

Buy EUR 38.00	Value Indicators: EUR DCF: 38.80 FCF-Value Potential 23e: 24.01	Warburg ESG Risk Score: 3.0 ESG Score (MSCI based): 2.0 Balance Sheet Score: 5.0 Market Liquidity Score: 2.0	Description: Highly specialised machine manufacturer developing laser applications for special purposes
	Price EUR 24.30 Upside 56.4 %	Market Snapshot: EUR m Market cap: 595.3 No. of shares (m): 24.5 EV: 566.3 Freefloat MC: 595.3 Ø Trad. Vol. (30d): 7.52 m	Shareholders: Freefloat 100.0 % Small Cap World Fund 5.0 % JPMorgan AM 3.0 % Société Générale 3.0 % UBS 3.0 %

Short-term visibility remains low; Mid-term targets confirmed

Stated Figures Q4/2020:					Comment on Figures:				
FY End: 31.12. in EUR m	Q4 20	Q4 20e	Q4 19	yoy	20	20e	19	yoy	<ul style="list-style-type: none"> Q4 sales guidance of EUR 96-102m reached at the lower end 31% revenue decline in the full year driven by COVID-related postponements in Solar and Electronics EBIT margin of 7.8% slightly below the target range of 8-12% as a consequence of lower sales
Sales	21.0	29.4	32.5	-35 %	96.2	104.6	140.0	-31 %	
EBIT	0.7	4.1	4.0	-82 %	7.5	11.0	19.2	-61 %	
Margin	3.3 %	14.1 %	12.1 %		7.8 %	10.5 %	13.7 %		

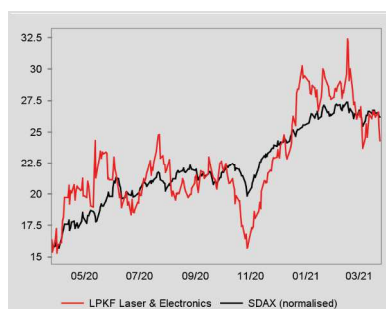
LPKF was only able to reach the lower end of its target range of EUR 96-102m in sales at an EBIT margin of 8-12% in 2020 and missed our expectations (sales EUR 104.6m, EBIT margin 10.5%). Revenue declined by 31% to EUR 96.2m and the EBIT margin decreased by almost 6pp to 7.8%. While LPKF maintained full operations during the pandemic, the top-line decline was mainly a result of COVID-related postponements of large orders in Solar (-44.9%), Electronics (-27.5%) and Welding (-36.1%).

None of the orders responsible for the significant revenue decline were cancelled and should contribute to the recovery this year. In Solar, LPKF already announced a EUR 28m framework contract in Q4, which should generate revenues from Q2 2021. However, with COVID cases on the rise again, visibility for the schedule of the larger orders, especially in H2, remains low. This is also true because although LPKF could receive its first larger order for its LIDE technology this year with a volume in the double-digit millions, a postponement to 2022 cannot be ruled out at this point in time. These uncertainties result in a significant range for the 2021 revenue potential, so that management has decided to not yet provide guidance for the full year. Given the low level of visibility, we have lowered our estimates.

The mid-term targets for 2024 (sales EUR >360m, EBIT margin >25%) were confirmed. Although the company has not yet been able to announce new LIDE orders, development projects with customers who have not ordered LIDE equipment for their R&D department made significant progress over the last year and the first products produced with the LIDE technology in the semiconductor industry were qualified by the end customer. According to management, the LIDE pipeline is well on track to reach its mid-term goals.

After a challenging year, short-term visibility remains low and we have adjusted our estimates accordingly. However, as the mid-term goals are still within reach, depending on the success of the LIDE technology, we confirm our target price and our Buy recommendation for LPKF.

