

<b>Buy</b> <b>EUR 35.00</b>  Price <b>EUR 16.08</b> Upside <b>117.7 %</b>	<b>Value Indicators:</b> EUR DCF: 34.85 FCF-Value Potential 23e: 19.07	<b>Warburg ESG Risk Score: 3.0</b> ESG Score (MSCI based): 2.0 Balance Sheet Score: 5.0 Market Liquidity Score: 2.0	<b>Description:</b> Highly specialised machine manufacturer developing laser applications for special purposes
	<b>Market Snapshot:</b> EUR m Market cap: 393.9 No. of shares (m): 24.5 EV: 383.1 Freefloat MC: 393.9 Ø Trad. Vol. (30d): 3.51 m	<b>Shareholders:</b> Freefloat 100.0 % Small Cap World Fund 5.0 % JPMorgan AM 3.0 % Société Générale 3.0 % UBS 3.0 %	<b>Key Figures (WRe):</b> 2021e Beta: 1.3 Price / Book: 4.2 x Equity Ratio: 75 %

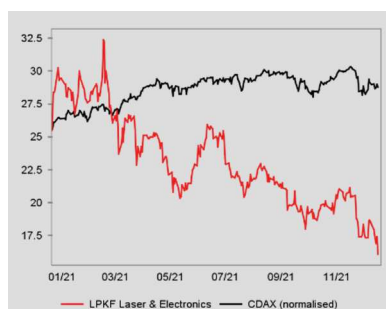
## Targets adjusted due to further solar order postponements

LPKF has cut its full-year sales target from EUR 110m to EUR 92-102m and the EBIT target from approx. EUR 1m to a range of EUR -2m to +6m. The guidance revision was the result of postponements in the delivery of solar orders. While LPKF was able to secure all required materials despite the current shortages and produce the equipment on time, the shipment schedule was delayed for some orders due to logistic bottlenecks. In addition, a Chinese customer had to delay its solar project which subsequently led to a shift in the delivery schedule for LPKF. In total, orders with a volume of EUR 17m were postponed and are now scheduled for Q1 2022. Order delays that resulted in the Q3 target revision have been delivered in full in the fourth quarter.

Although the adjusted top-line target is roughly on the previous year's level (EUR 96.2m), the management is anticipating a notable EBIT decline compared to last year (EUR 7.5m). This is the result of higher costs associated with the Arrayze launch next year and the development and improvement of other LIDE applications, including the flex 3.0 process for foldable displays.

While we have reduced our estimates for the current year, we increased our projections for 2022 to reflect the revenue shift from Q4 21 to Q1 22 in the solar segment and confirm our target price of EUR 35. Considering the strong mid-term potential of the LIDE technology, we confirm our Buy recommendation for LPKF. However, we are not anticipating a significant LIDE order in H1 2022 and do not expect short-term triggers for the stock.

Changes in Estimates:				Comment on Changes:			
FY End: 31.12. in EUR m	2021e (old)	+ / -	2022e (old)	+ / -	2023e (old)	+ / -	
Sales	113.3	-15.9 %	146.9	3.9 %	214.1	-0.5 %	▪ 2021 estimates reduced due to postponements of large solar orders
EBIT	11.4	-94.2 %	22.6	3.9 %	41.1	-0.5 %	▪ Margin decreases as a result of lower sales volume
EPS	0.33	-93.9 %	0.65	4.6 %	1.19	-0.8 %	▪ With orders shifting from Q4 21 to Q1 22, we increased our sales estimate for next year

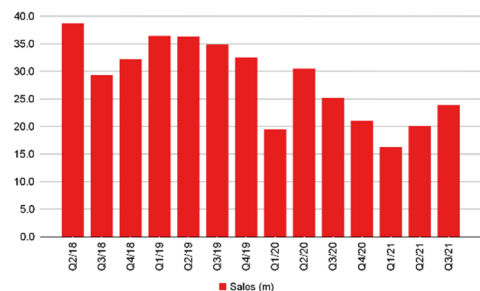


Rel. Performance vs CDAX:	
1 month:	-17.0 %
6 months:	-34.5 %
Year to date:	-54.6 %
Trailing 12 months:	-48.7 %

