x
P / FCF	n.a.	n.a.	10.6 x	n.a.	n.a.	13.5 x	7.0 x
P / E	n.a.	n.a.	36.2 x	n.a.	n.a.	14.8 x	7.7 x
P / E adj.*	n.a.	n.a.	36.2 x	n.a.	n.a.	14.8 x	7.7 x
Dividend Yield	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCF Potential Yield (on market EV)	-1.4 %	-1.4 %	4.5 %	-4.1 %	2.3 %	6.7 %	10.8 %

\*Adjustments made for: -

## Consolidated profit & loss

In EUR m	2019	2020	2021	2022e	2023e	2024e	2025e
<b>Sales</b>	<b>25.2</b>	<b>25.0</b>	<b>38.2</b>	<b>25.2</b>	<b>38.7</b>	<b>45.0</b>	<b>51.5</b>
Change Sales yoy	1.4 %	-0.7 %	52.9 %	-34.1 %	53.7 %	16.3 %	14.4 %
Increase / decrease in inventory	0.0	-0.1	0.2	-0.9	0.0	0.0	0.0
Own work capitalised	0.0	0.4	0.1	0.0	0.0	0.0	0.0
<b>Total Sales</b>	<b>25.2</b>	<b>25.3</b>	<b>38.5</b>	<b>24.3</b>	<b>38.7</b>	<b>45.0</b>	<b>51.5</b>
Material expenses	10.7	9.6	12.2	7.8	12.8	15.1	17.3
<b>Gross profit</b>	<b>14.5</b>	<b>15.7</b>	<b>26.3</b>	<b>16.5</b>	<b>25.9</b>	<b>29.9</b>	<b>34.3</b>
<i>Gross profit margin</i>	<i>57.8 %</i>	<i>62.7 %</i>	<i>68.8 %</i>	<i>65.4 %</i>	<i>67.0 %</i>	<i>66.4 %</i>	<i>66.5 %</i>
Personnel expenses	9.3	9.6	12.0	11.1	14.3	15.0	16.0
Other operating income	0.3	0.9	0.1	0.4	0.4	0.3	0.4
Other operating expenses	7.0	8.6	9.7	9.8	9.7	10.2	11.0
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EBITDA</b>	<b>-1.4</b>	<b>-1.7</b>	<b>4.7</b>	<b>-4.0</b>	<b>2.3</b>	<b>5.0</b>	<b>7.7</b>
<i>Margin</i>	<i>-5.5 %</i>	<i>-6.7 %</i>	<i>12.3 %</i>	<i>-15.7 %</i>	<i>6.1 %</i>	<i>11.1 %</i>	<i>14.9 %</i>
Depreciation of fixed assets	0.2	1.2	1.5	1.3	1.5	1.5	1.5
<b>EBITA</b>	<b>-1.6</b>	<b>-2.9</b>	<b>3.2</b>	<b>-5.3</b>	<b>0.9</b>	<b>3.5</b>	<b>6.2</b>
Amortisation of intangible assets	0.2	0.1	0.1	0.2	0.2	0.2	0.2
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EBIT</b>	<b>-1.8</b>	<b>-3.0</b>	<b>3.1</b>	<b>-5.5</b>	<b>0.7</b>	<b>3.3</b>	<b>6.0</b>
<i>Margin</i>	<i>-7.1 %</i>	<i>-12.0 %</i>	<i>8.2 %</i>	<i>-21.8 %</i>	<i>1.7 %</i>	<i>7.3 %</i>	<i>11.5 %</i>
<b>EBIT adj.</b>	<b>-1.8</b>	<b>-3.0</b>	<b>3.1</b>	<b>-4.0</b>	<b>0.7</b>	<b>3.3</b>	<b>6.0</b>
Interest income	0.0	0.2	0.3	0.0	0.0	0.0	0.0
Interest expenses	0.2	0.4	0.3	0.2	0.2	0.2	0.2
Other financial income (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EBT</b>	<b>-2.0</b>	<b>-3.1</b>	<b>3.1</b>	<b>-5.7</b>	<b>0.5</b>	<b>3.1</b>	<b>5.8</b>
<i>Margin</i>	<i>-7.8 %</i>	<i>-12.5 %</i>	<i>8.2 %</i>	<i>-22.5 %</i>	<i>1.2 %</i>	<i>6.9 %</i>	<i>11.2 %</i>
Total taxes	-0.6	-0.8	0.7	-1.8	0.7	1.0	1.8
<b>Net income from continuing operations</b>	<b>-1.4</b>	<b>-2.3</b>	<b>2.4</b>	<b>-3.9</b>	<b>-0.2</b>	<b>2.1</b>	<b>4.0</b>
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net income before minorities</b>	<b>-1.4</b>	<b>-2.3</b>	<b>2.4</b>	<b>-3.9</b>	<b>-0.2</b>	<b>2.1</b>	<b>4.0</b>
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net income</b>	<b>-1.4</b>	<b>-2.3</b>	<b>2.4</b>	<b>-3.9</b>	<b>-0.2</b>	<b>2.1</b>	<b>4.0</b>
<i>Margin</i>	<i>-5.5 %</i>	<i>-9.2 %</i>	<i>6.4 %</i>	<i>-15.6 %</i>	<i>-0.6 %</i>	<i>4.7 %</i>	<i>7.7 %</i>
Number of shares, average	7.2	8.0	8.0	8.0	8.0	8.0	8.0
<b>EPS</b>	<b>-0.19</b>	<b>-0.29</b>	<b>0.30</b>	<b>-0.49</b>	<b>-0.03</b>	<b>0.26</b>	<b>0.49</b>
EPS adj.	-0.19	-0.29	0.30	-0.49	-0.03	0.26	0.49

