

<p>Buy</p> <p>EUR 15.00</p> <p>Price EUR 8.30</p> <p>Upside 80.7 %</p>	<p>Value Indicators: EUR</p> <p>DCF: 15.44</p> <p>FCF-Value Potential 25e: 13.58</p>	<p>Warburg ESG Risk Score: 3.0</p> <p>ESG Score (MSCI based): 2.0</p> <p>Balance Sheet Score: 5.0</p> <p>Market Liquidity Score: 2.0</p>	<p>Description:</p> <p>Highly specialised machine manufacturer developing laser applications for special purposes</p>
	<p>Market Snapshot: EUR m</p> <p>Market cap: 203.3</p> <p>No. of shares (m): 24.5</p> <p>EV: 198.2</p> <p>Freefloat MC: 203.3</p> <p>Ø Trad. Vol. (30d): 327.76 th</p>	<p>Shareholders:</p> <p>Freefloat 100.00 %</p> <p>Small Cap World Fund 5.00 %</p> <p>JPMorgan AM 3.00 %</p> <p>Société Générale 3.00 %</p> <p>UBS 3.00 %</p>	<p>Key Figures (WRE): 2023e</p> <p>Beta: 1.3</p> <p>Price / Book: 2.1 x</p> <p>Equity Ratio: 74 %</p>

Growing order backlog provides solid visibility well into 2024

<p>Stated Figures Q2/2023:</p> <table border="1"> <thead> <tr> <th>FY End: 31.12. in EUR m</th> <th>Q2 23</th> <th>Q2 23e</th> <th>Q2 22</th> <th>yoy</th> <th>6M 23</th> <th>6M 23e</th> <th>6M 22</th> <th>yoy</th> <th></th> </tr> </thead> <tbody> <tr> <td>Sales</td> <td>27.7</td> <td>27.1</td> <td>29.7</td> <td>-7 %</td> <td>47.9</td> <td>47.3</td> <td>55.5</td> <td>-14 %</td> <td></td> </tr> <tr> <td>EBITDA</td> <td>1.9</td> <td>1.5</td> <td>2.8</td> <td>-33 %</td> <td>-2.5</td> <td>-2.8</td> <td>5.7</td> <td>n.a.</td> <td></td> </tr> <tr> <td>Margin</td> <td>6.7 %</td> <td>5.6 %</td> <td>9.3 %</td> <td></td> <td>-5.2 %</td> <td>-6.0 %</td> <td>10.3 %</td> <td></td> <td></td> </tr> <tr> <td>EBIT</td> <td>-0.4</td> <td>-0.7</td> <td>0.7</td> <td>n.a.</td> <td>-7.0</td> <td>-7.3</td> <td>1.7</td> <td>n.a.</td> <td></td> </tr> <tr> <td>Margin</td> <td>-1.6 %</td> <td>-2.7 %</td> <td>2.3 %</td> <td></td> <td>-14.6 %</td> <td>-15.4 %</td> <td>3.1 %</td> <td></td> <td></td> </tr> </tbody> </table>										FY End: 31.12. in EUR m	Q2 23	Q2 23e	Q2 22	yoy	6M 23	6M 23e	6M 22	yoy		Sales	27.7	27.1	29.7	-7 %	47.9	47.3	55.5	-14 %		EBITDA	1.9	1.5	2.8	-33 %	-2.5	-2.8	5.7	n.a.		Margin	6.7 %	5.6 %	9.3 %		-5.2 %	-6.0 %	10.3 %			EBIT	-0.4	-0.7	0.7	n.a.	-7.0	-7.3	1.7	n.a.		Margin	-1.6 %	-2.7 %	2.3 %		-14.6 %	-15.4 %	3.1 %			<p>Comment on Figures:</p> <ul style="list-style-type: none"> Q2 figures in line with our expectations and the company's targets (sales EUR 25-30m, EBIT EUR -3m to 1m) Sales decline mainly driven by lower Solar revenues (EUR 6.9m; -47% yoy) compared to the exceptionally strong Q2 2022 Electronics grew by 28% due to a solid demand from Western customers, while Asia remains weak EBIT decreased as a result of lower sales and ramp-up costs for Arraylize 									
FY End: 31.12. in EUR m	Q2 23	Q2 23e	Q2 22	yoy	6M 23	6M 23e	6M 22	yoy																																																																							
Sales	27.7	27.1	29.7	-7 %	47.9	47.3	55.5	-14 %																																																																							
EBITDA	1.9	1.5	2.8	-33 %	-2.5	-2.8	5.7	n.a.																																																																							
Margin	6.7 %	5.6 %	9.3 %		-5.2 %	-6.0 %	10.3 %																																																																								
EBIT	-0.4	-0.7	0.7	n.a.	-7.0	-7.3	1.7	n.a.																																																																							
Margin	-1.6 %	-2.7 %	2.3 %		-14.6 %	-15.4 %	3.1 %																																																																								

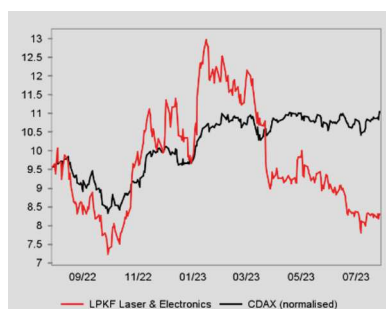
LPKF released its results for the second quarter, which were in line with the company's targets (sales EUR 25-30m, EBIT -3m to 1m) and our estimates (sales EUR 27.1m, EBIT -0.7m). Sales dropped by 7.0% yoy to EUR 27.1m. The decline was mainly driven by Solar, which fell 47% yoy to EUR 6.9m. The segment usually shows quarterly volatility and had its peak in Q2 last year with EUR 13m, while we expect this year's peak to be in Q4. All other segments grew by more than 20% compared to Q2 2022.