Company events:	
23.03.22	FY 2021
28.04.22	Q1
19.05.22	AGM
28.07.22	Q2

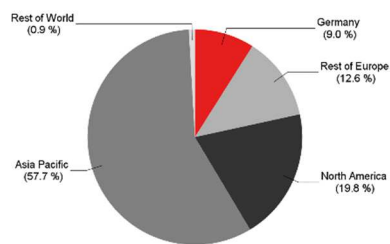
FY End: 31.12. in EUR m	CAGR (20-23e)	2017	2018	2019	2020	2021e	2022e	2023e
Sales	30.3 %	102.1	120.0	140.0	96.2	95.3	152.6	213.1
Change Sales yoy		12.0 %	17.5 %	16.7 %	-31.3 %	-1.0 %	60.1 %	39.7 %
Gross profit margin		69.7 %	64.3 %	63.8 %	72.4 %	71.7 %	65.5 %	66.1 %
EBITDA	50.8 %	11.6	14.9	26.9	14.8	6.8	31.3	50.9
Margin		11.4 %	12.4 %	19.2 %	15.4 %	7.1 %	20.5 %	23.9 %
EBIT	75.7 %	4.0	6.8	19.2	7.5	0.7	23.5	40.9
Margin		3.9 %	5.7 %	13.7 %	7.8 %	0.7 %	15.4 %	19.2 %
Net income	75.8 %	1.1	8.1	13.1	5.3	0.4	16.6	29.0
EPS	75.0 %	0.05	0.33	0.54	0.22	0.02	0.68	1.18
EPS adj.	75.0 %	0.05	0.33	0.54	0.22	0.02	0.68	1.18
DPS	26.0 %	0.00	0.00	0.10	0.10	0.10	0.20	0.20
Dividend Yield		n.a.	n.a.	1.1 %	0.5 %	0.6 %	1.2 %	1.2 %
FCFPS		0.14	0.24	1.72	-0.23	-0.08	0.48	0.81
FCF / Market cap		1.6 %	3.1 %	18.3 %	-1.1 %	-0.5 %	3.0 %	5.1 %
EV / Sales		2.3 x	1.7 x	1.5 x	5.1 x	4.0 x	2.4 x	1.6 x
EV / EBITDA		19.9 x	13.6 x	7.7 x	33.2 x	56.6 x	11.9 x	6.9 x
EV / EBIT		58.6 x	29.5 x	10.8 x	65.4 x	574.2 x	15.8 x	8.6 x
P / E		173.8 x	22.9 x	17.4 x	93.8 x	804.0 x	23.6 x	13.6 x
P / E adj.		173.8 x	22.9 x	17.4 x	93.8 x	804.0 x	23.6 x	13.6 x
FCF Potential Yield		2.5 %	6.5 %	8.9 %	2.2 %	1.2 %	5.8 %	9.9 %
Net Debt		38.0	16.6	-22.1	-12.8	-10.8	-22.6	-42.6
ROCE (NOPAT)		1.6 %	9.9 %	16.5 %	7.4 %	0.6 %	19.7 %	31.7 %
Guidance:		Sales EUR 92-102m. EBIT EUR -2m to 6m						

**Sales development**  
in EUR m



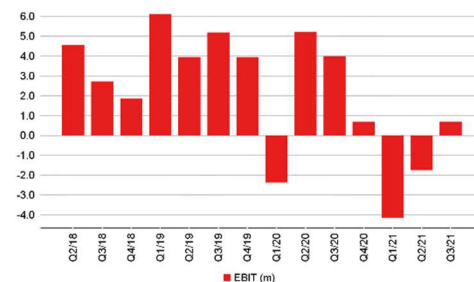
Source: Warburg Research

**Sales by regions**  
2020; in %



Source: Warburg Research

**EBIT development**  
in EUR m



Source: Warburg Research

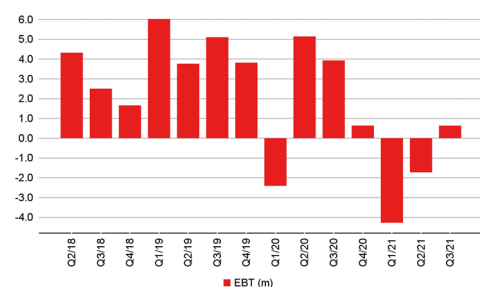
**Company Background**

- 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**

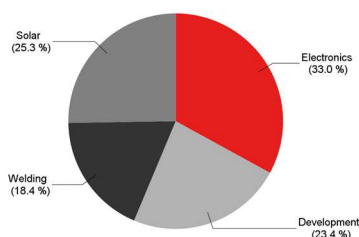
- LPKF is the technologically leading company in the market of laser applications and often first supplier of its customers.
- The high innovative strength of the company ensures the market-leading position and gives LPKF a first-mover advantage in new products that offer highly attractive TCO compared 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