\*Adjustments made for:

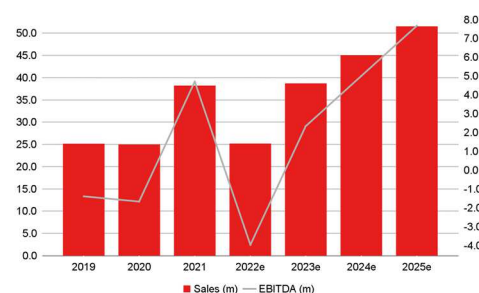
**Guidance: 2023: Revenues EUR 36 - 37,8m; EBITDA EUR 1.3 - 2.2m**

## Financial Ratios

	2019	2020	2021	2022e	2023e	2024e	2025e
Total Operating Costs / Sales	105.6 %	107.7 %	88.4 %	112.2 %	93.9 %	88.9 %	85.1 %
Operating Leverage	-48.6 x	-103.6 x	n.a.	n.a.	n.a.	23.8 x	5.6 x
EBITDA / Interest expenses	n.m.	n.m.	16.0 x	n.m.	11.7 x	25.0 x	38.4 x
Tax rate (EBT)	28.7 %	26.0 %	22.0 %	31.0 %	152.0 %	31.0 %	31.0 %
Dividend Payout Ratio	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Sales per Employee	156,331	139,676	211,199	140,000	234,679	276,344	299,628

