

<b>Buy</b> <b>EUR 38.00</b>  Price <b>EUR 19.98</b> Upside <b>90.2 %</b>	<b>Value Indicators:</b> EUR DCF: 38.30 FCF-Value Potential 23e: 20.93	<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: 489.4 No. of shares (m): 24.5 EV: 471.0 Freefloat MC: 489.4 Ø Trad. Vol. (30d): 2.16 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: 4.8 x Equity Ratio: 76 %

**Q3 figures in line with revised targets**

<b>Stated Figures Q3/2021:</b> FY End: 31.12. in EUR m										<b>Comment on Figures:</b> <ul style="list-style-type: none"> <li>Logistics bottleneck impeded Q3 growth</li> <li>Equipment with a sales volume of EUR 7m, scheduled for Q3, could not be delivered</li> <li>Sales decrease after nine months driven by the Solar segment, in which revenue declined by EUR 15.8m in the first nine months</li> </ul>									
	<b>Q3 21</b>	<b>Q3 21e</b>	<b>Q3 20</b>	<b>yoy</b>	<b>9M 21</b>	<b>9M 21e</b>	<b>9M 20</b>	<b>yoy</b>											
<b>Sales</b>	27.1	27.1	25.2	8 %	63.5	63.5	75.2	-16 %											
<b>EBITDA</b>	3.5	3.5	5.6	-38 %	1.5	1.5	12.3	-88 %											
<b>Margin</b>	12.7 %	12.7 %	22.2 %		2.3 %	2.3 %	16.4 %												
<b>EBIT</b>	1.9	1.9	4.0	-53 %	-4.0	-4.0	6.8	n.a.											
<b>Margin</b>	7.0 %	7.0 %	15.9 %		-6.3 %	-6.3 %	9.1 %												

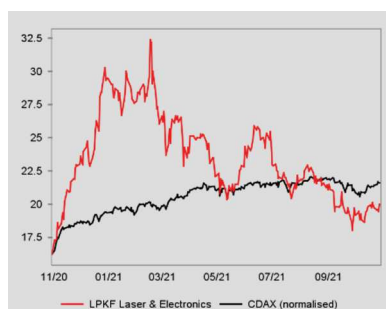
LPKF's Q3 results reached the lower end of its recently revised Q3 targets (sales EUR 23-28m, EBIT EUR 0-3m) but fell short of our estimates. Sales decreased by 5.3% to EUR 23.9m (WRe EUR 27.1m) and EBIT declined by 82.6% to EUR 0.7m (WRe EUR 1.9m). The EBIT margin declined from 15.9% in Q3 2020 to 2.9%. After nine months, the revenue of EUR 60.2m is still 20% below last year's figure.

This was mainly driven by a weaker Solar business, which only generated EUR 6.7m in sales in the first nine months, EUR 15.8m less than 2020. While the order momentum has already picked up again, logistics bottlenecks, especially for shipments entering China, impeded the delivery of ordered and produced goods. In Q3 alone, solar equipment with a sales volume of EUR 5m was postponed. The order momentum for the segment remains strong. In Q3 alone, the company signed two large frame contracts with a total volume of EUR 20m, of which EUR 15m were booked as order intake. The total Solar order backlog should be well above EUR 30m and the total volume of frame contracts even higher. Despite the temporary postponements, a recovery of the business unit is highly visible.

Electronics was also burdened by shipment delays in Q3 with a volume of approx. EUR 2m. After nine months, sales were at EUR 20.5m, EUR 3.5m below the 2020 figure. Development remained at the 2020 revenue level of EUR 15.0m (-2.0%). The Welding top line compensated for the temporary weaknesses and more than doubled in Q3 (9M sales +35.5% yoy) driven by new applications including battery pack welding. Since the lead times in all three segments are significantly shorter than in Solar, the order backlog does not provide a similar level of visibility. Adjusted for Solar, the high order backlog of EUR 67.7m (+202% yoy) still increased from approx. EUR 20m to more than EUR 30m, which we consider a solid indication of a recovery in Q4 and in 2022.