Changes in Estimates:					Comment on Changes:				
FY End: 31.12. in EUR m	2021e (old)	+ / -	2022e (old)	+ / -	2023e (old)	+ / -	<ul style="list-style-type: none"> Visibility for large orders remains low at the beginning of the year We have reflected the uncertainty by decreasing our estimates for 2021 and 2022 		
Sales	156.5	-5.4 %	188.3	-4.6 %	n.a.	n.m.			
EBIT	25.2	-0.1 %	33.5	-3.0 %	n.a.	n.m.			
EPS	0.73	0.0 %	0.97	-3.1 %	n.a.	n.m.			



Rel. Performance vs SDAX:

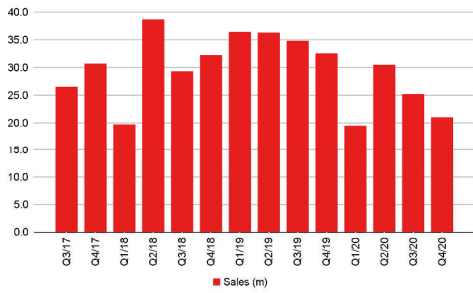
1 month:	-8.1 %
6 months:	-6.4 %
Year to date:	-20.0 %
Trailing 12 months:	-8.5 %

Company events:

29.04.21	Q1
20.05.21	AGM
29.07.21	Q2
28.10.21	Q3

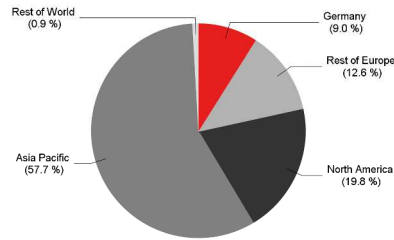
FY End: 31.12. in EUR m	CAGR (20-23e)	2017	2018	2019	2020	2021e	2022e	2023e
Sales	34.6 %	102.1	120.0	140.0	96.2	148.1	179.6	234.6
Change Sales yoy		12.0 %	17.5 %	16.7 %	-31.3 %	53.9 %	21.3 %	30.6 %
Gross profit margin		69.7 %	64.3 %	63.8 %	72.4 %	62.2 %	63.9 %	64.7 %
EBITDA	59.5 %	11.6	14.9	26.9	14.8	32.9	40.9	60.3
Margin		11.4 %	12.4 %	19.2 %	15.4 %	22.2 %	22.8 %	25.7 %
EBIT	87.0 %	4.0	6.8	19.2	7.5	25.2	32.5	49.3
Margin		3.9 %	5.7 %	13.7 %	7.8 %	17.0 %	18.1 %	21.0 %
Net income	87.0 %	1.1	8.1	13.1	5.3	17.9	23.0	34.9
EPS	86.6 %	0.05	0.33	0.54	0.22	0.73	0.94	1.43
EPS adj.	86.6 %	0.05	0.33	0.54	0.22	0.73	0.94	1.43
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 %	0.4 %	0.8 %	0.8 %
FCFPS		0.14	0.24	1.72	-0.23	0.66	0.77	1.08
FCF / Market cap		1.6 %	3.1 %	18.3 %	-1.1 %	2.7 %	3.2 %	4.4 %
EV / Sales		2.3 x	1.7 x	1.5 x	5.1 x	3.8 x	3.0 x	2.2 x
EV / EBITDA		19.9 x	13.6 x	7.7 x	33.2 x	17.2 x	13.4 x	8.6 x
EV / EBIT		58.6 x	29.5 x	10.8 x	65.4 x	22.5 x	16.8 x	10.6 x
P / E		173.8 x	22.9 x	17.4 x	93.8 x	33.3 x	25.9 x	17.0 x
P / E adj.		173.8 x	22.9 x	17.4 x	93.8 x	33.3 x	25.9 x	17.0 x
FCF Potential Yield		2.5 %	6.5 %	8.9 %	2.2 %	4.0 %	5.1 %	7.9 %
Net Debt		38.0	16.6	-22.1	-12.8	-29.0	-47.9	-74.4
ROCE (NOPAT)		1.6 %	9.9 %	16.5 %	7.4 %	22.3 %	27.7 %	38.8 %
Guidance:		-						