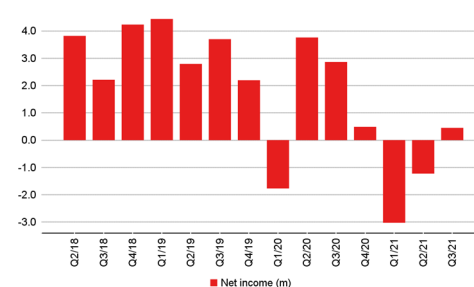
Source: Warburg Research

**Sales by segments**  
2020; 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
	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	
Sales	95.3	152.6	213.1	314.0	353.6	388.9	425.9	464.2	503.7	543.9	576.6	599.6	614.6	
Sales change	-1.0 %	60.1 %	39.7 %	47.4 %	12.6 %	10.0 %	9.5 %	9.0 %	8.5 %	8.0 %	6.0 %	4.0 %	2.5 %	2.5 %
EBIT	0.7	23.5	40.9	68.5	80.9	85.6	91.6	97.5	100.7	103.3	98.0	95.9	98.3	
EBIT-margin	0.7 %	15.4 %	19.2 %	21.8 %	22.9 %	22.0 %	21.5 %	21.0 %	20.0 %	19.0 %	17.0 %	16.0 %	16.0 %	
Tax rate (EBT)	28.5 %	29.0 %	29.0 %	29.0 %	29.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	
NOPAT	0.5	16.7	29.0	48.6	57.5	59.9	64.1	68.2	70.5	72.3	68.6	67.2	68.8	
Depreciation	6.1	7.8	10.0	14.4	15.6	16.3	17.0	18.6	20.1	21.8	23.1	24.0	24.6	
in % of Sales	6.4 %	5.1 %	4.7 %	4.6 %	4.4 %	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	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	
Change in Liquidity from														
- Working Capital	-3.3	1.6	8.1	7.6	0.8	3.5	3.7	3.8	3.9	4.0	3.3	2.3	1.5	
- Capex	11.6	11.7	11.7	17.3	17.7	17.5	17.0	18.6	20.1	21.8	23.1	24.0	24.6	
Capex in % of Sales	12.2 %	7.7 %	5.5 %	5.5 %	5.0 %	4.5 %	4.0 %	4.0 %	4.0 %	4.0 %	4.0 %	4.0 %	4.0 %	
Other	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	
Free Cash Flow (WACC Model)	-1.8	11.2	19.3	38.4	54.6	55.3	60.5	64.5	66.6	68.4	65.4	64.9	67.4	69
PV of FCF	-1.8	10.5	16.7	30.7	40.4	37.8	38.2	37.6	35.9	34.1	30.1	27.6	26.5	477
share of PVs	3.01 %			40.31 %										56.68 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	5.00 %	Financial Strength	1.10
Cost of debt (after tax)	2.8 %	Liquidity (share)	1.30
Market return	7.00 %	Cyclicality	1.30
Risk free rate	1.50 %	Transparency	1.35
		Others	1.30
<b>WACC</b>	<b>8.20 %</b>	<b>Beta</b>	<b>1.27</b>

Valuation (m)

Present values 2033e	364		
Terminal Value	477		
Financial liabilities	7		
Pension liabilities	0		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	20	No. of shares (m)	24.5
<b>Equity Value</b>	<b>854</b>	<b>Value per share (EUR)</b>	<b>34.85</b>

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
1.46	9.2 %	27.86	28.33	28.83	29.36	29.93	30.56	31.23	1.46	9.2 %	26.70	27.59	28.47	29.36	30.25	31.13	32.02
1.37	8.7 %	30.06	30.62	31.23	31.88	32.60	33.37	34.21	1.37	8.7 %	28.99	29.95	30.92	31.88	32.85	33.81	34.78
1.32	8.5 %	31.28	31.90	32.57	33.31	34.10	34.97	35.92	1.32	8.5 %	30.27	31.29	32.30	33.31	34.32	35.33	36.34
1.27	8.2 %	32.59	33.28	34.03	34.85	35.74	36.72	37.80	1.27	8.2 %	31.68	32.73	33.79	34.85	35.91	36.97	38.03
1.22	8.0 %	34.01	34.78	35.62	36.54	37.55	38.65	39.88	1.22	8.0 %	33.21	34.32	35.43	36.54	37.65	38.77	39.88
1.17	7.7 %	35.55	36.42	37.36	38.39	39.53	40.79	42.19	1.17	7.7 %	34.88	36.05	37.22	38.39	39.56	40.73	41.90
1.08	7.2 %	39.07	40.16	41.36	42.69	44.17	45.83	47.69	1.08	7.2 %	38.77	40.08	41.39	42.69	44.00	45.30	46.61

- Comparably high growth rates in 2023 and 2024 driven by anticipated LIDE orders
- Margin increase resulting from the high scalability of LPKF's business model