Since all delayed shipments are expected to be delivered in the current fiscal year, the full-year guidance was confirmed (sales EUR 110-120m. EBIT margin 10-13%) but is now expected to meet the lower end of the range. For Q4, this implies EUR 50m (+138% yoy) in revenue at an EBIT margin of 30% (vs. 3.3% in Q4/20). Although this appears highly ambitious, it should be feasible without further postponements, especially considering the ready-to-ship equipment worth EUR 7m and the strong order backlog.

Despite some remaining logistics-related risks in Q4 considering the significant number of shipments scheduled, the strong order momentum underpins the positive prospect for the coming quarters. We confirm our PT and our Buy recommendation for LPKF.



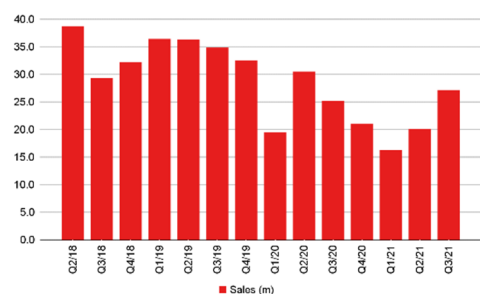
**Rel. Performance vs CDAX:**

1 month:	3.9 %
6 months:	-11.9 %
Year to date:	-43.9 %
Trailing 12 months:	-6.1 %

**Company events:**

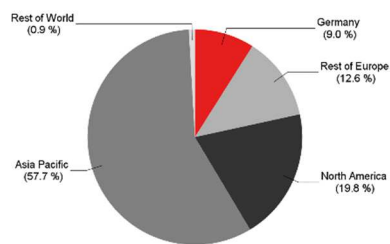
FY End: 31.12. in EUR m	CAGR (20-23e)	2017	2018	2019	2020	2021e	2022e	2023e
<b>Sales</b>	32.9 %	102.1	120.0	140.0	96.2	113.3	178.0	226.0
Change Sales yoy		12.0 %	17.5 %	16.7 %	-31.3 %	17.7 %	57.1 %	27.0 %
Gross profit margin		69.7 %	64.3 %	63.8 %	72.4 %	69.1 %	65.5 %	66.3 %
<b>EBITDA</b>	54.2 %	11.6	14.9	26.9	14.8	18.7	38.1	54.5
Margin		11.4 %	12.4 %	19.2 %	15.4 %	16.5 %	21.4 %	24.1 %
<b>EBIT</b>	79.8 %	4.0	6.8	19.2	7.5	11.4	29.0	43.9
Margin		3.9 %	5.7 %	13.7 %	7.8 %	10.1 %	16.3 %	19.4 %
<b>Net income</b>	79.9 %	1.1	8.1	13.1	5.3	8.1	20.6	31.1
<b>EPS</b>	79.4 %	0.05	0.33	0.54	0.22	0.33	0.84	1.27
<b>EPS adj.</b>	79.4 %	0.05	0.33	0.54	0.22	0.33	0.84	1.27
<b>DPS</b>	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 %	0.5 %	1.0 %	1.0 %
<b>FCFPS</b>		0.14	0.24	1.72	-0.23	0.23	0.67	0.96
<b>FCF / Market cap</b>		1.6 %	3.1 %	18.3 %	-1.1 %	1.1 %	3.4 %	4.8 %
<b>EV / Sales</b>		2.3 x	1.7 x	1.5 x	5.1 x	4.2 x	2.6 x	1.9 x
<b>EV / EBITDA</b>		19.9 x	13.6 x	7.7 x	33.2 x	25.2 x	11.9 x	7.9 x
<b>EV / EBIT</b>		58.6 x	29.5 x	10.8 x	65.4 x	41.2 x	15.7 x	9.8 x
<b>P / E</b>		173.8 x	22.9 x	17.4 x	93.8 x	60.5 x	23.8 x	15.7 x
<b>P / E adj.</b>		173.8 x	22.9 x	17.4 x	93.8 x	60.5 x	23.8 x	15.7 x
<b>FCF Potential Yield</b>		2.5 %	6.5 %	8.9 %	2.2 %	2.8 %	5.8 %	8.6 %
<b>Net Debt</b>		38.0	16.6	-22.1	-12.8	-18.4	-34.9	-58.6
<b>ROCE (NOPAT)</b>		1.6 %	9.9 %	16.5 %	7.4 %	10.0 %	24.0 %	33.8 %
<b>Guidance:</b>		Sales EUR 110-120m. EBIT margin 10-13%						