Especially Electronics was able to increase its top line in Q2 by 27.9% yoy to EUR 7.8m, despite the challenging market environment in this sector. This was driven by new product innovations that have been well received by the market, such as the Tensor depaneling technology and new semiconductor applications, but also by the current re-shoring trend and higher standards in North America and Europe regarding precision and automation. Group EBIT declined from EUR 0.7m to EUR -0.4m as a result of lower sales and increased development and ramp-up costs for LIDE and Arraylize. Moreover, LPKF is already in production for the large solar order that will generate the corresponding revenue in Q4.

The solid demand for LPKF's products is also reflected in the order backlog, which increased by 48% yoy to EUR 81.4m, of which EUR 55m are scheduled for delivery this year. Considering the usually short lead times, with the exception of the Solar segment, we believe that an order backlog of EUR 25m for 2024 in H1 provides solid visibility for growth next year. Against this background, LPKF has slightly adjusted its sales target for the full year from EUR 125-140m to EUR 125-135m and confirmed its EBIT margin target of 3-7%. For the third quarter, LPKF aims for EUR 28-33m in sales and EBIT of EUR -1m to 3m.

In Q3, we expect LPKF to reach the upper half of its target range with sales of EUR 31.7m and EBIT of EUR 2.6m (EBIT margin 8.3%). This and our unchanged forecast for the full year (sales EUR 132m, EBIT margin 4.1%) implies a significant qoq improvement in the last quarter. The increased Q4 top line of EUR 52m (+42% yoy, +65% yoy) should be mainly driven by the delivery of the large solar project, but accompanied by sales growth in Electronics and Welding. Due to LPKF's high gross margin (H1 73.4%) and the resulting high scalability, the increased sales volume should lead to a significant increase in profitability and an EBIT margin of 18.8% in Q4.

With Q2 figures in line with the company's planning and our expectations, and increased visibility for an improving development in H2 and especially Q4, we confirm our estimates, our price target of EUR 15 and our Buy recommendation for LPKF.



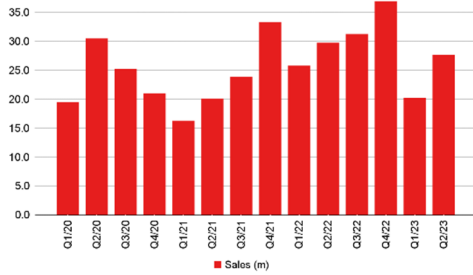
Rel. Performance vs CDAX:

1 month:	-3.7 %
6 months:	-35.2 %
Year to date:	-28.5 %
Trailing 12 months:	-28.3 %

Company events:
26.10.23 Q3

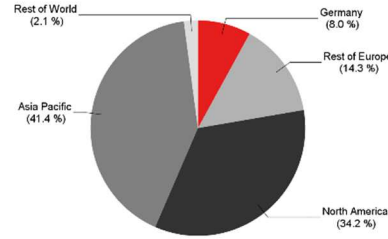
FY End: 31.12. in EUR m	CAGR (22-25e)	2019	2020	2021	2022	2023e	2024e	2025e
Sales	15.2 %	140.0	96.2	93.6	123.7	131.9	166.2	189.2
Change Sales yoy		16.7 %	-31.3 %	-2.8 %	32.2 %	6.6 %	26.0 %	13.8 %
Gross profit margin		63.8 %	72.4 %	74.7 %	70.1 %	68.2 %	70.1 %	69.5 %
EBITDA	37.8 %	26.9	14.8	7.6	15.1	14.4	30.8	39.6
Margin		19.2 %	15.4 %	8.1 %	12.2 %	10.9 %	18.5 %	20.9 %
EBIT	63.2 %	19.2	7.5	0.1	6.8	5.5	21.3	29.5
Margin		13.7 %	7.8 %	0.1 %	5.5 %	4.1 %	12.8 %	15.6 %
Net income	132.6 %	13.1	5.3	-0.1	1.7	3.8	15.1	20.9
EPS	129.8 %	0.54	0.22	0.00	0.07	0.16	0.61	0.85
EPS adj.	129.8 %	0.54	0.22	0.00	0.07	0.16	0.61	0.85
DPS	-	0.10	0.10	0.00	0.00	0.20	0.20	0.20
Dividend Yield		1.1 %	0.5 %	n.a.	n.a.	2.4 %	2.4 %	2.4 %
FCFPS		1.72	-0.23	-0.03	0.01	-0.18	0.92	1.05
FCF / Market cap		18.3 %	-1.1 %	-0.1 %	0.1 %	-2.2 %	11.1 %	12.9 %
EV / Sales		1.5 x	5.1 x	5.9 x	2.2 x	1.5 x	1.1 x	0.8 x
EV / EBITDA		7.7 x	33.2 x	72.1 x	17.9 x	13.8 x	5.7 x	3.7 x
EV / EBIT		10.8 x	65.4 x	n.a.	39.8 x	36.3 x	8.3 x	5.0 x
P / E		17.4 x	93.8 x	n.a.	163.0 x	51.9 x	13.6 x	9.6 x
P / E adj.		17.4 x	93.8 x	n.a.	163.0 x	51.9 x	13.6 x	9.6 x
FCF Potential Yield		8.9 %	2.2 %	1.1 %	2.9 %	5.1 %	12.1 %	18.6 %
Net Debt		-22.1	-12.8	-9.6	-9.6	-5.2	-27.8	-53.6
ROCE (NOPAT)		16.5 %	7.4 %	0.0 %	2.1 %	4.3 %	16.8 %	24.9 %
Guidance:		Sales EUR 125-135m. EBIT margin 3% to 7%						