**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	2017	2018	2019	2020	2021e	2022e	2023e	
Net Income before minorities	1.1	8.1	13.1	5.3	0.4	16.6	29.0	
+ Depreciation + Amortisation	7.7	8.1	7.7	7.3	6.1	7.8	10.0	
- Net Interest Income	-0.9	-0.9	-0.5	-0.2	-0.1	-0.1	0.0	
- Maintenance Capex	4.0	3.9	2.8	1.9	1.9	3.1	4.3	
+ Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<b>= Free Cash Flow Potential</b>	<b>5.8</b>	<b>13.1</b>	<b>18.5</b>	<b>11.0</b>	<b>4.7</b>	<b>21.4</b>	<b>34.8</b>	
FCF Potential Yield (on market EV)	2.5 %	6.5 %	8.9 %	2.2 %	1.2 %	5.8 %	9.9 %	
WACC	8.20 %	8.20 %	8.20 %	8.20 %	8.20 %	8.20 %	8.20 %	
<b>= Enterprise Value (EV)</b>	<b>231.5</b>	<b>202.0</b>	<b>208.3</b>	<b>493.0</b>	<b>383.1</b>	<b>371.3</b>	<b>351.3</b>	
<b>= Fair Enterprise Value</b>	<b>70.1</b>	<b>159.8</b>	<b>225.8</b>	<b>133.6</b>	<b>57.3</b>	<b>261.3</b>	<b>424.5</b>	
- Net Debt (Cash)	-13.1	-13.1	-13.1	-13.1	-11.2	-23.0	-42.9	
- Pension Liabilities	0.4	0.4	0.4	0.4	0.4	0.4	0.4	
- 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	
<b>= Fair Market Capitalisation</b>	<b>82.9</b>	<b>172.6</b>	<b>238.6</b>	<b>146.4</b>	<b>68.2</b>	<b>284.0</b>	<b>467.1</b>	
Number of shares, average	22.3	24.5	24.5	24.5	24.5	24.5	24.5	
<b>= Fair value per share (EUR)</b>	<b>3.72</b>	<b>7.04</b>	<b>9.74</b>	<b>5.98</b>	<b>2.78</b>	<b>11.59</b>	<b>19.07</b>	
premium (-) / discount (+) in %					-82.7 %	-27.9 %	18.6 %	
<b>Sensitivity Fair value per Share (EUR)</b>								
	11.20 %	2.62	5.30	7.27	4.51	2.16	8.74	14.43
	10.20 %	2.82	5.77	7.93	4.91	2.32	9.50	15.67
	9.20 %	3.07	6.34	8.74	5.38	2.53	10.43	17.18
WACC	<b>8.20 %</b>	<b>3.38</b>	<b>7.04</b>	<b>9.74</b>	<b>5.98</b>	<b>2.78</b>	<b>11.59</b>	<b>19.07</b>
	7.20 %	3.78	7.95	11.02	6.73	3.11	13.07	21.47
	6.20 %	4.31	9.15	12.71	7.73	3.54	15.03	24.66
	5.20 %	5.04	10.81	15.06	9.12	4.13	17.75	29.06

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

Valuation	2017	2018	2019	2020	2021e	2022e	2023e
Price / Book	3.6 x	2.4 x	2.5 x	5.4 x	4.2 x	3.6 x	2.8 x
Book value per share ex intangibles	1.74	2.55	3.06	3.09	3.03	3.67	4.85
EV / Sales	2.3 x	1.7 x	1.5 x	5.1 x	4.0 x	2.4 x	1.6 x
EV / EBITDA	19.9 x	13.6 x	7.7 x	33.2 x	56.6 x	11.9 x	6.9 x
EV / EBIT	58.6 x	29.5 x	10.8 x	65.4 x	574.2 x	15.8 x	8.6 x
EV / EBIT adj.*	132.1 x	22.1 x	11.3 x	65.4 x	574.2 x	15.8 x	8.6 x
P / FCF	62.9 x	32.1 x	5.5 x	n.a.	n.a.	33.4 x	19.8 x
P / E	173.8 x	22.9 x	17.4 x	93.8 x	804.0 x	23.6 x	13.6 x
P / E adj.*	173.8 x	22.9 x	17.4 x	93.8 x	804.0 x	23.6 x	13.6 x
Dividend Yield	n.a.	n.a.	1.1 %	0.5 %	0.6 %	1.2 %	1.2 %
FCF Potential Yield (on market EV)	2.5 %	6.5 %	8.9 %	2.2 %	1.2 %	5.8 %	9.9 %