Sales development
in EUR m



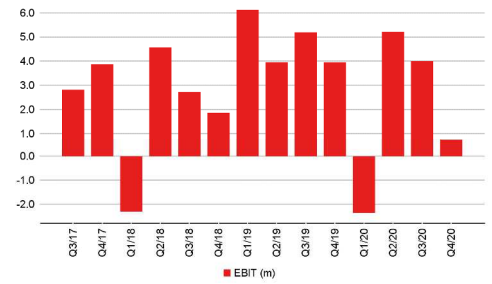
Source: Warburg Research

Sales by regions
2020; in %



Source: Warburg Research

EBIT development
in EUR m



Source: Warburg Research

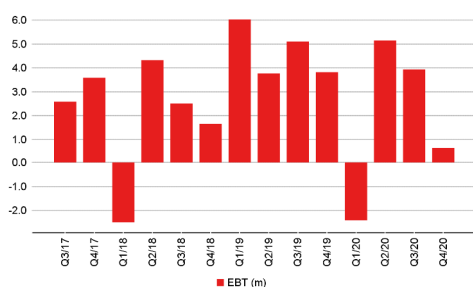
Company Background

- Global market leader/top supplier for laser-based processing tools replacing conventional and non-digital processes.
- LPKF is 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 up to 65% in its applications.
- Through its Solar BU (31.5% of sales) LPKF 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 (19.8% of sales) offers versatile applications for a range of customer industries including automotive, consumer electronics and healthcare

Competitive Quality

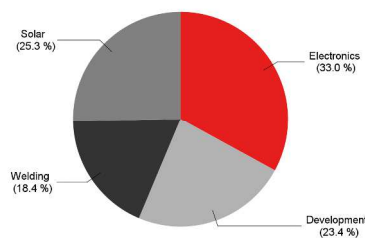
- LPKF is the technologically leading company in the market of laser applications and often first supplier of its customers.
- The high innovative strength of the company ensures the market-leading position and gives LPKF a first-mover advantage in new products that offer highly attractive TCO compared 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 leads to close relationships to customers.
- The focused low asset business model and high R&D efforts offer a high scalability and attractive capital returns.

EBT development
in EUR m



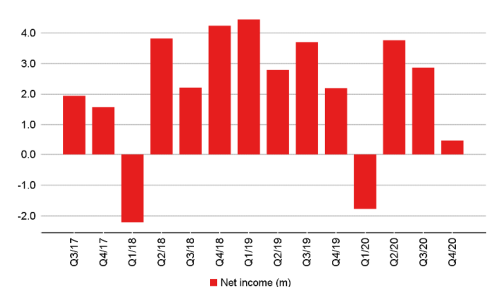
Source: Warburg Research

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	148.1	179.6	234.6	352.5	397.8	437.5	479.1	522.2	566.6	611.9	648.7	674.6	691.5	
Sales change	53.9 %	21.3 %	30.6 %	50.3 %	12.8 %	10.0 %	9.5 %	9.0 %	8.5 %	8.0 %	6.0 %	4.0 %	2.5 %	2.5 %
EBIT	25.2	32.5	49.3	85.7	92.2	96.3	103.0	109.7	113.3	116.3	110.3	107.9	110.6	
EBIT-margin	17.0 %	18.1 %	21.0 %	24.3 %	23.2 %	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	18.0	23.1	35.0	60.8	65.5	67.4	72.1	76.8	79.3	81.4	77.2	75.6	77.4	
Depreciation	7.7	8.4	11.0	16.2	17.5	18.4	19.2	20.9	22.7	24.5	25.9	27.0	27.7	
in % of Sales	5.2 %	4.7 %	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	-2.3	1.5	8.5	7.0	4.5	4.0	4.2	4.3	4.4	4.5	3.7	2.6	1.7	
- Capex	11.6	11.7	11.7	19.4	19.9	19.7	19.2	20.9	22.7	24.5	25.9	27.0	27.7	
Capex in % of Sales	7.8 %	6.5 %	5.0 %	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)	16.4	18.3	25.8	51.0	58.7	62.2	68.0	72.5	75.0	76.9	73.6	73.0	75.8	78
PV of FCF	15.4	16.0	20.9	38.1	40.6	39.8	40.4	39.8	38.1	36.2	32.0	29.4	28.3	523
share of PVs	5.58 %			38.69 %										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	1.20
		Others	1.30
WACC	8.04 %	Beta	1.24