Sales development
in EUR m



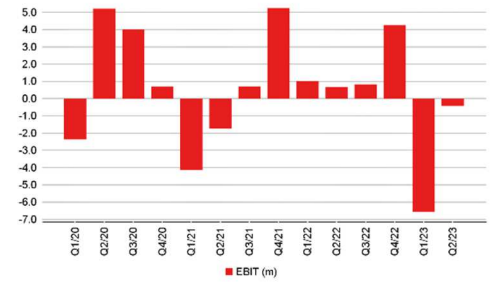
Source: Warburg Research

Sales by regions
2022; in %



Source: Warburg Research

EBIT development
in EUR m



Source: Warburg Research

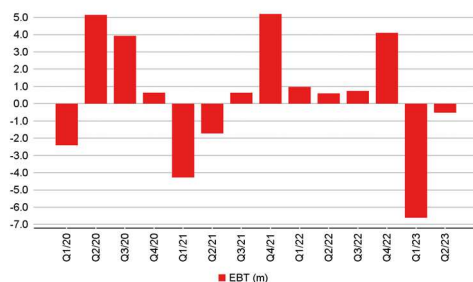
Company Background

- Global market leader/top supplier of laser-based processing tools replacing conventional and non-digital processes.
- LPKF is an innovation leader and usually the first supplier of new laser-based processing technologies.
- Approx. 50% of revenues are generated with the development and production of PCBs (segments Development and Electronics) where LPKF is global market leader with market shares of up to 65% in its applications.
- LPKF's Solar BU offers laser scribe to producers of thin film solar modules. In the future the new LTP technology will also contribute to this segment.
- The Welding segment offers versatile applications for a range of customer industries including automotive, consumer electronics and healthcare

Competitive Quality

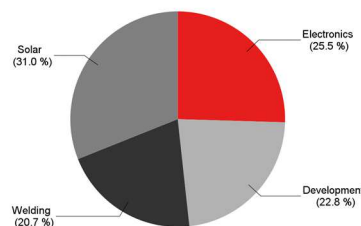
- LPKF is the technologically leading company in the market of laser applications and often first supplier of its customers.
- The high innovative strength of the company ensures the market-leading position and gives LPKF a first-mover advantage in new products that offer highly attractive TCO compared to conventional solutions.
- The company holds a dominant market-leading position in selected niches (e.g. in development and solar segment) but there is also some dependency on single customers.
- International service and distribution network fosters close relationships to customers.
- The focused low-asset business model and high R&D efforts offer high scalability and attractive capital returns.

EBT development
in EUR m



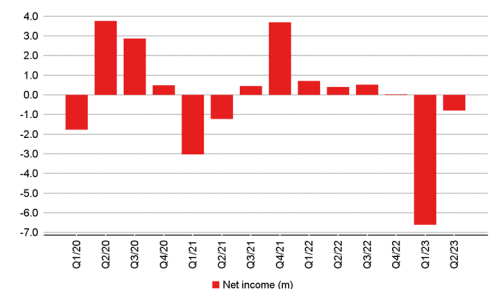
Source: Warburg Research

Sales by segments
2022; 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
	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	2035e	
Sales	131.9	166.2	189.2	211.9	235.3	258.8	282.1	306.1	330.5	350.4	364.4	375.3	384.7	
Sales change	6.6 %	26.0 %	13.8 %	12.0 %	11.0 %	10.0 %	9.0 %	8.5 %	8.0 %	6.0 %	4.0 %	3.0 %	2.5 %	2.5 %
EBIT	5.5	21.3	29.5	33.9	38.8	41.4	43.7	47.4	51.2	54.3	56.5	58.2	59.6	
EBIT-margin	4.1 %	12.8 %	15.6 %	16.0 %	16.5 %	16.0 %	15.5 %	15.5 %	15.5 %	15.5 %	15.5 %	15.5 %	15.5 %	
Tax rate (EBT)	29.0 %	29.0 %	29.0 %	29.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	
NOPAT	3.9	15.1	20.9	24.1	27.2	29.0	30.6	33.2	35.9	38.0	39.5	40.7	41.7	
Depreciation	8.9	9.5	10.1	10.6	10.8	10.9	11.3	12.2	13.2	14.0	14.6	15.0	15.4	
in % of Sales	6.7 %	5.7 %	5.3 %	5.0 %	4.6 %	4.2 %	4.0 %	4.0 %	4.0 %	4.0 %	4.0 %	4.0 %	4.0 %	
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	9.0	-6.8	-3.1	2.0	1.8	2.1	2.8	2.9	2.9	2.4	1.7	1.3	1.1	
- Capex	8.9	9.4	9.0	9.5	9.4	10.4	11.3	12.2	13.2	14.0	14.6	15.0	15.4	
Capex in % of Sales	6.7 %	5.7 %	4.7 %	4.5 %	4.0 %	4.0 %	4.0 %	4.0 %	4.0 %	4.0 %	4.0 %	4.0 %	4.0 %	
- Other	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Free Cash Flow (WACC Model)	-5.7	21.4	24.5	23.1	26.8	27.4	27.8	30.4	33.0	35.7	37.9	39.4	40.6	42
PV of FCF	-5.5	18.9	19.7	17.0	17.9	16.7	15.4	15.3	15.2	15.0	14.5	13.7	12.9	182
share of PVs	8.98 %			41.65 %										49.36 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	2.00 %	Financial Strength	1.10
Cost of debt (after tax)	2.8 %	Liquidity (share)	1.30
Market return	8.25 %	Cyclicality	1.30
Risk free rate	2.75 %	Transparency	1.50
		Others	1.30
WACC	9.76 %	Beta	1.30