**Sales development**  
in EUR m



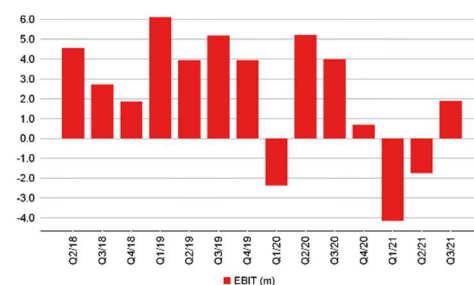
Source: Warburg Research

**Sales by regions**  
2020; in %



Source: Warburg Research

**EBIT development**  
in EUR m



Source: Warburg Research

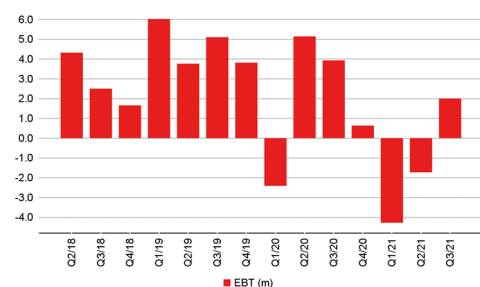
## Company Background

- 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

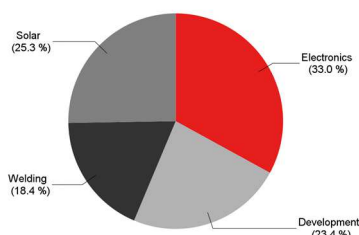
- LPKF is the technologically leading company in the market of laser applications and often first supplier of its customers.
- The high innovative strength of the company ensures the market-leading position and gives LPKF a first-mover advantage in new products that offer highly attractive TCO compared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



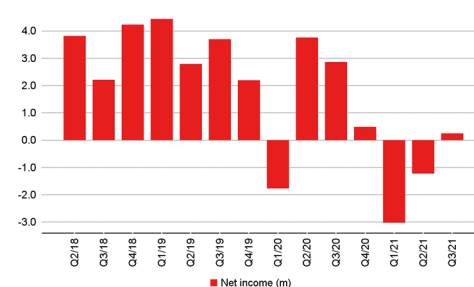
Source: Warburg Research

**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	113.3	178.0	226.0	345.0	390.2	429.2	470.0	512.3	555.8	600.3	636.3	661.7	678.3	
Sales change	17.7 %	57.1 %	27.0 %	52.7 %	13.1 %	10.0 %	9.5 %	9.0 %	8.5 %	8.0 %	6.0 %	4.0 %	2.5 %	2.5 %
EBIT	11.4	29.0	43.9	82.9	90.1	94.4	101.0	107.6	111.2	114.1	108.2	105.9	108.5	
EBIT-margin	10.1 %	16.3 %	19.4 %	24.0 %	23.1 %	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	8.2	20.6	31.1	58.9	64.0	66.1	70.7	75.3	77.8	79.8	75.7	74.1	76.0	
Depreciation	7.3	9.1	10.6	15.9	17.2	18.0	18.8	20.5	22.2	24.0	25.5	26.5	27.1	
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	0.1	0.0	
Change in Liquidity from														
- Working Capital	-2.0	2.1	7.1	10.3	1.1	3.9	4.1	4.2	4.4	4.4	3.6	2.5	1.7	
- Capex	11.6	11.7	11.7	19.0	19.5	19.3	18.8	20.5	22.2	24.0	25.5	26.5	27.1	
Capex in % of Sales	10.2 %	6.6 %	5.2 %	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)	5.8	15.9	23.0	45.9	60.7	61.0	66.7	71.2	73.5	75.5	72.2	71.6	74.3	76
PV of FCF	5.8	14.6	19.5	36.0	44.0	40.9	41.3	40.7	38.9	36.9	32.6	29.9	28.7	516
share of PVs	4.30 %			39.96 %										55.73 %