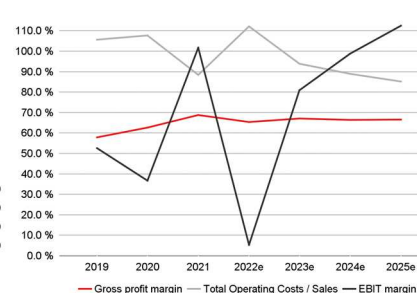
### Sales, EBITDA

in EUR m

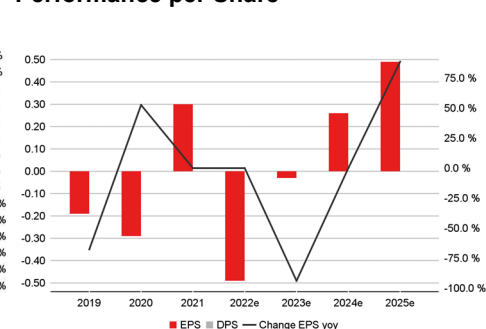


### Operating Performance

in %



### Performance per Share



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

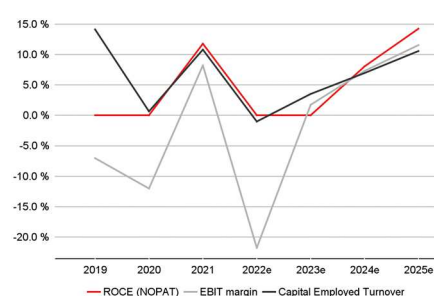
## Consolidated balance sheet

In EUR m	2019	2020	2021	2022e	2023e	2024e	2025e
<b>Assets</b>							
Goodwill and other intangible assets	0.1	0.1	1.2	1.2	29.2	29.2	29.2
thereof other intangible assets	0.1	0.1	1.2	1.2	1.2	1.2	1.2
thereof Goodwill	0.0	0.0	0.0	0.0	28.0	28.0	28.0
Property, plant and equipment	0.5	1.9	9.6	8.8	8.9	8.1	7.3
Financial assets	2.1	2.1	0.4	0.4	0.4	0.4	0.4
Other long-term assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Fixed assets</b>	<b>2.6</b>	<b>4.0</b>	<b>11.2</b>	<b>10.3</b>	<b>38.5</b>	<b>37.7</b>	<b>36.9</b>
Inventories	5.0	6.7	4.9	3.6	4.8	5.3	5.7
Accounts receivable	5.0	3.5	3.6	2.8	4.2	4.9	5.6
Liquid assets	11.3	8.3	19.9	12.5	5.3	5.7	8.1
Other short-term assets	2.8	9.4	8.2	9.5	9.5	9.4	8.9
<b>Current assets</b>	<b>24.1</b>	<b>27.9</b>	<b>36.5</b>	<b>28.4</b>	<b>23.8</b>	<b>25.2</b>	<b>28.3</b>
<b>Total Assets</b>	<b>26.7</b>	<b>31.9</b>	<b>47.7</b>	<b>38.7</b>	<b>62.3</b>	<b>62.9</b>	<b>65.3</b>
<b>Liabilities and shareholders' equity</b>							
Subscribed capital	7.3	8.0	8.1	8.1	8.1	8.1	8.1
Capital reserve	9.7	20.2	20.2	20.2	20.2	20.2	20.2
Retained earnings	0.0	0.0	0.0	-3.9	-4.2	-2.0	1.9
Other equity components	-3.3	-5.0	-2.7	-2.7	-2.7	-2.7	-2.7
Shareholders' equity	13.8	23.2	25.6	21.6	21.4	23.5	27.5
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total equity</b>	<b>13.8</b>	<b>23.2</b>	<b>25.6</b>	<b>21.6</b>	<b>21.4</b>	<b>23.5</b>	<b>27.5</b>
Provisions	1.2	0.3	0.2	0.2	0.2	0.2	0.2
thereof provisions for pensions and similar obligations	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial liabilities (total)	10.4	5.1	15.8	12.5	11.6	10.7	9.8
Short-term financial liabilities	10.4	1.9	5.1	2.1	2.1	2.1	2.1
Accounts payable	0.9	2.3	3.2	1.4	2.1	2.5	2.8
Other liabilities	0.4	1.0	3.0	3.0	27.0	26.0	25.0
<b>Liabilities</b>	<b>12.9</b>	<b>8.7</b>	<b>22.2</b>	<b>17.1</b>	<b>40.9</b>	<b>39.4</b>	<b>37.8</b>
<b>Total liabilities and shareholders' equity</b>	<b>26.7</b>	<b>31.9</b>	<b>47.7</b>	<b>38.7</b>	<b>62.3</b>	<b>62.9</b>	<b>65.3</b>

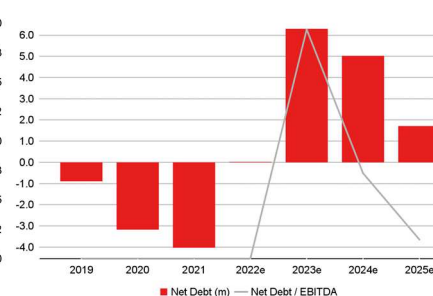
## Financial Ratios

	2019	2020	2021	2022e	2023e	2024e	2025e
<b>Efficiency of Capital Employment</b>							
Operating Assets Turnover	2.6 x	2.6 x	2.6 x	1.8 x	2.5 x	2.9 x	3.3 x
Capital Employed Turnover	1.9 x	1.3 x	1.8 x	1.2 x	1.4 x	1.6 x	1.8 x
ROA	-52.7 %	-57.7 %	21.8 %	-37.9 %	-0.6 %	5.7 %	10.7 %
<b>Return on Capital</b>							
ROCE (NOPAT)	n.a.	n.a.	11.8 %	n.a.	n.a.	8.1 %	14.2 %
ROE	-11.6 %	-12.5 %	10.0 %	-16.6 %	-1.1 %	9.5 %	15.6 %
Adj. ROE	-11.6 %	-12.5 %	10.0 %	-16.6 %	-1.1 %	9.5 %	15.6 %
<b>Balance sheet quality</b>							
Net Debt	-0.9	-3.2	-4.0	0.0	6.3	5.0	1.7
Net Financial Debt	-0.9	-3.2	-4.0	0.0	6.3	5.0	1.7
Net Gearing	-6.5 %	-13.7 %	-15.8 %	0.1 %	29.5 %	21.4 %	6.2 %
Net Fin. Debt / EBITDA	n.a.	n.a.	n.a.	n.a.	268.8 %	100.3 %	22.3 %
Book Value / Share	1.9	2.9	3.2	2.7	2.7	2.9	3.4
Book value per share ex intangibles	1.9	2.9	3.0	2.6	-1.0	-0.7	-0.2