Valuation (m)

Present values 2033e	415		
Terminal Value	523		
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
Equity Value	950	Value per share (EUR)	38.80

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
1.43	9.0 %	30.80	31.32	31.87	32.46	33.10	33.79	34.54	1.43	9.0 %	29.60	30.55	31.51	32.46	33.41	34.36	35.31
1.34	8.5 %	33.33	33.95	34.63	35.36	36.16	37.03	37.98	1.34	8.5 %	32.24	33.28	34.32	35.36	36.40	37.45	38.49
1.29	8.3 %	34.73	35.43	36.19	37.00	37.90	38.88	39.95	1.29	8.3 %	33.72	34.82	35.91	37.00	38.10	39.19	40.29
1.24	8.0 %	36.25	37.03	37.88	38.80	39.80	40.91	42.13	1.24	8.0 %	35.35	36.50	37.65	38.80	39.95	41.10	42.25
1.19	7.8 %	37.90	38.77	39.72	40.76	41.90	43.16	44.56	1.19	7.8 %	37.12	38.34	39.55	40.76	41.97	43.18	44.39
1.14	7.5 %	39.70	40.67	41.74	42.91	44.21	45.65	47.26	1.14	7.5 %	39.08	40.36	41.64	42.91	44.19	45.47	46.75
1.05	7.0 %	43.79	45.04	46.42	47.94	49.65	51.57	53.74	1.05	7.0 %	43.63	45.07	46.51	47.94	49.38	50.82	52.26

- Sales decrease in 2020 reflects the risk of global economic downturn
- 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
- Higher capex in 2020 includes a EUR 6m investment in LPKF's LIDE foundry

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	17.9	23.0	34.9	
+ Depreciation + Amortisation	7.7	8.1	7.7	7.3	7.7	8.4	11.0	
- 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	3.0	3.6	4.7	
+ Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
= Free Cash Flow Potential	5.8	13.1	18.5	11.0	22.8	28.0	41.3	
FCF Potential Yield (on market EV)	2.5 %	6.5 %	8.9 %	2.2 %	4.0 %	5.1 %	7.9 %	
WACC	8.04 %	8.04 %	8.04 %	8.04 %	8.04 %	8.04 %	8.04 %	
= Enterprise Value (EV)	231.5	202.0	208.3	493.0	566.3	547.3	520.9	
= Fair Enterprise Value	71.5	162.9	230.2	136.2	283.1	347.5	513.7	
- Net Debt (Cash)	-13.1	-13.1	-13.1	-13.1	-29.3	-48.3	-74.8	
- 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	
= Fair Market Capitalisation	84.3	175.7	243.0	149.0	312.1	395.4	588.1	
Number of shares, average	22.3	24.5	24.5	24.5	24.5	24.5	24.5	
= Fair value per share (EUR)	3.78	7.17	9.92	6.08	12.74	16.14	24.01	
premium (-) / discount (+) in %					-47.6 %	-33.6 %	-1.2 %	
Sensitivity Fair value per Share (EUR)								
	11.04 %	2.65	5.37	7.37	4.57	9.60	12.29	18.31
	10.04 %	2.86	5.85	8.05	4.97	10.44	13.32	19.83
	9.04 %	3.12	6.44	8.88	5.47	11.46	14.57	21.69
WACC	8.04 %	3.44	7.17	9.92	6.08	12.74	16.14	24.01
	7.04 %	3.85	8.12	11.25	6.87	14.38	18.15	26.98
	6.04 %	4.41	9.37	13.03	7.92	16.56	20.83	30.95
	5.04 %	5.18	11.13	15.51	9.39	19.61	24.58	36.48