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	410		
Terminal Value	516		
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>938</b>	<b>Value per share (EUR)</b>	<b>38.30</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 %	30.66	31.16	31.70	32.27	32.90	33.57	34.29	1.46	9.2 %	29.40	30.36	31.32	32.27	33.23	34.19	35.15
1.37	8.7 %	33.07	33.68	34.33	35.04	35.81	36.65	37.56	1.37	8.7 %	31.91	32.95	34.00	35.04	36.09	37.13	38.18
1.32	8.5 %	34.41	35.08	35.81	36.60	37.46	38.40	39.43	1.32	8.5 %	33.32	34.41	35.51	36.60	37.69	38.79	39.88
1.27	8.2 %	35.85	36.60	37.41	38.30	39.26	40.32	41.49	1.27	8.2 %	34.86	36.00	37.15	38.30	39.44	40.59	41.74
1.22	8.0 %	37.41	38.25	39.16	40.15	41.24	42.44	43.76	1.22	8.0 %	36.53	37.74	38.94	40.15	41.35	42.56	43.76
1.17	7.7 %	39.10	40.04	41.06	42.18	43.41	44.78	46.29	1.17	7.7 %	38.37	39.64	40.91	42.18	43.45	44.72	45.99
1.08	7.2 %	42.96	44.14	45.45	46.89	48.49	50.29	52.31	1.08	7.2 %	42.64	44.06	45.47	46.89	48.31	49.72	51.14

- 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	8.1	20.6	31.1	
+ Depreciation + Amortisation	7.7	8.1	7.7	7.3	7.3	9.1	10.6	
- 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	2.3	3.6	4.5	
+ 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>13.2</b>	<b>26.1</b>	<b>37.2</b>	
FCF Potential Yield (on market EV)	2.5 %	6.5 %	8.9 %	2.2 %	2.8 %	5.8 %	8.6 %	
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>471.0</b>	<b>454.5</b>	<b>430.9</b>	
<b>= Fair Enterprise Value</b>	<b>70.1</b>	<b>159.8</b>	<b>225.8</b>	<b>133.6</b>	<b>160.9</b>	<b>318.8</b>	<b>454.2</b>	
- Net Debt (Cash)	-13.1	-13.1	-13.1	-13.1	-18.8	-35.3	-58.9	
- 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>179.3</b>	<b>353.7</b>	<b>512.8</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>7.32</b>	<b>14.44</b>	<b>20.93</b>	
premium (-) / discount (+) in %					-63.4 %	-27.7 %	4.8 %	
<b>Sensitivity Fair value per Share (EUR)</b>								
	11.20 %	2.62	5.30	7.27	4.51	5.56	10.95	15.97
	10.20 %	2.82	5.77	7.93	4.91	6.03	11.89	17.30
	9.20 %	3.07	6.34	8.74	5.38	6.61	13.03	18.92
WACC	<b>8.20 %</b>	<b>3.38</b>	<b>7.04</b>	<b>9.74</b>	<b>5.98</b>	<b>7.32</b>	<b>14.44</b>	<b>20.93</b>
	7.20 %	3.78	7.95	11.02	6.73	8.23	16.25	23.51
	6.20 %	4.31	9.15	12.71	7.73	9.44	18.64	26.91
	5.20 %	5.04	10.81	15.06	9.12	11.11	21.95	31.63