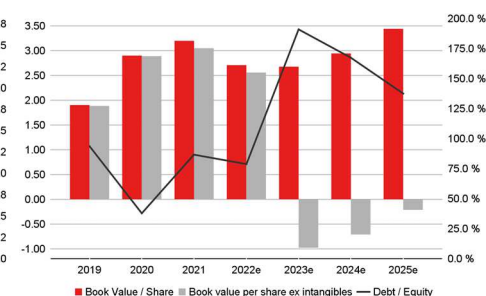
### ROCE Development



### Net debt in EUR m



### Book Value per Share in EUR



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

## Consolidated cash flow statement

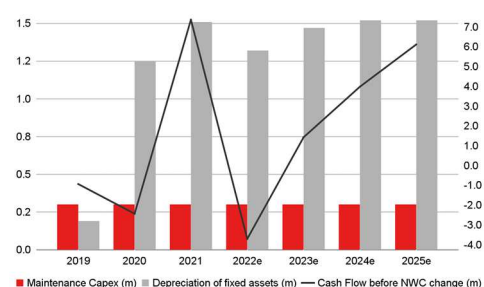
In EUR m	2019	2020	2021	2022e	2023e	2024e	2025e
Net income	-1.4	-2.3	2.4	-3.9	-0.2	2.1	4.0
Depreciation of fixed assets	0.2	1.2	1.5	1.3	1.5	1.5	1.5
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	0.2	0.1	0.1	0.2	0.2	0.2	0.2
Increase/decrease in long-term provisions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other non-cash income and expenses	0.1	-1.5	3.3	-1.3	0.0	0.1	0.4
<b>Cash Flow before NWC change</b>	<b>-0.9</b>	<b>-2.4</b>	<b>7.4</b>	<b>-3.7</b>	<b>1.4</b>	<b>4.0</b>	<b>6.1</b>
Increase / decrease in inventory	0.8	-1.8	1.8	1.3	-1.2	-0.5	-0.4
Increase / decrease in accounts receivable	-2.7	1.6	-0.1	0.8	-1.4	-0.7	-0.7
Increase / decrease in accounts payable	0.3	1.4	0.9	-1.8	0.7	0.4	0.3
Increase / decrease in other working capital positions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Increase / decrease in working capital (total)	-1.6	1.2	2.5	0.4	-1.9	-0.8	-0.8
<b>Net cash provided by operating activities [1]</b>	<b>-2.5</b>	<b>-1.3</b>	<b>9.9</b>	<b>-3.4</b>	<b>-0.5</b>	<b>3.2</b>	<b>5.3</b>
Investments in intangible assets	-0.2	0.0	-1.2	-0.2	-0.2	-0.2	-0.2
Investments in property, plant and equipment	-0.4	-1.2	-0.5	-0.5	-0.6	-0.7	-0.8
Payments for acquisitions	0.0	0.0	0.0	0.0	-29.0	-1.0	-1.0
Financial investments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income from asset disposals	0.1	0.5	1.7	0.0	0.0	0.0	0.0
<b>Net cash provided by investing activities [2]</b>	<b>-0.1</b>	<b>-0.7</b>	<b>0.1</b>	<b>-0.7</b>	<b>-29.8</b>	<b>-1.9</b>	<b>-2.0</b>
Change in financial liabilities	-2.3	-10.4	1.6	-3.3	-0.9	-0.9	-0.9
Dividends paid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Purchase of own shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	5.1	11.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	3.4	0.0	24.0	0.0	0.0
<b>Net cash provided by financing activities [3]</b>	<b>2.7</b>	<b>0.7</b>	<b>5.0</b>	<b>-3.3</b>	<b>23.1</b>	<b>-0.9</b>	<b>-0.9</b>
<b>Change in liquid funds [1]+[2]+[3]</b>	<b>0.1</b>	<b>-1.3</b>	<b>15.0</b>	<b>-7.4</b>	<b>-7.2</b>	<b>0.4</b>	<b>2.4</b>
Effects of exchange-rate changes on cash	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Cash and cash equivalent at end of period</b>	<b>11.7</b>	<b>10.0</b>	<b>23.3</b>	<b>12.5</b>	<b>5.3</b>	<b>5.7</b>	<b>8.1</b>

