

Buy EUR 9.00 (EUR 8.50) Price EUR 7.91 Upside 13.8 %	Value Indicators: EUR DCF: 8.96 FCF-Value Potential 17e: 7.94	Share data: Bloomberg: MXHN GR Reuters: MAXG.DE ISIN: DE000A2DA588	Description: High-tech automation specialist
	Market Snapshot: EUR m Market cap: 233.0 No. of shares (m): 29.5 EV: 269.1 Freefloat MC: 123.5 Ø Trad. Vol. (30d): 134.97 th	Shareholders: Freefloat 53.0 % Günther-Gruppe 31.4 % Stüber & Co. KG 6.1 % Badem-Württemb. Vers.-anstalt 8.9 % Universal Investment 4.1 %	Risk Profile (WRe): 2017e Beta: 1.5 Price / Book: 1.6 x Equity Ratio: 43 % Net Fin. Debt / EBITDA: 1.1 x Net Debt / EBITDA: 1.1 x

Well on track to meet targets after strong Q3

Stated Figures Q3/2017:								Comment on Figures:	
in EUR m	Q3/17	Q3/17e	Q3/16	yoy	9M/17	9M/16	yoy	<ul style="list-style-type: none"> Revenue growth chiefly driven by the Industrial Automation segment (+31.5% yoy) whereas Environmental Technology (ET) was flat (+0.7% yoy) Profitability benefitted from the higher revenue base and generally improved efficiency, particularly in the Environmental Technology segment which was only breakeven at EBIT level last year as segment revenues declined sharply (Q3/17 EBIT before PPA in ET of EUR 4.5m vs. EUR 0.36m in Q3/16). 	
Sales	90.9	88.6	74.3	22.4%	271.1	234.4	16.7%		
EBITDA	7.9	7.4	6.3	25.6%	20.9	14.6	43.2%		
<i>Margin</i>	8.7%	8.4%	8.5%		7.7%	6.2%			
EBIT before PPA	6.3	5.8	4.6	36.9%	16.0	9.6	66.9%		
<i>Margin</i>	7.0%	6.5%	6.2%		5.9%	4.1%			
EBIT	5.8	5.3	3.6	63.4%	14.5	6.4	125.9%		
<i>Margin</i>	6.4%	6.0%	4.8%		5.3%	2.7%			
EPS in EUR	0.12	0.11	0.10	20.0%	0.29	0.11	163.6%		

Following the release of Q3/17 results on November 14, we are increasing our price target and confirm our Buy recommendation. The price target rises to **EUR 9** per share (EUR 8.50) after we increase our revenue and earnings forecasts and roll forward our model.

MAX Automation confirmed its guidance for revenues of at least EUR 370m and EBIT before PPA in the range of EUR 22-25m. Considering that Q4 is typically the strongest quarter in terms of profitability and with 9M/17 EBIT before PPA of EUR 16m, the upper end of that corridor appears to be well in reach. The order situation remains good with order intake in the Industrial Automation segment up slightly by 3.8% yoy and 9M/17 order backlog of EUR 174.4m at approx. last year's level. For the Environmental Technology segment, management indicated that the general environment for recycling solutions was improving, which is also evident from the strong growth in order intake in Q3/17 (+58.8% yoy) due to several new orders that will largely materialise in 2018. With a book-to-bill ratio of 1.18x for Q3/17, the outlook remains good and we reaffirm our Buy recommendation.

Changes in Estimates:							Comment on Changes:	
FY End: 31.12. in EUR m	2017e (old)	+ / -	2018e (old)	+ / -	2019e (old)	+ / -	<ul style="list-style-type: none"> Fine-tuning of estimates FY 2018 revenue growth also reflects the acquisition of Shanghai Cisens Automation Co., Ltd., which we expect to contribute about EUR 20m in revenues in FY 2018. 	
Sales	376.5	2.6 %	417.4	2.7 %	440.6	2.1 %		
EBIT before	23.5	5.1 %	29.7	3.4 %	34.4	3.9 %		
EBIT	21.8	4.1 %	28.0	3.6 %	33.1	4.1 %		
EPS	0.55	5.5 %	0.60	3.3 %	0.72	4.2 %		