▪ 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	4.8 x	4.0 x	3.2 x
Book value per share ex intangibles	1.74	2.55	3.06	3.09	3.36	4.19	5.46
EV / Sales	2.3 x	1.7 x	1.5 x	5.1 x	4.2 x	2.6 x	1.9 x
EV / EBITDA	19.9 x	13.6 x	7.7 x	33.2 x	25.2 x	11.9 x	7.9 x
EV / EBIT	58.6 x	29.5 x	10.8 x	65.4 x	41.2 x	15.7 x	9.8 x
EV / EBIT adj.*	132.1 x	22.1 x	11.3 x	65.4 x	41.2 x	15.7 x	9.8 x
P / FCF	62.9 x	32.1 x	5.5 x	n.a.	87.1 x	29.6 x	20.7 x
P / E	173.8 x	22.9 x	17.4 x	93.8 x	60.5 x	23.8 x	15.7 x
P / E adj.*	173.8 x	22.9 x	17.4 x	93.8 x	60.5 x	23.8 x	15.7 x
Dividend Yield	n.a.	n.a.	1.1 %	0.5 %	0.5 %	1.0 %	1.0 %
FCF Potential Yield (on market EV)	2.5 %	6.5 %	8.9 %	2.2 %	2.8 %	5.8 %	8.6 %

\*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>113.3</b>	<b>178.0</b>	<b>226.0</b>
Change Sales yoy	12.0 %	17.5 %	16.7 %	-31.3 %	17.7 %	57.1 %	27.0 %
Increase / decrease in inventory	-0.7	0.8	-0.8	0.2	0.9	-0.9	1.1
Own work capitalised	3.6	4.3	4.3	5.3	5.3	4.6	5.0
<b>Total Sales</b>	<b>104.9</b>	<b>125.1</b>	<b>143.6</b>	<b>101.7</b>	<b>119.5</b>	<b>181.8</b>	<b>232.1</b>
Material expenses	33.8	48.0	54.2	32.0	41.2	65.2	82.3
<b>Gross profit</b>	<b>71.1</b>	<b>77.2</b>	<b>89.4</b>	<b>69.7</b>	<b>78.3</b>	<b>116.6</b>	<b>149.9</b>
<i>Gross profit margin</i>	<i>69.7 %</i>	<i>64.3 %</i>	<i>63.8 %</i>	<i>72.4 %</i>	<i>69.1 %</i>	<i>65.5 %</i>	<i>66.3 %</i>
Personnel expenses	41.9	44.3	44.7	41.5	46.2	57.3	68.0
Other operating income	5.7	3.7	4.0	3.8	4.3	4.6	4.7
Other operating expenses	23.3	21.7	21.7	17.1	17.7	25.8	32.1
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>18.7</b>	<b>38.1</b>	<b>54.5</b>
<i>Margin</i>	<i>11.4 %</i>	<i>12.4 %</i>	<i>19.2 %</i>	<i>15.4 %</i>	<i>16.5 %</i>	<i>21.4 %</i>	<i>24.1 %</i>
Depreciation of fixed assets	4.0	3.9	4.4	4.0	4.1	5.2	6.6
<b>EBITA</b>	<b>7.6</b>	<b>11.0</b>	<b>22.5</b>	<b>10.9</b>	<b>14.6</b>	<b>32.9</b>	<b>47.9</b>
Amortisation of intangible assets	3.7	4.2	3.3	3.3	3.2	3.9	4.1
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>11.4</b>	<b>29.0</b>	<b>43.9</b>
<i>Margin</i>	<i>3.9 %</i>	<i>5.7 %</i>	<i>13.7 %</i>	<i>7.8 %</i>	<i>10.1 %</i>	<i>16.3 %</i>	<i>19.4 %</i>
<b>EBIT adj.</b>	<b>1.8</b>	<b>9.1</b>	<b>18.4</b>	<b>7.5</b>	<b>11.4</b>	<b>29.0</b>	<b>43.9</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>11.3</b>	<b>28.9</b>	<b>43.8</b>
<i>Margin</i>	<i>3.0 %</i>	<i>5.0 %</i>	<i>13.4 %</i>	<i>7.6 %</i>	<i>10.0 %</i>	<i>16.3 %</i>	<i>19.4 %</i>
Total taxes	1.9	-2.1	5.6	2.0	3.2	8.4	12.7
<b>Net income from continuing operations</b>	<b>1.1</b>	<b>8.1</b>	<b>13.1</b>	<b>5.3</b>	<b>8.1</b>	<b>20.6</b>	<b>31.1</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>8.1</b>	<b>20.6</b>	<b>31.1</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>8.1</b>	<b>20.6</b>	<b>31.1</b>
<i>Margin</i>	<i>1.1 %</i>	<i>6.7 %</i>	<i>9.4 %</i>	<i>5.6 %</i>	<i>7.2 %</i>	<i>11.5 %</i>	<i>13.8 %</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>0.33</b>	<b>0.84</b>	<b>1.27</b>
EPS adj.	0.05	0.33	0.54	0.22	0.33	0.84	1.27