Valuation (m)

Present values 2035e	187		
Terminal Value	182		
Financial liabilities	3		
Pension liabilities	0		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	13	No. of shares (m)	24.5
Equity Value	378	Value per share (EUR)	15.44

Sensitivity Value per Share (EUR)

Beta	WACC	Terminal Growth							Beta	WACC	Delta EBIT-margin						
		1.75 %	2.00 %	2.25 %	2.50 %	2.75 %	3.00 %	3.25 %			-1.5 pp	-1.0 pp	-0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+1.5 pp
1.49	10.8 %	12.92	13.08	13.24	13.41	13.59	13.79	13.99	1.49	10.8 %	12.06	12.51	12.96	13.41	13.86	14.31	14.76
1.39	10.3 %	13.78	13.96	14.15	14.36	14.58	14.81	15.06	1.39	10.3 %	12.91	13.39	13.88	14.36	14.84	15.32	15.81
1.35	10.0 %	14.25	14.44	14.66	14.88	15.12	15.38	15.66	1.35	10.0 %	13.38	13.88	14.38	14.88	15.38	15.88	16.38
1.30	9.8 %	14.74	14.96	15.19	15.44	15.71	15.99	16.30	1.30	9.8 %	13.88	14.40	14.92	15.44	15.96	16.48	17.00
1.25	9.5 %	15.28	15.51	15.77	16.04	16.33	16.65	16.99	1.25	9.5 %	14.42	14.96	15.50	16.04	16.58	17.12	17.66
1.21	9.3 %	15.84	16.10	16.38	16.69	17.01	17.36	17.74	1.21	9.3 %	15.01	15.57	16.13	16.69	17.25	17.81	18.37
1.11	8.8 %	17.10	17.42	17.76	18.14	18.54	18.97	19.45	1.11	8.8 %	16.31	16.92	17.53	18.14	18.74	19.35	19.96

- Comparably high growth rates in 2024 and 2025 driven by anticipated LIDE orders
- Margin increase resulting from the high scalability of LPKF's business model
- The "Others" line comprises adjustments for leasing related depreciations

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	2022	2023e	2024e	2025e	
Net Income before minorities	13.1	5.3	-0.1	1.7	3.8	15.1	20.9	
+ Depreciation + Amortisation	7.7	7.3	7.5	8.3	8.9	9.5	10.1	
- Net Interest Income	-0.5	-0.2	-0.2	-0.4	-0.1	-0.1	-0.1	
- Maintenance Capex	2.8	1.9	1.9	2.5	2.6	3.3	3.8	
+ Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
= Free Cash Flow Potential	18.5	11.0	5.8	7.9	10.2	21.3	27.2	
FCF Potential Yield (on market EV)	8.9 %	2.2 %	1.1 %	2.9 %	5.1 %	12.1 %	18.6 %	
WACC	9.76 %	9.76 %	9.76 %	9.76 %	9.76 %	9.76 %	9.76 %	
= Enterprise Value (EV)	208.3	493.0	547.8	269.9	198.2	175.5	146.8	
= Fair Enterprise Value	189.8	112.3	59.2	80.9	104.1	218.0	279.1	
- Net Debt (Cash)	-9.9	-9.9	-9.9	-9.9	-5.4	-28.1	-53.9	
- Pension Liabilities	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
- Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
- 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	
= Fair Market Capitalisation	199.3	121.9	68.8	90.4	109.2	245.8	332.7	
Number of shares, average	24.5	24.5	24.5	24.5	24.5	24.5	24.5	
= Fair value per share (EUR)	8.14	4.97	2.81	3.69	4.46	10.03	13.58	
premium (-) / discount (+) in %					-46.3 %	20.9 %	66.0 %	
Sensitivity Fair value per Share (EUR)								
	12.76 %	6.32	3.90	2.24	2.92	3.46	7.94	10.90
	11.76 %	6.82	4.20	2.40	3.13	3.74	8.52	11.64
	10.76 %	7.42	4.55	2.58	3.39	4.06	9.21	12.52
WACC	9.76 %	8.14	4.97	2.81	3.69	4.46	10.03	13.58
	8.76 %	9.02	5.50	3.09	4.07	4.94	11.05	14.88
	7.76 %	10.13	6.16	3.43	4.54	5.55	12.33	16.52
	6.76 %	11.58	7.01	3.88	5.16	6.35	13.99	18.64