\*Adjustments made for: -

**Consolidated profit & loss**

In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
<b>Sales</b>	<b>102.1</b>	<b>120.0</b>	<b>140.0</b>	<b>96.2</b>	<b>95.3</b>	<b>152.6</b>	<b>213.1</b>
Change Sales yoy	12.0 %	17.5 %	16.7 %	-31.3 %	-1.0 %	60.1 %	39.7 %
Increase / decrease in inventory	-0.7	0.8	-0.8	0.2	5.9	-0.8	1.1
Own work capitalised	3.6	4.3	4.3	5.3	4.5	4.0	4.3
<b>Total Sales</b>	<b>104.9</b>	<b>125.1</b>	<b>143.6</b>	<b>101.7</b>	<b>105.7</b>	<b>155.8</b>	<b>218.4</b>
Material expenses	33.8	48.0	54.2	32.0	37.4	55.8	77.6
<b>Gross profit</b>	<b>71.1</b>	<b>77.2</b>	<b>89.4</b>	<b>69.7</b>	<b>68.3</b>	<b>99.9</b>	<b>140.9</b>
<i>Gross profit margin</i>	<i>69.7 %</i>	<i>64.3 %</i>	<i>63.8 %</i>	<i>72.4 %</i>	<i>71.7 %</i>	<i>65.5 %</i>	<i>66.1 %</i>
Personnel expenses	41.9	44.3	44.7	41.5	43.9	50.3	64.1
Other operating income	5.7	3.7	4.0	3.8	2.7	4.0	4.5
Other operating expenses	23.3	21.7	21.7	17.1	20.3	22.3	30.3
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EBITDA</b>	<b>11.6</b>	<b>14.9</b>	<b>26.9</b>	<b>14.8</b>	<b>6.8</b>	<b>31.3</b>	<b>50.9</b>
<i>Margin</i>	<i>11.4 %</i>	<i>12.4 %</i>	<i>19.2 %</i>	<i>15.4 %</i>	<i>7.1 %</i>	<i>20.5 %</i>	<i>23.9 %</i>
Depreciation of fixed assets	4.0	3.9	4.4	4.0	3.4	4.4	6.2
<b>EBITA</b>	<b>7.6</b>	<b>11.0</b>	<b>22.5</b>	<b>10.9</b>	<b>3.3</b>	<b>26.9</b>	<b>44.7</b>
Amortisation of intangible assets	3.7	4.2	3.3	3.3	2.7	3.4	3.8
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EBIT</b>	<b>4.0</b>	<b>6.8</b>	<b>19.2</b>	<b>7.5</b>	<b>0.7</b>	<b>23.5</b>	<b>40.9</b>
<i>Margin</i>	<i>3.9 %</i>	<i>5.7 %</i>	<i>13.7 %</i>	<i>7.8 %</i>	<i>0.7 %</i>	<i>15.4 %</i>	<i>19.2 %</i>
<b>EBIT adj.</b>	<b>1.8</b>	<b>9.1</b>	<b>18.4</b>	<b>7.5</b>	<b>0.7</b>	<b>23.5</b>	<b>40.9</b>
Interest income	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Interest expenses	0.9	0.9	0.5	0.3	0.1	0.1	0.0
Other financial income (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EBT</b>	<b>3.0</b>	<b>6.0</b>	<b>18.7</b>	<b>7.3</b>	<b>0.6</b>	<b>23.4</b>	<b>40.9</b>
<i>Margin</i>	<i>3.0 %</i>	<i>5.0 %</i>	<i>13.4 %</i>	<i>7.6 %</i>	<i>0.6 %</i>	<i>15.4 %</i>	<i>19.2 %</i>
Total taxes	1.9	-2.1	5.6	2.0	0.2	6.8	11.9
<b>Net income from continuing operations</b>	<b>1.1</b>	<b>8.1</b>	<b>13.1</b>	<b>5.3</b>	<b>0.4</b>	<b>16.6</b>	<b>29.0</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>1.1</b>	<b>8.1</b>	<b>13.1</b>	<b>5.3</b>	<b>0.4</b>	<b>16.6</b>	<b>29.0</b>
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net income</b>	<b>1.1</b>	<b>8.1</b>	<b>13.1</b>	<b>5.3</b>	<b>0.4</b>	<b>16.6</b>	<b>29.0</b>
<i>Margin</i>	<i>1.1 %</i>	<i>6.7 %</i>	<i>9.4 %</i>	<i>5.6 %</i>	<i>0.4 %</i>	<i>10.9 %</i>	<i>13.6 %</i>
Number of shares, average	22.3	24.5	24.5	24.5	24.5	24.5	24.5
<b>EPS</b>	<b>0.05</b>	<b>0.33</b>	<b>0.54</b>	<b>0.22</b>	<b>0.02</b>	<b>0.68</b>	<b>1.18</b>
EPS adj.	0.05	0.33	0.54	0.22	0.02	0.68	1.18

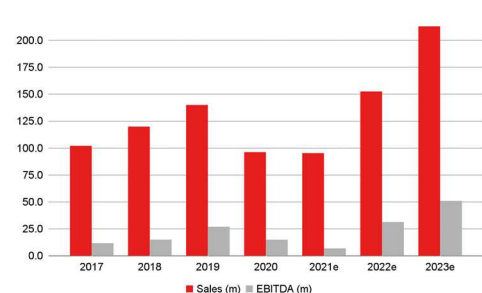
\*Adjustments made for:

**Guidance: Sales EUR 92-102m. EBIT EUR -2m to 6m**

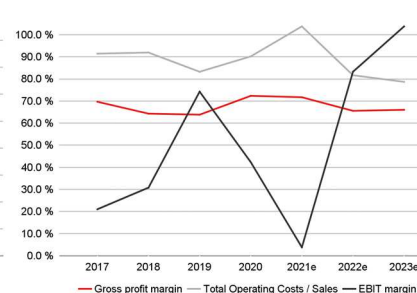
**Financial Ratios**

	2017	2018	2019	2020	2021e	2022e	2023e
Total Operating Costs / Sales	91.4 %	91.9 %	83.3 %	90.2 %	103.8 %	81.6 %	78.6 %
Operating Leverage	n.a.	4.2 x	10.8 x	1.9 x	93.8 x	56.9 x	1.9 x
EBITDA / Interest expenses	12.3 x	17.4 x	52.0 x	51.2 x	61.0 x	417.9 x	1311.2 x
Tax rate (EBT)	61.8 %	-34.5 %	29.9 %	26.9 %	28.5 %	29.0 %	29.0 %
Dividend Payout Ratio	0.0 %	0.0 %	18.7 %	45.9 %	615.9 %	29.5 %	16.9 %
Sales per Employee	149,439	183,145	205,328	137,479	n.a.	n.a.	n.a.