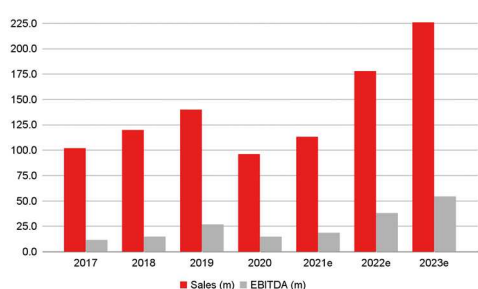
\*Adjustments made for:

**Guidance: Sales EUR 110-120m. EBIT margin 10-13%**

**Financial Ratios**

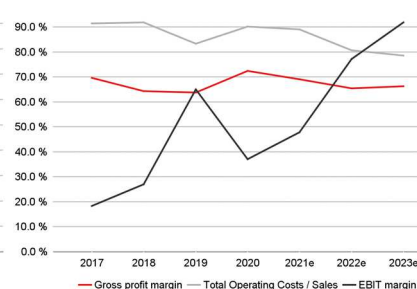
	2017	2018	2019	2020	2021e	2022e	2023e
Total Operating Costs / Sales	91.4 %	91.9 %	83.3 %	90.2 %	89.0 %	80.7 %	78.6 %
Operating Leverage	n.a.	4.2 x	10.8 x	1.9 x	2.9 x	2.7 x	1.9 x
EBITDA / Interest expenses	12.3 x	17.4 x	52.0 x	51.2 x	168.7 x	509.1 x	1402.5 x
Tax rate (EBT)	61.8 %	-34.5 %	29.9 %	26.9 %	28.5 %	29.0 %	29.0 %
Dividend Payout Ratio	0.0 %	0.0 %	18.7 %	45.9 %	30.2 %	23.8 %	15.8 %
Sales per Employee	149,439	183,145	205,328	137,479	n.a.	n.a.	n.a.