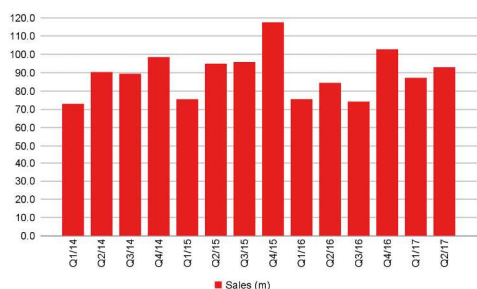


Rel. Performance vs CDAX:	
1 month:	-0.7 %
6 months:	0.6 %
Year to date:	24.7 %
Trailing 12 months:	28.2 %

Company events:	

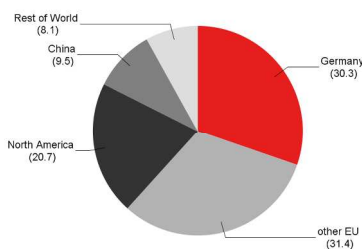
FY End: 31.12. in EUR m	CAGR (16-19e)	2013	2014	2015	2016	2017e	2018e	2019e
Sales	10.1 %	270.1	351.4	384.0	337.1	386.3	428.5	449.9
Change Sales yoy		10.6 %	30.1 %	9.3 %	-12.2 %	14.6 %	10.9 %	5.0 %
<i>Gross profit margin</i>		49.6 %	47.9 %	48.2 %	49.6 %	48.5 %	48.6 %	48.6 %
EBITDA	21.2 %	23.3	28.0	32.3	24.4	31.5	38.2	43.5
<i>Margin</i>		8.6 %	8.0 %	8.4 %	7.2 %	8.2 %	8.9 %	9.7 %
EBIT before PPA	27.2 %	18.2	20.5	24.7	17.4	24.7	30.7	35.8
<i>Margin</i>		6.7 %	5.8 %	6.4 %	5.2 %	6.4 %	7.2 %	8.0 %
EBIT	40.7 %	17.0	18.0	19.9	12.4	22.7	29.0	34.5
<i>Margin</i>		6.3 %	5.1 %	5.2 %	3.7 %	5.9 %	6.8 %	7.7 %
Net income	38.6 %	10.2	10.0	10.2	8.3	16.0	18.3	22.1
EPS	34.2 %	0.38	0.37	0.38	0.31	0.58	0.62	0.75
DPS	0.0 %	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Dividend Yield		3.2 %	3.3 %	3.0 %	2.6 %	1.9 %	1.9 %	1.9 %
FCFPS		0.63	0.30	0.91	-0.92	0.73	0.44	0.55
FCF / Market cap		13.5 %	8.8 %	18.0 %	-16.0 %	8.7 %	5.6 %	7.0 %
EV / Sales		0.7 x	0.5 x	0.5 x	0.7 x	0.7 x	0.6 x	0.6 x
EV / EBITDA		8.1 x	6.1 x	5.5 x	9.2 x	8.5 x	6.8 x	5.7 x
P / E		12.2 x	12.4 x	13.4 x	18.6 x	13.6 x	12.8 x	10.5 x
P / E adj.		12.2 x	9.5 x	10.0 x	14.4 x	12.8 x	12.6 x	10.5 x
FCF Potential Yield		8.4 %	11.8 %	12.3 %	8.4 %	8.1 %	9.7 %	11.7 %
Net Debt		65.0	48.9	40.8	70.9	36.0	27.1	15.3
ROCE (NOPAT)		9.3 %	8.3 %	8.8 %	6.6 %	10.2 %	11.3 %	13.0 %
Guidance:	2017e: Sales of at least EUR 370m, EBIT before PPA of EUR 22-25m.							