- 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	5.4 x	4.5 x	3.5 x
Book value per share ex intangibles	1.74	2.55	3.06	3.09	3.75	4.66	6.09
EV / Sales	2.3 x	1.7 x	1.5 x	5.1 x	3.8 x	3.0 x	2.2 x
EV / EBITDA	19.9 x	13.6 x	7.7 x	33.2 x	17.2 x	13.4 x	8.6 x
EV / EBIT	58.6 x	29.5 x	10.8 x	65.4 x	22.5 x	16.8 x	10.6 x
EV / EBIT adj.*	132.1 x	22.1 x	11.3 x	65.4 x	22.5 x	16.8 x	10.6 x
P / FCF	62.9 x	32.1 x	5.5 x	n.a.	36.8 x	31.4 x	22.5 x
P / E	173.8 x	22.9 x	17.4 x	93.8 x	33.3 x	25.9 x	17.0 x
P / E adj.*	173.8 x	22.9 x	17.4 x	93.8 x	33.3 x	25.9 x	17.0 x
Dividend Yield	n.a.	n.a.	1.1 %	0.5 %	0.4 %	0.8 %	0.8 %
FCF Potential Yield (on market EV)	2.5 %	6.5 %	8.9 %	2.2 %	4.0 %	5.1 %	7.9 %

*Adjustments made for:

Consolidated profit & loss

In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
Sales	102.1	120.0	140.0	96.2	148.1	179.6	234.6
Change Sales yoy	12.0 %	17.5 %	16.7 %	-31.3 %	53.9 %	21.3 %	30.6 %
Increase / decrease in inventory	-0.7	0.8	-0.8	0.2	-0.7	2.9	3.8
Own work capitalised	3.6	4.3	4.3	5.3	4.0	4.0	5.2
Total Sales	104.9	125.1	143.6	101.7	151.4	186.4	243.5
Material expenses	33.8	48.0	54.2	32.0	59.2	71.7	91.7
Gross profit	71.1	77.2	89.4	69.7	92.1	114.8	151.8
<i>Gross profit margin</i>	<i>69.7 %</i>	<i>64.3 %</i>	<i>63.8 %</i>	<i>72.4 %</i>	<i>62.2 %</i>	<i>63.9 %</i>	<i>64.7 %</i>
Personnel expenses	41.9	44.3	44.7	41.5	41.9	52.1	63.1
Other operating income	5.7	3.7	4.0	3.8	3.3	3.2	4.2
Other operating expenses	23.3	21.7	21.7	17.1	20.6	25.0	32.6
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	11.6	14.9	26.9	14.8	32.9	40.9	60.3
<i>Margin</i>	<i>11.4 %</i>	<i>12.4 %</i>	<i>19.2 %</i>	<i>15.4 %</i>	<i>22.2 %</i>	<i>22.8 %</i>	<i>25.7 %</i>
Depreciation of fixed assets	4.0	3.9	4.4	4.0	4.7	5.2	6.8
EBITA	7.6	11.0	22.5	10.9	28.1	35.7	53.5
Amortisation of intangible assets	3.7	4.2	3.3	3.3	3.0	3.2	4.2
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	4.0	6.8	19.2	7.5	25.2	32.5	49.3
<i>Margin</i>	<i>3.9 %</i>	<i>5.7 %</i>	<i>13.7 %</i>	<i>7.8 %</i>	<i>17.0 %</i>	<i>18.1 %</i>	<i>21.0 %</i>
EBIT adj.	1.8	9.1	18.4	7.5	25.2	32.5	49.3
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
EBT	3.0	6.0	18.7	7.3	25.1	32.4	49.2
<i>Margin</i>	<i>3.0 %</i>	<i>5.0 %</i>	<i>13.4 %</i>	<i>7.6 %</i>	<i>16.9 %</i>	<i>18.1 %</i>	<i>21.0 %</i>
Total taxes	1.9	-2.1	5.6	2.0	7.1	9.4	14.3
Net income from continuing operations	1.1	8.1	13.1	5.3	17.9	23.0	34.9
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	1.1	8.1	13.1	5.3	17.9	23.0	34.9
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income	1.1	8.1	13.1	5.3	17.9	23.0	34.9
<i>Margin</i>	<i>1.1 %</i>	<i>6.7 %</i>	<i>9.4 %</i>	<i>5.6 %</i>	<i>12.1 %</i>	<i>12.8 %</i>	<i>14.9 %</i>
Number of shares, average	22.3	24.5	24.5	24.5	24.5	24.5	24.5
EPS	0.05	0.33	0.54	0.22	0.73	0.94	1.43
EPS adj.	0.05	0.33	0.54	0.22	0.73	0.94	1.43