**Sales, EBITDA**  
in EUR m



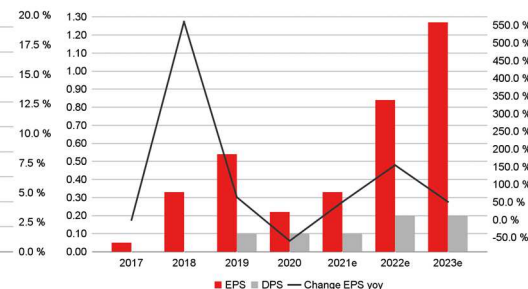
Source: Warburg Research

**Operating Performance**  
in %



Source: Warburg Research

**Performance per Share**



Source: Warburg Research

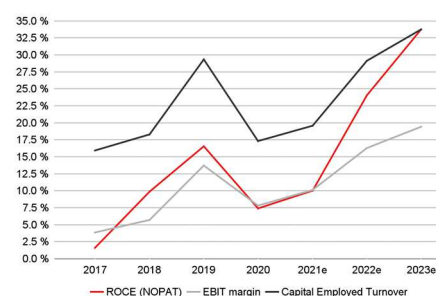
**Consolidated balance sheet**

In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
<b>Assets</b>							
Goodwill and other intangible assets	15.4	15.2	15.9	17.3	19.5	20.2	21.1
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	49.1	50.8	51.2
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>68.6</b>	<b>71.1</b>	<b>72.3</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	13.7	19.5	22.3
Liquid assets	3.3	3.7	31.3	20.1	24.3	39.0	60.9
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>65.8</b>	<b>87.5</b>	<b>118.4</b>
<b>Total Assets</b>	<b>116.6</b>	<b>128.8</b>	<b>128.0</b>	<b>121.7</b>	<b>134.4</b>	<b>158.6</b>	<b>190.8</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	18.3	38.8	69.9
Other equity components	19.5	27.5	40.7	42.8	43.6	44.2	45.1
Shareholders' equity	54.2	77.7	90.8	92.9	101.8	123.0	155.0
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>101.8</b>	<b>123.0</b>	<b>155.0</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	5.3	7.3	9.3
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>32.6</b>	<b>35.7</b>	<b>35.9</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>134.4</b>	<b>158.6</b>	<b>190.8</b>

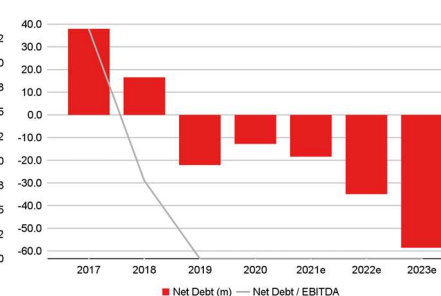
**Financial Ratios**

	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	1.7 x	2.5 x	2.9 x
Capital Employed Turnover	1.1 x	1.3 x	2.0 x	1.2 x	1.4 x	2.0 x	2.3 x
ROA	1.9 %	13.5 %	21.6 %	8.4 %	11.8 %	28.9 %	43.0 %
<b>Return on Capital</b>							
ROCE (NOPAT)	1.6 %	9.9 %	16.5 %	7.4 %	10.0 %	24.0 %	33.8 %
ROE	2.1 %	12.2 %	15.6 %	5.8 %	8.3 %	18.3 %	22.4 %
Adj. ROE	2.1 %	12.2 %	15.6 %	5.8 %	8.3 %	18.3 %	22.4 %
<b>Balance sheet quality</b>							
Net Debt	38.0	16.6	-22.1	-12.8	-18.4	-34.9	-58.6
Net Financial Debt	37.7	16.3	-22.4	-13.1	-18.8	-35.3	-58.9
Net Gearing	70.0 %	21.4 %	-24.3 %	-13.7 %	-18.1 %	-28.4 %	-37.8 %
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	4.2	5.0	6.3
Book value per share ex intangibles	1.7	2.6	3.1	3.1	3.4	4.2	5.5