▪ To maintain its production, we assume an investment of 2% of sales

Valuation	2019	2020	2021	2022	2023e	2024e	2025e
Price / Book	2.5 x	5.4 x	6.0 x	3.0 x	2.1 x	1.8 x	1.5 x
Book value per share ex intangibles	3.06	3.09	2.99	3.01	3.14	3.73	4.60
EV / Sales	1.5 x	5.1 x	5.9 x	2.2 x	1.5 x	1.1 x	0.8 x
EV / EBITDA	7.7 x	33.2 x	72.1 x	17.9 x	13.8 x	5.7 x	3.7 x
EV / EBIT	10.8 x	65.4 x	n.a.	39.8 x	36.3 x	8.3 x	5.0 x
EV / EBIT adj.*	11.3 x	65.4 x	n.a.	39.8 x	36.3 x	8.3 x	5.0 x
P / FCF	5.5 x	n.a.	n.a.	n.a.	n.a.	9.0 x	7.8 x
P / E	17.4 x	93.8 x	n.a.	163.0 x	51.9 x	13.6 x	9.6 x
P / E adj.*	17.4 x	93.8 x	n.a.	163.0 x	51.9 x	13.6 x	9.6 x
Dividend Yield	1.1 %	0.5 %	n.a.	n.a.	2.4 %	2.4 %	2.4 %
FCF Potential Yield (on market EV)	8.9 %	2.2 %	1.1 %	2.9 %	5.1 %	12.1 %	18.6 %

*Adjustments made for: -

Consolidated profit & loss

In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Sales	140.0	96.2	93.6	123.7	131.9	166.2	189.2
Change Sales yoy	16.7 %	-31.3 %	-2.8 %	32.2 %	6.6 %	26.0 %	13.8 %
Increase / decrease in inventory	-0.8	0.2	7.3	-5.2	-6.5	0.7	0.6
Own work capitalised	4.3	5.3	5.9	6.3	6.2	6.3	5.7
Total Sales	143.6	101.7	106.7	124.8	131.6	173.2	195.5
Material expenses	54.2	32.0	36.8	38.0	41.7	56.7	64.0
Gross profit	89.4	69.7	69.9	86.7	89.9	116.5	131.5
<i>Gross profit margin</i>	<i>63.8 %</i>	<i>72.4 %</i>	<i>74.7 %</i>	<i>70.1 %</i>	<i>68.2 %</i>	<i>70.1 %</i>	<i>69.5 %</i>
Personnel expenses	44.7	41.5	44.3	49.5	54.5	60.2	65.3
Other operating income	4.0	3.8	3.3	4.2	4.1	4.0	4.0
Other operating expenses	21.7	17.1	21.2	26.4	25.2	29.6	30.7
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	26.9	14.8	7.6	15.1	14.4	30.8	39.6
<i>Margin</i>	<i>19.2 %</i>	<i>15.4 %</i>	<i>8.1 %</i>	<i>12.2 %</i>	<i>10.9 %</i>	<i>18.5 %</i>	<i>20.9 %</i>
Depreciation of fixed assets	4.4	4.0	3.8	3.8	3.9	4.0	4.0
EBITA	22.5	10.9	3.8	11.3	10.5	26.8	35.6
Amortisation of intangible assets	3.3	3.3	3.7	4.5	5.0	5.5	6.1
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	19.2	7.5	0.1	6.8	5.5	21.3	29.5
<i>Margin</i>	<i>13.7 %</i>	<i>7.8 %</i>	<i>0.1 %</i>	<i>5.5 %</i>	<i>4.1 %</i>	<i>12.8 %</i>	<i>15.6 %</i>
EBIT adj.	18.4	7.5	0.1	6.8	5.5	21.3	29.5
Interest income	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Interest expenses	0.5	0.3	0.2	0.4	0.1	0.1	0.1
Other financial income (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBT	18.7	7.3	-0.2	6.4	5.4	21.2	29.4
<i>Margin</i>	<i>13.4 %</i>	<i>7.6 %</i>	<i>-0.2 %</i>	<i>5.2 %</i>	<i>4.1 %</i>	<i>12.8 %</i>	<i>15.5 %</i>
Total taxes	5.6	2.0	-0.1	4.8	1.6	6.2	8.5
Net income from continuing operations	13.1	5.3	-0.1	1.7	3.8	15.1	20.9
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income before minorities	13.1	5.3	-0.1	1.7	3.8	15.1	20.9
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income	13.1	5.3	-0.1	1.7	3.8	15.1	20.9
<i>Margin</i>	<i>9.4 %</i>	<i>5.6 %</i>	<i>-0.1 %</i>	<i>1.3 %</i>	<i>2.9 %</i>	<i>9.1 %</i>	<i>11.0 %</i>
Number of shares, average	24.5	24.5	24.5	24.5	24.5	24.5	24.5
EPS	0.54	0.22	0.00	0.07	0.16	0.61	0.85
EPS adj.	0.54	0.22	0.00	0.07	0.16	0.61	0.85