*Adjustments made for:

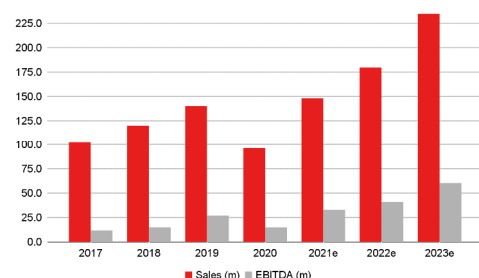
Guidance: -

Financial Ratios

	2017	2018	2019	2020	2021e	2022e	2023e
Total Operating Costs / Sales	91.4 %	91.9 %	83.3 %	90.2 %	80.0 %	81.0 %	78.1 %
Operating Leverage	n.a.	4.2 x	10.8 x	1.9 x	4.3 x	1.4 x	1.7 x
EBITDA / Interest expenses	12.3 x	17.4 x	52.0 x	51.2 x	296.6 x	547.1 x	1552.2 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 %	13.7 %	21.3 %	14.0 %
Sales per Employee	149,439	183,145	205,328	137,479	n.a.	n.a.	n.a.

Sales, EBITDA

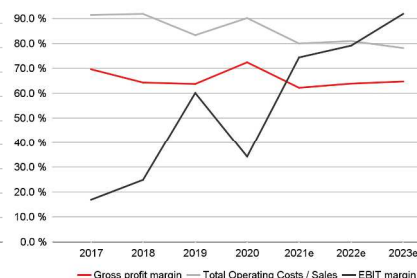
in EUR m



Source: Warburg Research

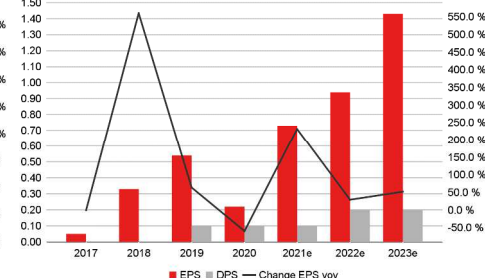
Operating Performance

in %



Source: Warburg Research

Performance per Share



Source: Warburg Research

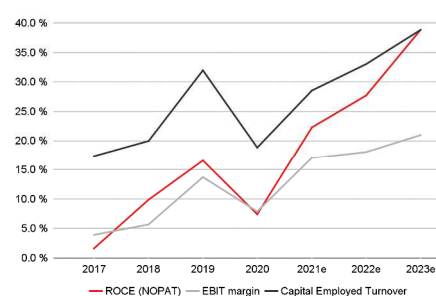
Consolidated balance sheet

In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
Assets							
Goodwill and other intangible assets	15.4	15.2	15.9	17.3	18.4	19.1	20.0
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	48.4	50.1	50.2
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
Fixed assets	62.1	59.8	60.7	63.4	66.9	69.3	70.3
Inventories	25.5	25.7	19.2	19.8	20.6	23.8	30.1
Accounts receivable	19.4	30.5	11.3	13.2	16.2	18.7	23.1
Liquid assets	3.3	3.7	31.3	20.1	34.9	52.0	76.7
Other short-term assets	6.2	9.1	5.5	5.2	5.2	5.2	5.2
Current assets	54.4	69.0	67.3	58.3	76.8	99.7	135.1
Total Assets	116.6	128.8	128.0	121.7	143.7	169.0	205.4
Liabilities and shareholders' equity							