## Financial Ratios

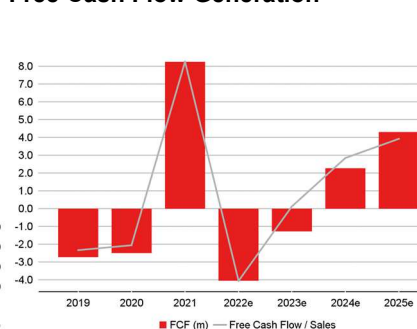
	2019	2020	2021	2022e	2023e	2024e	2025e
<b>Cash Flow</b>							
FCF	-2.7	-2.5	8.3	-4.1	-1.3	2.3	4.3
Free Cash Flow / Sales	-10.8 %	-10.0 %	21.6 %	-16.1 %	-3.3 %	5.1 %	8.4 %
Free Cash Flow Potential	-1.1	-1.2	3.7	-1.3	1.3	3.8	5.6
Free Cash Flow / Net Profit	196.0 %	108.0 %	338.8 %	103.3 %	518.3 %	106.8 %	108.6 %
Interest Received / Avg. Cash	0.2 %	2.4 %	2.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Interest Paid / Avg. Debt	1.7 %	4.7 %	2.8 %	1.4 %	1.7 %	1.8 %	2.0 %
<b>Management of Funds</b>							
Investment ratio	2.3 %	4.9 %	4.2 %	2.8 %	2.1 %	2.0 %	1.9 %
Maint. Capex / Sales	1.2 %	1.2 %	0.8 %	1.2 %	0.8 %	0.7 %	0.6 %
Capex / Dep	148.7 %	91.7 %	102.9 %	46.1 %	47.9 %	52.3 %	58.1 %
Avg. Working Capital / Sales	32.8 %	33.8 %	17.3 %	20.5 %	15.4 %	16.2 %	15.7 %
Trade Debtors / Trade Creditors	541.0 %	150.5 %	112.9 %	200.0 %	200.0 %	196.0 %	200.0 %
Inventory Turnover	2.1 x	1.4 x	2.5 x	2.2 x	2.7 x	2.9 x	3.0 x
Receivables collection period (days)	73	50	34	41	40	40	40
Payables payment period (days)	32	87	94	65	60	60	59
Cash conversion cycle (Days)	211	219	88	143	117	107	101

### CAPEX and Cash Flow

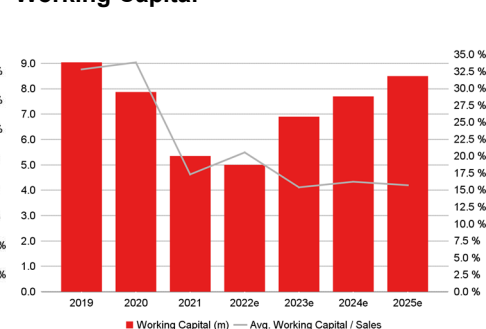
in EUR m



### Free Cash Flow Generation



### Working Capital



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research



**LEGAL DISCLAIMER**

This research report ("investment recommendation") was prepared by the Warburg Research GmbH, a fully owned subsidiary of the M.M.Warburg & CO (AG & Co.) KGaA and is passed on by the M.M.Warburg & CO (AG & Co.) KGaA. It is intended solely for the recipient and may not be passed on to another company without their prior consent, regardless of whether the company is part of the same corporation or not. It contains selected information and does not purport to be complete. The investment recommendation is based on publicly available information and data ("information") believed to be accurate and complete. Warburg Research GmbH neither examines the information for accuracy and completeness, nor guarantees its accuracy and completeness. Possible errors or incompleteness of the information do not constitute grounds for liability of M.M.Warburg & CO (AG & Co.) KGaA or Warburg Research GmbH for damages of any kind whatsoever, and M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH are not liable for indirect and/or direct and/or consequential damages. In particular, neither M.M.Warburg & CO (AG & Co.) KGaA nor Warburg Research GmbH are liable for the statements, plans or other details contained in these investment recommendations concerning the examined companies, their affiliated companies, strategies, economic situations, market and competitive situations, regulatory environment, etc. Although due care has been taken in compiling this investment recommendation, it cannot be excluded that it is incomplete or contains errors. M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH, their shareholders and employees are not liable for the accuracy and completeness of the statements, estimations and the conclusions derived from the information contained in this investment recommendation. Provided a investment recommendation is being transmitted in connection with an existing contractual relationship, i.e. financial advisory or similar services, the liability of M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH shall be restricted to gross negligence and wilful misconduct. In case of failure in essential tasks, M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH are liable for normal negligence. In any case, the liability of M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH is limited to typical, expectable damages. This investment recommendation does not constitute an offer or a solicitation of an offer for the purchase or sale of any security. Partners, directors or employees of M.M.Warburg & CO (AG & Co.) KGaA, Warburg Research GmbH or affiliated companies may serve in a position of responsibility, i.e. on the board of directors of companies mentioned in the report. Opinions expressed in this investment recommendation are subject to change without notice. The views expressed in this research report accurately reflect the research analyst's personal views about the subject securities and issuers. Unless otherwise specified in the research report, no part of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in the research report. All rights reserved.

**COPYRIGHT NOTICE**

This work including all its parts is protected by copyright. Any use beyond the limits provided by copyright law without permission is prohibited and punishable. This applies, in particular, to reproductions, translations, microfilming, and storage and processing on electronic media of the entire content or parts thereof.