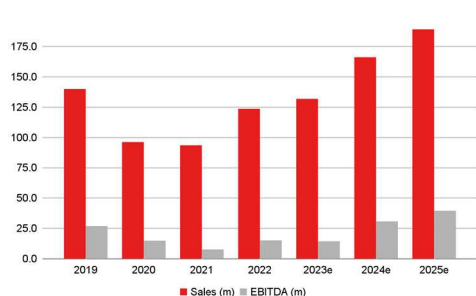
*Adjustments made for:

Guidance: Sales EUR 125-135m. EBIT margin 3% to 7%

Financial Ratios

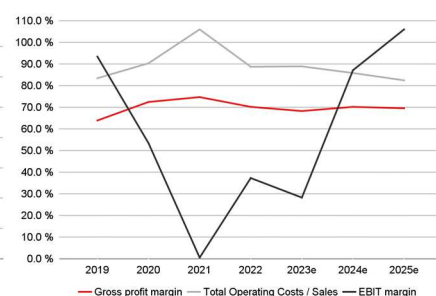
	2019	2020	2021	2022	2023e	2024e	2025e
Total Operating Costs / Sales	83.3 %	90.2 %	105.9 %	88.6 %	88.9 %	85.7 %	82.4 %
Operating Leverage	10.8 x	1.9 x	35.8 x	353.7 x	-2.9 x	11.1 x	2.8 x
EBITDA / Interest expenses	52.0 x	51.2 x	30.8 x	38.6 x	245.9 x	526.6 x	677.2 x
Tax rate (EBT)	29.9 %	26.9 %	32.9 %	74.1 %	29.0 %	29.0 %	29.0 %
Dividend Payout Ratio	18.7 %	45.9 %	0.0 %	0.0 %	127.6 %	32.5 %	23.5 %
Sales per Employee	205,328	139,673	125,426	167,161	170,009	203,659	224,379

Sales, EBITDA
in EUR m



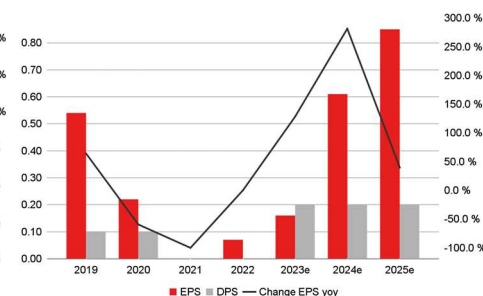
Source: Warburg Research

Operating Performance
in %



Source: Warburg Research

Performance per Share



Source: Warburg Research

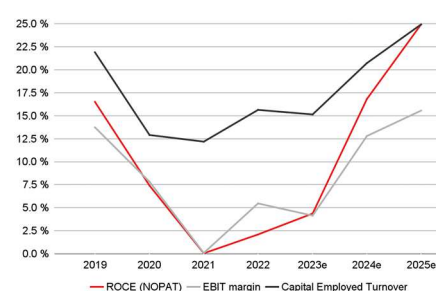
Consolidated balance sheet

In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Assets							
Goodwill and other intangible assets	15.9	17.3	19.1	20.7	21.9	22.7	22.3
thereof other intangible assets	1.0	0.7	0.7	1.0	1.0	1.0	1.0
thereof Goodwill	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Property, plant and equipment	44.7	46.0	46.3	45.1	43.6	42.2	41.1
Financial assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other long-term assets	0.1	0.0	0.2	0.3	0.3	0.3	0.3
Fixed assets	60.7	63.4	65.6	66.1	65.8	65.3	63.6
Inventories	19.2	19.8	28.5	27.7	24.2	28.5	31.8
Accounts receivable	11.3	13.2	17.2	27.5	30.7	23.7	19.7
Liquid assets	31.3	20.1	15.2	12.8	8.4	31.0	56.8
Other short-term assets	5.5	5.2	5.8	4.4	4.4	4.4	4.4
Current assets	67.3	58.3	66.7	72.3	67.6	87.5	112.6
Total Assets	128.0	121.7	132.2	138.4	133.4	152.8	176.3
Liabilities and shareholders' equity							
Subscribed capital	24.5	24.5	24.5	24.5	24.5	24.5	24.5
Capital reserve	15.5	15.5	15.5	15.5	15.5	15.5	15.5
Retained earnings	10.2	10.2	12.0	12.7	16.5	31.6	52.5
Other equity components	40.7	42.8	40.2	41.9	42.3	42.5	42.7
Shareholders' equity	90.8	92.9	92.2	94.5	98.8	114.0	135.1
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total equity	90.8	92.9	92.2	94.5	98.8	114.0	135.1
Provisions	6.1	3.2	2.7	3.8	3.8	3.8	3.8
thereof provisions for pensions and similar obligations	0.3	0.4	0.4	0.3	0.3	0.3	0.3
Financial liabilities (total)	8.9	6.9	5.2	2.9	2.9	2.9	2.9
Short-term financial liabilities	2.0	1.8	1.8	0.9	0.9	0.9	0.9
Accounts payable	5.6	7.6	7.2	7.5	6.9	10.0	12.4
Other liabilities	16.5	11.0	24.9	29.7	21.1	22.1	22.1
Liabilities	37.2	28.7	40.0	43.9	34.7	38.8	41.2
Total liabilities and shareholders' equity	128.0	121.7	132.2	138.4	133.4	152.8	176.3