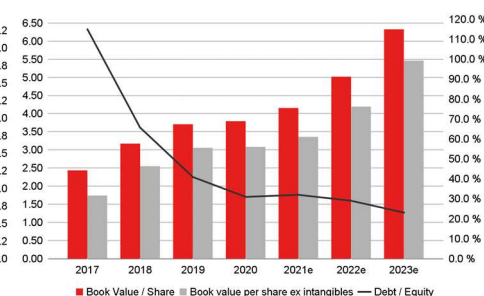
**ROCE Development**



**Net debt in EUR m**



**Book Value per Share in EUR**



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

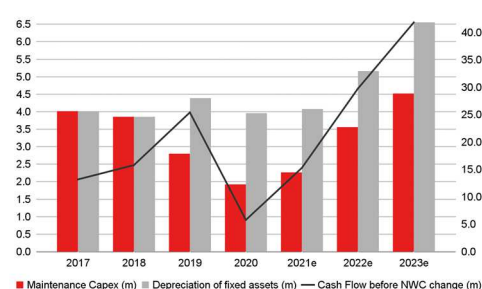
**Consolidated cash flow statement**

In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
Net income	1.1	8.1	13.1	5.3	8.1	20.6	31.1
Depreciation of fixed assets	4.0	3.9	4.4	4.0	4.1	5.2	6.6
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	3.2	3.9	4.1
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>15.3</b>	<b>29.7</b>	<b>41.8</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	-0.5	-5.8	-2.8
Increase / decrease in accounts payable	0.6	3.1	-2.8	2.0	5.2	4.9	2.0
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	2.0	-1.5	-6.5
<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>17.2</b>	<b>28.2</b>	<b>35.3</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>4.2</b>	<b>14.7</b>	<b>21.8</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	24.3	39.0	60.9

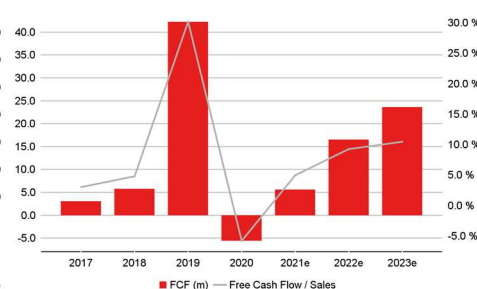
**Financial Ratios**

	2017	2018	2019	2020	2021e	2022e	2023e
<b>Cash Flow</b>							
FCF	3.1	5.8	42.2	-5.6	5.6	16.5	23.6
Free Cash Flow / Sales	3.0 %	4.8 %	30.2 %	-5.8 %	5.0 %	9.3 %	10.5 %
Free Cash Flow Potential	5.8	13.1	18.5	11.0	13.2	26.1	37.2
Free Cash Flow / Net Profit	267.7 %	71.8 %	321.9 %	-104.1 %	69.4 %	80.4 %	76.0 %
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 %	10.2 %	6.6 %	5.2 %
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 %	160.0 %	128.9 %	110.1 %
Avg. Working Capital / Sales	33.7 %	29.7 %	18.9 %	18.4 %	17.2 %	11.0 %	10.7 %
Trade Debtors / Trade Creditors	601.2 %	444.1 %	201.8 %	173.0 %	258.5 %	267.1 %	239.8 %
Inventory Turnover	1.3 x	1.9 x	2.8 x	1.6 x	1.8 x	2.7 x	2.7 x
Receivables collection period (days)	69	93	30	50	44	40	36
Payables payment period (days)	35	52	38	87	47	41	41
Cash conversion cycle (Days)	219	149	54	133	87	46	60

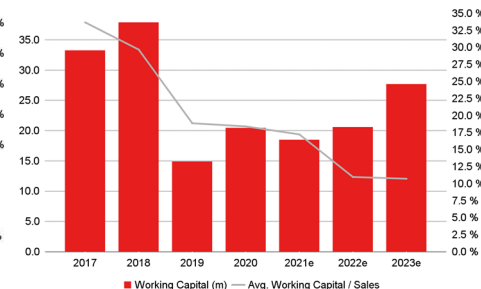
**CAPEX and Cash Flow**  
in EUR m



**Free Cash Flow Generation**



**Working Capital**



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research



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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	144	67
Hold	60	28
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	46	78
Hold	11	19
Sell	0	0
Rating suspended	2	3
<b>Total</b>	<b>59</b>	<b>100</b>

**PRICE AND RATING HISTORY LPKF AS OF 29.10.2021**



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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