**DISCLOSURE ACCORDING TO §85 OF THE GERMAN SECURITIES TRADING ACT (WPHG), MAR AND MIFID II INCL. COMMISSION DELEGATED REGULATION (EU) 2016/958 AND (EU) 2017/565**

The valuation underlying the investment recommendation for the company analysed here is based on generally accepted and widely used methods of fundamental analysis, such as e.g. DCF Model, Free Cash Flow Value Potential, NAV, Peer Group Comparison or Sum of the Parts Model (see also <http://www.mmwarburg.de/disclaimer/disclaimer.htm#Valuation>). The result of this fundamental valuation is modified to take into consideration the analyst's assessment as regards the expected development of investor sentiment and its impact on the share price.

Independent of the applied valuation methods, there is the risk that the price target will not be met, for instance because of unforeseen changes in demand for the company's products, changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, tax rate etc. For investments in foreign markets and instruments there are further risks, generally based on exchange rate changes or changes in political and social conditions.

This commentary reflects the opinion of the relevant author at the point in time of its compilation. A change in the fundamental factors underlying the valuation can mean that the valuation is subsequently no longer accurate. Whether, or in what time frame, an update of this commentary follows is not determined in advance.

Additional internal and organisational arrangements to prevent or to deal with conflicts of interest have been implemented. Among these are the spatial separation of Warburg Research GmbH from M.M.Warburg & CO (AG & Co.) KGaA and the creation of areas of confidentiality. This prevents the exchange of information, which could form the basis of conflicts of interest for Warburg Research GmbH in terms of the analysed issuers or their financial instruments.

The analysts of Warburg Research GmbH do not receive a gratuity – directly or indirectly – from the investment banking activities of M.M.Warburg & CO (AG & Co.) KGaA or of any company within the Warburg-Group.

All prices of financial instruments given in this investment recommendation are the closing prices on the last stock-market trading day before the publication date stated, unless another point in time is explicitly stated.

M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH are subject to the supervision of the Federal Financial Supervisory Authority, BaFin. M.M.Warburg & CO (AG & Co.) KGaA is additionally subject to the supervision of the European Central Bank (ECB).

**SOURCES**

All **data and consensus estimates** have been obtained from FactSet except where stated otherwise.

The **Warburg ESG Risk Score** is based on information © 2020 MSCI ESG Research LLC. Reproduced by permission. Although Warburg Research's information providers, including without limitation, MSCI ESG Research LLC and its affiliates (the "ESG Parties"), obtain information (the "Information") from sources they consider reliable, none of the ESG Parties warrants or guarantees the originality, accuracy and/or completeness, of any data herein and expressly disclaim all express or implied warranties, including those of merchantability and fitness for a particular purpose. The Information may only be used for your internal use, may not be reproduced or disseminated in any form and may not be used as a basis for, or a component, of any financial instruments or products indices. Further, none of the Information can in and of itself be used to determine which securities to buy or sell or when to buy or sell them. None of the ESG Parties shall have any liability for any errors or omissions in connection with any data herein, or any liability for any direct, indirect, special, punitive, consequential or any other damage (including lost profits) even if notified of the possibility.

### Additional information for clients in the United States

1. This research report (the "Report") is a product of Warburg Research GmbH, Germany, a fully owned subsidiary of M.M.Warburg & CO (AG & Co.) KGaA, Germany (in the following collectively "Warburg"). Warburg is the employer of the research analyst(s), who have prepared the Report. The research analyst(s) reside outside the United States and are not associated persons of any U.S. regulated broker-dealer and therefore are not subject to the supervision of any U.S. regulated broker-dealer.
2. The Report is provided in the United States for distribution solely to "major U.S. institutional investors" under Rule 15a-6 of the U.S. Securities Exchange Act of 1934 by CIC.
3. CIC (Crédit Industriel et Commercial) and M.M. Warburg & CO have concluded a Research Distribution Agreement that gives CIC Market Solutions exclusive distribution in France, the US and Canada of the Warburg Research GmbH research product.
4. The research reports are distributed in the United States of America by CIC ("CIC") pursuant to a SEC Rule 15a-6 agreement with CIC Market Solutions Inc ("CICI"), a U.S. registered broker-dealer and a related company of CIC, and are distributed solely to persons who qualify as "Major U.S. Institutional Investors" as defined in SEC Rule 15a-6 under the Securities Exchange Act of 1934.
5. Any person who is not a Major U.S. Institutional Investor must not rely on this communication. The delivery of this research report to any person in the United States of America is not a recommendation to effect any transactions in the securities discussed herein, or an endorsement of any opinion expressed herein.