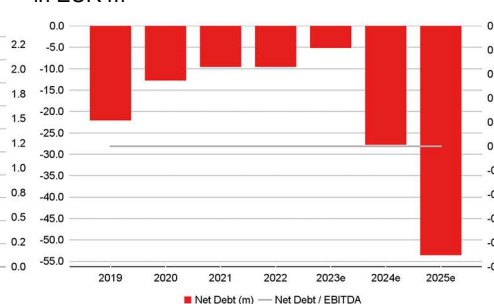
Financial Ratios

	2019	2020	2021	2022	2023e	2024e	2025e
Efficiency of Capital Employment							
Operating Assets Turnover	2.3 x	1.4 x	1.4 x	1.7 x	1.7 x	2.4 x	2.9 x
Capital Employed Turnover	2.0 x	1.2 x	1.1 x	1.5 x	1.4 x	1.9 x	2.3 x
ROA	21.6 %	8.4 %	-0.2 %	2.5 %	5.8 %	23.1 %	32.8 %
Return on Capital							
ROCE (NOPAT)	16.5 %	7.4 %	0.0 %	2.1 %	4.3 %	16.8 %	24.9 %
ROE	15.6 %	5.8 %	-0.1 %	1.8 %	4.0 %	14.2 %	16.8 %
Adj. ROE	15.6 %	5.8 %	-0.1 %	1.8 %	4.0 %	14.2 %	16.8 %
Balance sheet quality							
Net Debt	-22.1	-12.8	-9.6	-9.6	-5.2	-27.8	-53.6
Net Financial Debt	-22.4	-13.1	-10.0	-9.9	-5.4	-28.1	-53.9
Net Gearing	-24.3 %	-13.7 %	-10.4 %	-10.1 %	-5.2 %	-24.4 %	-39.7 %
Net Fin. Debt / EBITDA	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Book Value / Share	3.7	3.8	3.8	3.9	4.0	4.7	5.5
Book value per share ex intangibles	3.1	3.1	3.0	3.0	3.1	3.7	4.6

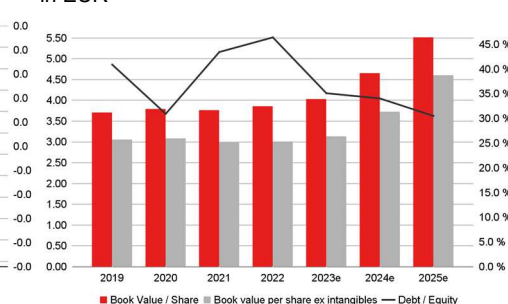
ROCE Development



Net debt in EUR m



Book Value per Share in EUR



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

Consolidated cash flow statement

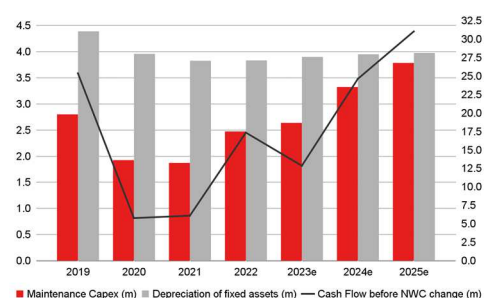
In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Net income	13.1	5.3	-0.1	1.7	3.8	15.1	20.9
Depreciation of fixed assets	4.4	4.0	3.8	3.8	3.9	4.0	4.0
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	3.3	3.3	3.7	4.5	5.0	5.5	6.1
Increase/decrease in long-term provisions	0.5	-2.5	-0.5	1.1	0.0	0.0	0.0
Other non-cash income and expenses	4.1	-4.3	-0.8	6.3	0.1	0.1	0.1
Cash Flow before NWC change	25.4	5.8	6.1	17.4	12.8	24.6	31.1
Increase / decrease in inventory	6.6	-2.0	-9.4	-0.3	3.5	-4.3	-3.3
Increase / decrease in accounts receivable	19.2	-1.5	-3.6	-10.3	-3.3	7.0	4.0
Increase / decrease in accounts payable	-2.8	2.0	-0.5	0.3	-9.2	4.1	2.4
Increase / decrease in other working capital positions	-0.3	-0.4	15.3	1.5	0.6	0.6	0.6
Increase / decrease in working capital (total)	22.6	-1.8	1.8	-8.9	-8.4	7.4	3.7
Net cash provided by operating activities [1]	48.0	4.0	7.9	8.5	4.5	32.0	34.8
Investments in intangible assets	-4.0	-4.8	-5.4	-6.2	-6.5	-6.8	-6.2
Investments in property, plant and equipment	-1.8	-4.8	-3.2	-2.1	-2.4	-2.6	-2.8
Payments for acquisitions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial investments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income from asset disposals	0.0	0.0	0.1	0.1	0.0	0.0	0.0
Net cash provided by investing activities [2]	-5.8	-9.5	-8.6	-8.2	-8.9	-9.4	-9.0
Change in financial liabilities	-13.2	-2.2	-2.1	-2.3	0.0	0.0	0.0
Dividends paid	0.0	-2.4	-2.5	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	-1.3	-0.7	-0.7	-0.8	0.0	0.0	0.0
Net cash provided by financing activities [3]	-14.5	-5.4	-5.2	-3.1	0.0	0.0	0.0
Change in liquid funds [1]+[2]+[3]	27.7	-11.0	-5.9	-2.8	-4.4	22.6	25.8
Effects of exchange-rate changes on cash	-0.1	-0.3	1.0	0.4	0.0	0.0	0.0
Cash and cash equivalent at end of period	31.3	20.1	15.2	12.8	8.4	31.0	56.8