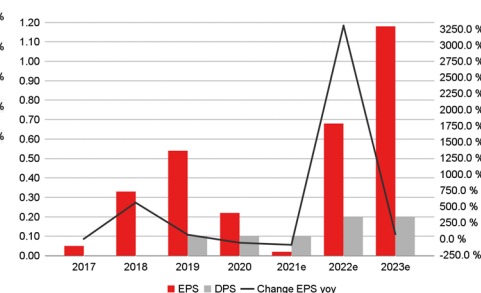
**Sales, EBITDA**  
in EUR m



**Operating Performance**  
in %



**Performance per Share**



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

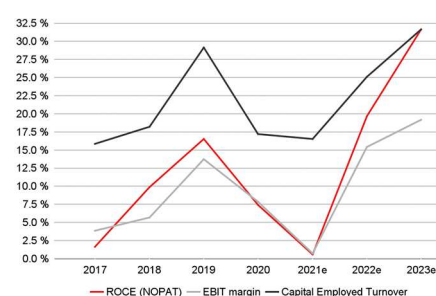
**Consolidated balance sheet**

In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
<b>Assets</b>							
Goodwill and other intangible assets	15.4	15.2	15.9	17.3	19.2	19.8	20.2
thereof other intangible assets	1.8	1.4	1.0	0.7	0.7	0.7	0.7
thereof Goodwill	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Property, plant and equipment	46.5	44.3	44.7	46.0	49.8	52.2	53.0
Financial assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other long-term assets	0.2	0.2	0.1	0.0	0.0	0.0	0.0
<b>Fixed assets</b>	<b>62.1</b>	<b>59.8</b>	<b>60.7</b>	<b>63.4</b>	<b>68.9</b>	<b>72.0</b>	<b>73.2</b>
Inventories	25.5	25.7	19.2	19.8	22.6	23.8	30.1
Accounts receivable	19.4	30.5	11.3	13.2	11.5	16.7	21.0
Liquid assets	3.3	3.7	31.3	20.1	16.7	26.7	44.9
Other short-term assets	6.2	9.1	5.5	5.2	5.2	5.2	5.2
<b>Current assets</b>	<b>54.4</b>	<b>69.0</b>	<b>67.3</b>	<b>58.3</b>	<b>56.0</b>	<b>72.4</b>	<b>101.2</b>
<b>Total Assets</b>	<b>116.6</b>	<b>128.8</b>	<b>128.0</b>	<b>121.7</b>	<b>125.0</b>	<b>144.4</b>	<b>174.3</b>
<b>Liabilities and shareholders' equity</b>							
Subscribed capital	22.3	24.5	24.5	24.5	24.5	24.5	24.5
Capital reserve	1.5	15.5	15.5	15.5	15.5	15.5	15.5
Retained earnings	10.9	10.2	10.2	10.2	10.6	27.2	56.2
Other equity components	19.5	27.5	40.7	42.8	42.8	42.6	42.8
Shareholders' equity	54.2	77.7	90.8	92.9	93.3	109.7	139.0
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total equity</b>	<b>54.2</b>	<b>77.7</b>	<b>90.8</b>	<b>92.9</b>	<b>93.3</b>	<b>109.7</b>	<b>139.0</b>
Provisions	4.0	5.5	6.1	3.2	3.2	3.2	3.2
thereof provisions for pensions and similar obligations	0.3	0.3	0.3	0.4	0.4	0.4	0.4
Financial liabilities (total)	41.0	20.0	8.9	6.9	5.5	3.7	1.9
Short-term financial liabilities	21.0	2.6	2.0	0.0	-0.4	-1.2	-2.0
Accounts payable	3.2	6.9	5.6	7.6	4.4	6.3	8.8
Other liabilities	14.1	18.6	16.5	11.0	18.5	21.4	21.4
<b>Liabilities</b>	<b>62.3</b>	<b>51.1</b>	<b>37.2</b>	<b>28.7</b>	<b>31.7</b>	<b>34.7</b>	<b>35.4</b>
<b>Total liabilities and shareholders' equity</b>	<b>116.6</b>	<b>128.8</b>	<b>128.0</b>	<b>121.7</b>	<b>125.0</b>	<b>144.4</b>	<b>174.3</b>