### Reference in accordance with section 85 of the German Securities Trading Act (WpHG) and Art. 20 MAR regarding possible conflicts of interest with companies analysed:

- 1- Warburg Research, or an affiliated company, or an employee of one of these companies responsible for the compilation of the research, hold a **share of more than 5%** of the equity capital of the analysed company.
- 2- Warburg Research, or an affiliated company, within the last twelve months participated in the **management of a consortium** for an issue in the course of a public offering of such financial instruments, which are, or the issuer of which is, the subject of the investment recommendation.
- 3- Companies affiliated with Warburg Research **manage financial instruments**, which are, or the issuers of which are, subject of the investment recommendation, in a market based on the provision of buy or sell contracts.
- 4- MMWB, Warburg Research, or an affiliated company, reached an agreement with the issuer to provide **investment banking and/or investment services** and the relevant agreement was in force in the last 12 months or there arose for this period, based on the relevant agreement, the obligation to provide or to receive a service or compensation - provided that this disclosure does not result in the disclosure of confidential business information.
- 5- The company compiling the analysis or an affiliated company had reached an **agreement on the compilation of the investment recommendation** with the analysed company.
- 6a- Warburg Research, or an affiliated company, holds a **net long position of more than 0.5%** of the total issued share capital of the analysed company.
- 6b- Warburg Research, or an affiliated company, holds a **net short position of more than 0.5%** of the total issued share capital of the analysed company.
- 6c- The issuer holds shares of more than 5% of the total issued capital of Warburg Research or an affiliated company.
- 7- The company preparing the analysis as well as its affiliated companies and employees have **other important interests** in relation to the analysed company, such as, for example, the exercising of mandates at analysed companies.

This report has been made accessible to the company analysed.

Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
Vectron Systems AG	3, 5	<a href="http://www.mmwarburg.com/disclaimer/disclaimer_en/DE000A0KEXC7.htm">http://www.mmwarburg.com/disclaimer/disclaimer_en/DE000A0KEXC7.htm</a>

## INVESTMENT RECOMMENDATION

Investment recommendation: expected direction of the share price development of the financial instrument up to the given price target in the opinion of the analyst who covers this financial instrument.

-B-	<b>Buy:</b>	The price of the analysed financial instrument is expected to rise over the next 12 months.
-H-	<b>Hold:</b>	The price of the analysed financial instrument is expected to remain mostly flat over the next 12 months.
-S-	<b>Sell:</b>	The price of the analysed financial instrument is expected to fall over the next 12 months.
“-“	<b>Rating suspended:</b>	The available information currently does not permit an evaluation of the company.

## WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING

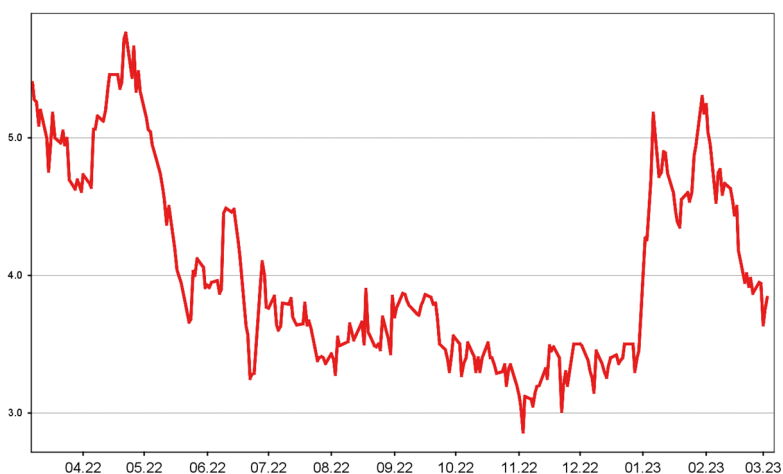
Rating	Number of stocks	% of Universe
Buy	161	75
Hold	43	20
Sell	7	3
Rating suspended	3	1
<b>Total</b>	<b>214</b>	<b>100</b>

## WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING ...

... taking into account only those companies which were provided with major investment services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	44	86
Hold	6	12
Sell	0	0
Rating suspended	1	2
<b>Total</b>	<b>51</b>	<b>100</b>

## PRICE AND RATING HISTORY VECTRON SYSTEMS AG AS OF 06.03.2023



Markings in the chart show rating changes by Warburg Research GmbH in the last 12 months. Every marking details the date and closing price on the day of the rating change.