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	28.1	51.1	86.1
Other equity components	19.5	27.5	40.7	42.8	42.3	42.2	43.2
Shareholders' equity	54.2	77.7	90.8	92.9	110.3	133.3	169.2
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total equity	54.2	77.7	90.8	92.9	110.3	133.3	169.2
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
thereof 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	6.1	7.4	9.6
Other liabilities	14.1	18.6	16.5	11.0	18.5	21.4	21.4
Liabilities	62.3	51.1	37.2	28.7	33.4	35.8	36.2
Total liabilities and shareholders' equity	116.6	128.8	128.0	121.7	143.7	169.0	205.4

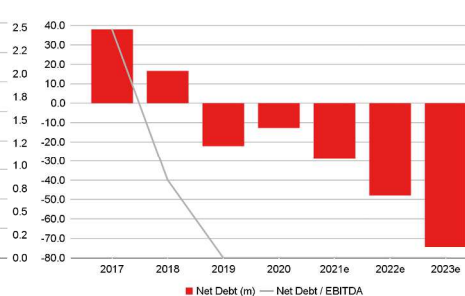
Financial Ratios

	2017	2018	2019	2020	2021e	2022e	2023e
Efficiency of Capital Employment							
Operating Assets Turnover	1.3 x	1.5 x	2.3 x	1.4 x	2.2 x	2.6 x	3.0 x
Capital Employed Turnover	1.1 x	1.3 x	2.0 x	1.2 x	1.8 x	2.1 x	2.5 x
ROA	1.9 %	13.5 %	21.6 %	8.4 %	26.8 %	33.2 %	49.7 %
Return on Capital							
ROCE (NOPAT)	1.6 %	9.9 %	16.5 %	7.4 %	22.3 %	27.7 %	38.8 %
ROE	2.1 %	12.2 %	15.6 %	5.8 %	17.6 %	18.9 %	23.1 %
Adj. ROE	2.1 %	12.2 %	15.6 %	5.8 %	17.6 %	18.9 %	23.1 %
Balance sheet quality							
Net Debt	38.0	16.6	-22.1	-12.8	-29.0	-47.9	-74.4
Net Financial Debt	37.7	16.3	-22.4	-13.1	-29.3	-48.3	-74.8
Net Gearing	70.0 %	21.4 %	-24.3 %	-13.7 %	-26.3 %	-36.0 %	-44.0 %
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	4.5	5.4	6.9
Book value per share ex intangibles	1.7	2.6	3.1	3.1	3.8	4.7	6.1