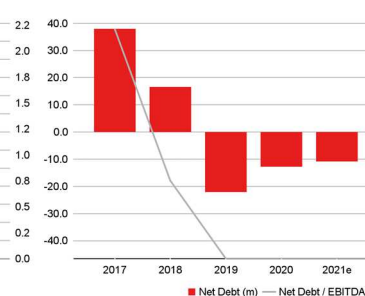
**Financial Ratios**

	2017	2018	2019	2020	2021e	2022e	2023e
<b>Efficiency of Capital Employment</b>							
Operating Assets Turnover	1.3 x	1.5 x	2.3 x	1.4 x	1.4 x	2.1 x	2.7 x
Capital Employed Turnover	1.1 x	1.3 x	2.0 x	1.2 x	1.2 x	1.8 x	2.2 x
ROA	1.9 %	13.5 %	21.6 %	8.4 %	0.6 %	23.1 %	39.7 %
<b>Return on Capital</b>							
ROCE (NOPAT)	1.6 %	9.9 %	16.5 %	7.4 %	0.6 %	19.7 %	31.7 %
ROE	2.1 %	12.2 %	15.6 %	5.8 %	0.4 %	16.4 %	23.3 %
Adj. ROE	2.1 %	12.2 %	15.6 %	5.8 %	0.4 %	16.4 %	23.3 %
<b>Balance sheet quality</b>							
Net Debt	38.0	16.6	-22.1	-12.8	-10.8	-22.6	-42.6
Net Financial Debt	37.7	16.3	-22.4	-13.1	-11.2	-23.0	-42.9
Net Gearing	70.0 %	21.4 %	-24.3 %	-13.7 %	-11.6 %	-20.6 %	-30.6 %
Net Fin. Debt / EBITDA	323.8 %	109.7 %	n.a.	n.a.	n.a.	n.a.	n.a.
Book Value / Share	2.4	3.2	3.7	3.8	3.8	4.5	5.7
Book value per share ex intangibles	1.7	2.6	3.1	3.1	3.0	3.7	4.8

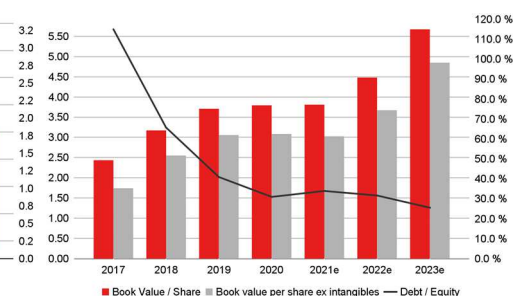
**ROCE Development**



**Net debt in EUR m**



**Book Value per Share in EUR**



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

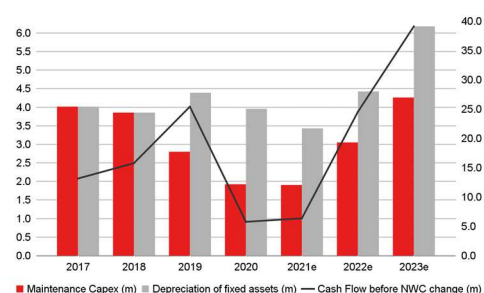
**Consolidated cash flow statement**

In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
Net income	1.1	8.1	13.1	5.3	0.4	16.6	29.0
Depreciation of fixed assets	4.0	3.9	4.4	4.0	3.4	4.4	6.2
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	3.7	4.2	3.3	3.3	2.7	3.4	3.8
Increase/decrease in long-term provisions	0.6	1.1	0.5	-2.5	0.0	0.0	0.0
Other non-cash income and expenses	3.8	-1.4	4.1	-4.3	-0.1	0.1	0.1
<b>Cash Flow before NWC change</b>	<b>13.1</b>	<b>15.8</b>	<b>25.4</b>	<b>5.8</b>	<b>6.4</b>	<b>24.5</b>	<b>39.1</b>
Increase / decrease in inventory	-0.6	-0.2	6.6	-2.0	-2.8	-1.2	-6.3
Increase / decrease in accounts receivable	0.6	-11.1	19.2	-1.5	1.7	-5.2	-4.3
Increase / decrease in accounts payable	0.6	3.1	-2.8	2.0	4.3	4.8	2.5
Increase / decrease in other working capital positions	-4.1	4.0	-0.3	-0.4	0.0	0.6	0.6
Increase / decrease in working capital (total)	-3.5	-4.3	22.6	-1.8	3.3	-1.0	-7.5
<b>Net cash provided by operating activities [1]</b>	<b>9.6</b>	<b>11.5</b>	<b>48.0</b>	<b>4.0</b>	<b>9.7</b>	<b>23.5</b>	<b>31.6</b>
Investments in intangible assets	-3.8	-4.0	-4.0	-4.8	-4.4	-4.8	-4.8
Investments in property, plant and equipment	-2.7	-1.8	-1.8	-4.8	-7.2	-6.9	-6.9
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	0.3	0.1	0.0	0.0	0.0	0.0	0.0
<b>Net cash provided by investing activities [2]</b>	<b>-6.3</b>	<b>-5.7</b>	<b>-5.8</b>	<b>-9.5</b>	<b>-11.6</b>	<b>-11.7</b>	<b>-11.7</b>
Change in financial liabilities	-9.8	-13.6	-13.2	-2.2	-1.4	-1.8	-1.8
Dividends paid	0.0	0.0	0.0	-2.4	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	16.2	0.0	0.0	0.0	0.0	0.0
Other	-0.9	-0.9	-1.3	-0.7	0.0	0.0	0.0
<b>Net cash provided by financing activities [3]</b>	<b>-10.8</b>	<b>1.8</b>	<b>-14.5</b>	<b>-5.4</b>	<b>-1.4</b>	<b>-1.8</b>	<b>-1.8</b>
<b>Change in liquid funds [1]+[2]+[3]</b>	<b>-7.4</b>	<b>7.6</b>	<b>27.7</b>	<b>-11.0</b>	<b>-3.3</b>	<b>10.0</b>	<b>18.1</b>
Effects of exchange-rate changes on cash	-0.1	0.1	-0.1	-0.3	0.0	0.0	0.0
Cash and cash equivalent at end of period	-4.0	11.1	31.3	20.1	16.7	26.7	44.9