Financial Ratios

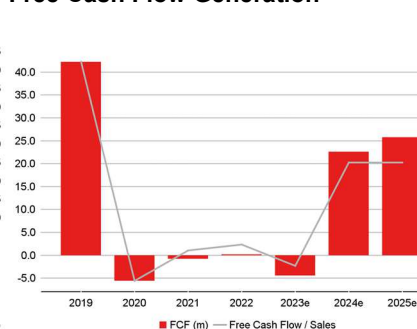
	2019	2020	2021	2022	2023e	2024e	2025e
Cash Flow							
FCF	42.2	-5.6	-0.8	0.2	-4.4	22.6	25.8
Free Cash Flow / Sales	30.2 %	-5.8 %	-0.8 %	0.2 %	-3.3 %	13.6 %	13.6 %
Free Cash Flow Potential	18.5	11.0	5.8	7.9	10.2	21.3	27.2
Free Cash Flow / Net Profit	321.9 %	-104.1 %	670.2 %	12.4 %	-115.0 %	150.2 %	123.5 %
Interest Received / Avg. Cash	0.1 %	0.2 %	0.1 %	0.2 %	0.0 %	0.0 %	0.0 %
Interest Paid / Avg. Debt	3.6 %	3.7 %	4.1 %	9.7 %	2.0 %	2.0 %	2.0 %
Management of Funds							
Investment ratio	4.1 %	9.9 %	9.3 %	6.7 %	6.7 %	5.7 %	4.7 %
Maint. Capex / Sales	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %
Capex / Dep	75.3 %	130.4 %	115.2 %	99.5 %	100.1 %	99.3 %	89.1 %
Avg. Working Capital / Sales	18.9 %	18.4 %	21.2 %	18.3 %	23.1 %	19.0 %	14.1 %
Trade Debtors / Trade Creditors	201.8 %	173.0 %	238.2 %	365.8 %	444.9 %	237.0 %	158.9 %
Inventory Turnover	2.8 x	1.6 x	1.3 x	1.4 x	1.7 x	2.0 x	2.0 x
Receivables collection period (days)	30	50	67	81	85	52	38
Payables payment period (days)	38	87	71	72	60	64	71
Cash conversion cycle (Days)	54	133	88	68	123	81	69

CAPEX and Cash Flow

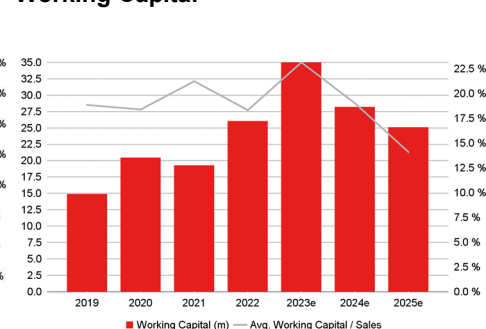
in EUR m



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.
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.
- 4- The company compiling the analysis or an affiliated company had reached an **agreement on the compilation of the investment recommendation** with the analysed company.
- 5- 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.
- 6a- 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.
- 6b- The issuer holds shares of more than 5% of the total issued capital of Warburg Research or an affiliated company.
- 6c- 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.

Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
LPKF	5	https://www.mmwarburg.com/disclaimer/disclaimer_en/DE0006450000.htm

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-	Buy:	The price of the analysed financial instrument is expected to rise over the next 12 months.
-H-	Hold:	The price of the analysed financial instrument is expected to remain mostly flat over the next 12 months.
-S-	Sell:	The price of the analysed financial instrument is expected to fall over the next 12 months.
“-“	Rating suspended:	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	152	73
Hold	44	21
Sell	7	3
Rating suspended	4	2
Total	207	100

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	43	88
Hold	4	8
Sell	0	0
Rating suspended	2	4
Total	49	100

PRICE AND RATING HISTORY LPKF AS OF 28.07.2023



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 Rüschemeyer +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

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

Rudolf Alexander Michaelis +49 40 3282-2649
Germany rmichaelis@mmwarburg.com

Roman Alexander Niklas +49 69 5050-7412
Switzerland rniklas@mmwarburg.com

Charlotte Wernicke +49 40 3282-2669
Roadshow/Marketing cwernicke@mmwarburg.com

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

SALES TRADING

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

Rico Müller +49 40 3282-2685
Sales Trading rmueller@mmwarburg.com

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

DESIGNATED SPONSORING

Marcel Magiera +49 40 3282-2662
Designated Sponsoring mmagiera@mmwarburg.com

Sebastian Schulz +49 40 3282-2631
Designated Sponsoring sschulz@mmwarburg.com

Jörg Treptow +49 40 3282-2658
Designated Sponsoring 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

Bloomberg [RESP MMWA GO](https://www.bloomberg.com/quote/RESP:MMWA)

FactSet www.factset.com

Refinitiv www.refinitiv.com

Capital IQ 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