**EQUITIES**

**Matthias Rode** +49 40 3282-2678  
Head of Equities mrode@mmwarburg.com

**RESEARCH**

**Michael Heider** +49 40 309537-280  
Head of Research mheider@warburg-research.com

**Henner Rüschemier** +49 40 309537-270  
Head of Research hrueschmeier@warburg-research.com

**Stefan Augustin** +49 40 309537-168  
Cap. Goods, Engineering saugustin@warburg-research.com

**Jan Bauer** +49 40 309537-155  
Renewables jbauer@warburg-research.com

**Christian Cohrs** +49 40 309537-175  
Industrials & Transportation ccohrs@warburg-research.com

**Dr. Christian Ehmann** +49 40 309537-167  
BioTech, Life Science cehmann@warburg-research.com

**Felix Ellmann** +49 40 309537-120  
Software, IT fellmann@warburg-research.com

**Jörg Philipp Frey** +49 40 309537-258  
Retail, Consumer Goods jfrey@warburg-research.com

**Marius Fuhrberg** +49 40 309537-185  
Financial Services mfuhrberg@warburg-research.com

**Mustafa Hidir** +49 40 309537-230  
Automobiles, Car Suppliers mhidir@warburg-research.com

**Fabio Hölscher** +49 40 309537-240  
Automobiles, Car Suppliers fhoelscher@warburg-research.com

**Philipp Kaiser** +49 40 309537-260  
Real Estate, Construction pkaiser@warburg-research.com

**Thilo Kleibauer** +49 40 309537-257  
Retail, Consumer Goods tkleibauer@warburg-research.com

**Hannes Müller** +49 40 309537-255  
Software, IT hmueller@warburg-research.com

**Andreas Pläsier** +49 40 309537-246  
Banks, Financial Services aplaesier@warburg-research.com

**Malte Schaumann** +49 40 309537-170  
Technology mschaumann@warburg-research.com

**Oliver Schwarz** +49 40 309537-250  
Chemicals, Agriculture oschwarz@warburg-research.com

**Simon Stippig** +49 40 309537-265  
Real Estate, Telco sstippig@warburg-research.com

**Cansu Tatar** +49 40 309537-248  
Cap. Goods, Engineering ctatar@warburg-research.com

**Marc-René Tonn** +49 40 309537-259  
Automobiles, Car Suppliers mtonn@warburg-research.com

**Robert-Jan van der Horst** +49 40 309537-290  
Technology rvanderhorst@warburg-research.com

**Andreas Wolf** +49 40 309537-140  
Software, IT awolf@warburg-research.com

**INSTITUTIONAL EQUITY SALES**

**Marc Niemann** +49 40 3282-2660  
Head of Equity Sales, Germany mniemann@mmwarburg.com

**Klaus Schilling** +49 69 5050-7400  
Head of Equity Sales, Germany kschilling@mmwarburg.com

**Tim Beckmann** +49 40 3282-2665  
United Kingdom tbeckmann@mmwarburg.com

**Lea Bogdanova** +49 69 5050-7411  
United Kingdom, Ireland lbogdanova@mmwarburg.com

**Jens Buchmüller** +49 69 5050-7415  
Scandinavia, Austria jbuchmueller@mmwarburg.com

**Matthias Fritsch** +49 40 3282-2696  
United Kingdom mfritsch@mmwarburg.com

**Maximilian Martin** +49 69 5050-7413  
Austria, Poland mmartin@mmwarburg.com

**Christopher Seedorf** +49 40 3282-2695  
Switzerland cseedorf@mmwarburg.com

**Sophie Hauer** +49 69 5050-7417  
Roadshow/Marketing shauer@mmwarburg.com

**Juliane Niemann** +49 40 3282-2694  
Roadshow/Marketing jniemann@mmwarburg.com

**SALES TRADING**

**Oliver Merckel** +49 40 3282-2634  
Head of Sales Trading omerckel@mmwarburg.com

**Elyaz Dust** +49 40 3282-2702  
Sales Trading edust@mmwarburg.com

**Marcel Magiera** +49 40 3282-2662  
Sales Trading mmagiera@mmwarburg.com

**Bastian Quast** +49 40 3282-2701  
Sales Trading bquast@mmwarburg.com

**Jan-Philip Schmidt** +49 40 3282-2682  
Sales Trading jschmidt@mmwarburg.com

**Sebastian Schulz** +49 40 3282-2631  
Sales Trading sschulz@mmwarburg.com

**Jörg Treptow** +49 40 3282-2658  
Sales Trading jtreptow@mmwarburg.com

**MACRO RESEARCH**

**Carsten Klude** +49 40 3282-2572  
Macro Research cklude@mmwarburg.com

**Dr. Christian Jasperneite** +49 40 3282-2439  
Investment Strategy cjasperneite@mmwarburg.com

**Our research can be found under:**

Warburg Research [research.mmwarburg.com/en/index.html](http://research.mmwarburg.com/en/index.html)

Bloomberg RESP MMWA GO

FactSet [www.factset.com](http://www.factset.com)

Refinitiv [www.refinitiv.com](http://www.refinitiv.com)

Capital IQ [www.capitaliq.com](http://www.capitaliq.com)

**For access please contact:**

**Andrea Schaper** +49 40 3282-2632  
Sales Assistance aschaper@mmwarburg.com

**Kerstin Muthig** +49 40 3282-2703  
Sales Assistance kmuthig@mmwarburg.com