**Financial Ratios**

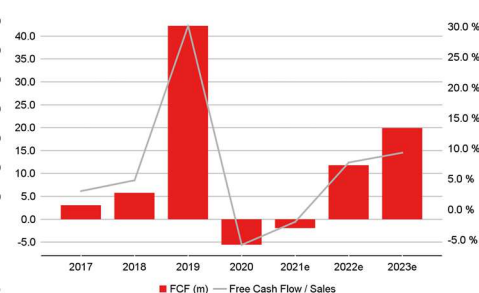
	2017	2018	2019	2020	2021e	2022e	2023e
<b>Cash Flow</b>							
FCF	3.1	5.8	42.2	-5.6	-1.9	11.8	19.9
Free Cash Flow / Sales	3.0 %	4.8 %	30.2 %	-5.8 %	-2.0 %	7.7 %	9.4 %
Free Cash Flow Potential	5.8	13.1	18.5	11.0	4.7	21.4	34.8
Free Cash Flow / Net Profit	267.7 %	71.8 %	321.9 %	-104.1 %	-486.8 %	71.0 %	68.7 %
Interest Received / Avg. Cash	0.1 %	0.1 %	0.1 %	0.2 %	0.0 %	0.0 %	0.0 %
Interest Paid / Avg. Debt	2.2 %	2.8 %	3.6 %	3.7 %	1.8 %	1.6 %	1.4 %
<b>Management of Funds</b>							
Investment ratio	6.4 %	4.8 %	4.1 %	9.9 %	12.2 %	7.7 %	5.5 %
Maint. Capex / Sales	3.9 %	3.2 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %
Capex / Dep	85.3 %	71.1 %	75.3 %	130.4 %	190.2 %	150.4 %	116.8 %
Avg. Working Capital / Sales	33.7 %	29.7 %	18.9 %	18.4 %	19.8 %	11.8 %	10.7 %
Trade Debtors / Trade Creditors	601.2 %	444.1 %	201.8 %	173.0 %	261.4 %	265.1 %	238.6 %
Inventory Turnover	1.3 x	1.9 x	2.8 x	1.6 x	1.7 x	2.3 x	2.6 x
Receivables collection period (days)	69	93	30	50	44	40	36
Payables payment period (days)	35	52	38	87	43	41	41
Cash conversion cycle (Days)	219	149	54	133	100	54	64

**CAPEX and Cash Flow**  
in EUR m



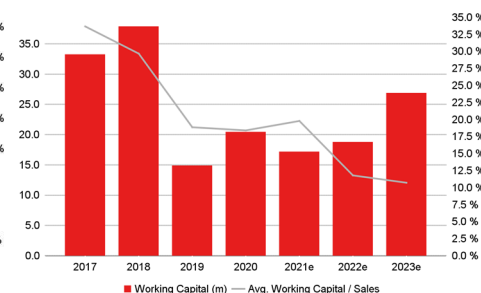
Source: Warburg Research

**Free Cash Flow Generation**



Source: Warburg Research

**Working Capital**



Source: Warburg Research



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- 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.

Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
LPKF	5	<a href="http://www.mmwarburg.com/disclaimer/disclaimer_en/DE0006450000.htm">http://www.mmwarburg.com/disclaimer/disclaimer_en/DE0006450000.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	157	72
Hold	52	24
Sell	5	2
Rating suspended	3	1
<b>Total</b>	<b>217</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	51	84
Hold	8	13
Sell	0	0
Rating suspended	2	3
<b>Total</b>	<b>61</b>	<b>100</b>

**PRICE AND RATING HISTORY LPKF AS OF 20.12.2021**



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.

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