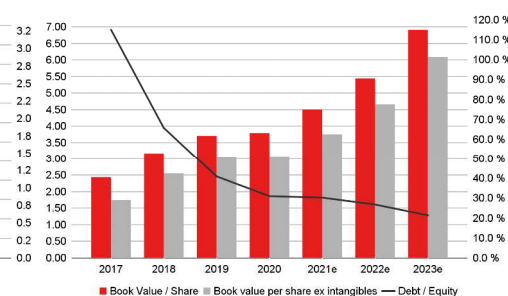
ROCE Development



Net debt in EUR m



Book Value per Share in EUR



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

Consolidated cash flow statement

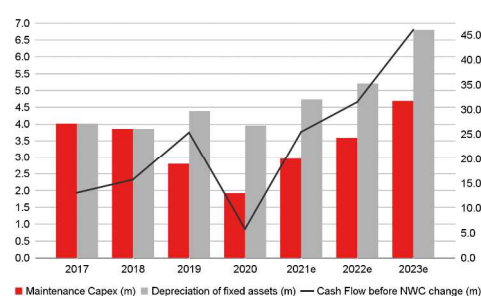
In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
Net income	1.1	8.1	13.1	5.3	17.9	23.0	34.9
Depreciation of fixed assets	4.0	3.9	4.4	4.0	4.7	5.2	6.8
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	3.7	4.2	3.3	3.3	3.0	3.2	4.2
Increase/decrease in long-term provisions	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
Cash Flow before NWC change	13.1	15.8	25.4	5.8	25.5	31.6	46.1
Increase / decrease in inventory	-0.6	-0.2	6.6	-2.0	-0.8	-3.2	-6.3
Increase / decrease in accounts receivable	0.6	-11.1	19.2	-1.5	-3.0	-2.5	-4.4
Increase / decrease in accounts payable	0.6	3.1	-2.8	2.0	6.0	4.2	2.2
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	2.3	-0.9	-7.9
Net cash provided by operating activities [1]	9.6	11.5	48.0	4.0	27.8	30.7	38.2
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
Net cash provided by investing activities [2]	-6.3	-5.7	-5.8	-9.5	-11.6	-11.7	-11.7
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
Net cash provided by financing activities [3]	-10.8	1.8	-14.5	-5.4	-1.4	-1.8	-1.8
Change in liquid funds [1]+[2]+[3]	-7.4	7.6	27.7	-11.0	14.8	17.2	24.7
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	34.9	52.0	76.7

Financial Ratios

	2017	2018	2019	2020	2021e	2022e	2023e
Cash Flow							
FCF	3.1	5.8	42.2	-5.6	16.2	19.0	26.5
Free Cash Flow / Sales	3.0 %	4.8 %	30.2 %	-5.8 %	10.9 %	10.6 %	11.3 %
Free Cash Flow Potential	5.8	13.1	18.5	11.0	22.8	28.0	41.3
Free Cash Flow / Net Profit	267.7 %	71.8 %	321.9 %	-104.1 %	90.3 %	82.4 %	75.7 %
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 %
Management of Funds							
Investment ratio	6.4 %	4.8 %	4.1 %	9.9 %	7.8 %	6.5 %	5.0 %
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 %	150.6 %	138.6 %	106.1 %
Avg. Working Capital / Sales	33.7 %	29.7 %	18.9 %	18.4 %	13.1 %	10.6 %	10.2 %
Trade Debtors / Trade Creditors	601.2 %	444.1 %	201.8 %	173.0 %	265.6 %	252.7 %	240.6 %
Inventory Turnover	1.3 x	1.9 x	2.8 x	1.6 x	2.9 x	3.0 x	3.0 x
Receivables collection period (days)	69	93	30	50	40	38	36
Payables payment period (days)	35	52	38	87	38	38	38
Cash conversion cycle (Days)	219	149	54	133	52	43	56

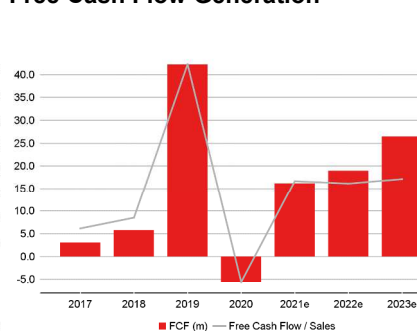
CAPEX and Cash Flow

in EUR m



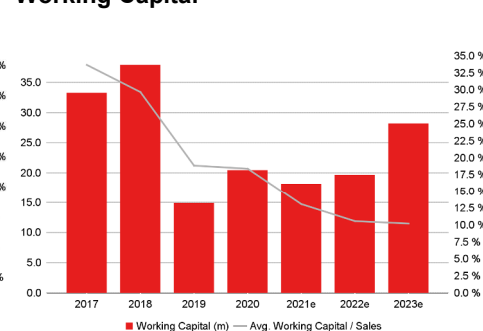
Source: Warburg Research

Free Cash Flow Generation



Source: Warburg Research

Working Capital



Source: Warburg Research

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

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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-	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	132	64
Hold	63	30
Sell	7	3
Rating suspended	5	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	38	78
Hold	8	16
Sell	0	0
Rating suspended	3	6
Total	49	100

PRICE AND RATING HISTORY LPKF AS OF 25.03.2021



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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