Sales development in EUR m



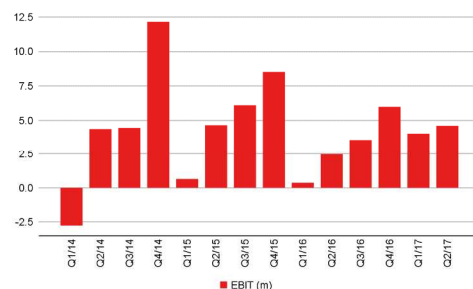
Source: Warburg Research

Sales by regions 2016; in %



Source: Warburg Research

EBIT development in EUR m



Source: Warburg Research

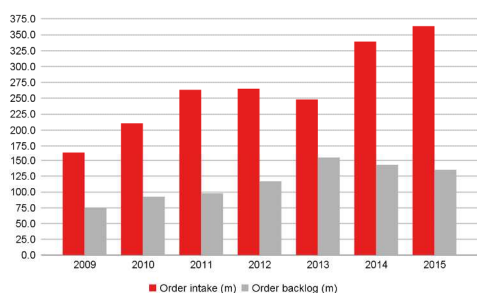
Company Background

- M.A.X. Automation AG (M.A.X.) is a globally active group of companies operating in the industrial automation and environmental technology segments.
- In Industrial Automation M.A.X. develops and produces automation solutions for key sectors such as the automotive, medical technology, electronics and food processing industries.
- In Environmental technology M.A.X. offers innovative solutions for the disposal and recycling of waste (high-performance systems for shredding, conveying and preparing primary and secondary raw materials).
- The markets that M.A.X. targets are situated mainly in Europe, North America, South America, and Asia. The subsidiaries are represented partly by its own sales companies on international markets.

Competitive Quality

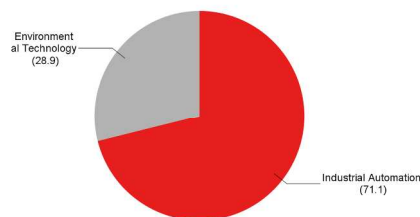
- All subsidiaries of M.A.X. are positioned as technologically leading providers in their respective markets, offering individual automation and process solutions.
- M.A.X. focuses on the development and production of technologically complex components and systems solutions based on extensive, in-depth process know-how.
- As M.A.X. offers individual technical components (35% WRe), automation systems (55% WRe) as well as services (10% WRe)...
- ... M.A.X. has an important competitive advantage and is able to provide customer-specific, integrated automation solutions with a high degree of technical complexity on a one-stop shop basis.
- As M.A.X. operates in an environment characterized by intense global competition and permanent technological progress, innovation is key to M.A.X.'s success.

Order intake and backlog in EUR m



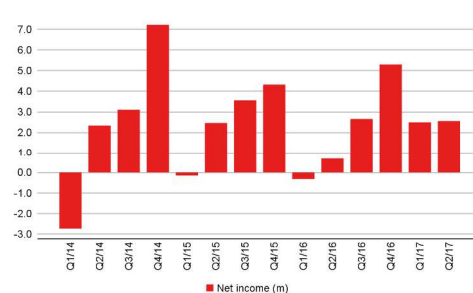
Source: Warburg Research

Sales by segments 2016; 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
	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	
Sales	386.3	428.5	449.9	470.2	489.6	508.0	525.6	542.2	557.9	572.7	586.6	599.6	611.8	
Sales change	14.6 %	10.9 %	5.0 %	4.5 %	4.1 %	3.8 %	3.5 %	3.2 %	2.9 %	2.6 %	2.4 %	2.2 %	2.0 %	2.0 %
EBIT	22.7	29.0	34.5	36.0	36.7	37.3	37.8	38.2	38.5	38.6	38.7	38.6	38.5	
EBIT-margin	5.9 %	6.8 %	7.7 %	7.7 %	7.5 %	7.4 %	7.2 %	7.0 %	6.9 %	6.7 %	6.6 %	6.4 %	6.3 %	
Tax rate (EBT)	19.5 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	
NOPAT	18.3	20.3	24.1	25.2	25.7	26.1	26.5	26.7	26.9	27.0	27.1	27.1	27.0	
Depreciation	8.8	9.2	9.0	9.4	9.9	10.5	11.0	11.5	12.1	12.6	13.1	13.6	14.1	
in % of Sales	2.3 %	2.1 %	2.0 %	2.0 %	2.0 %	2.1 %	2.1 %	2.1 %	2.2 %	2.2 %	2.2 %	2.3 %	2.3 %	
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	-7.0	4.4	4.9	4.6	4.4	4.2	4.0	3.8	3.6	3.4	3.2	3.0	2.8	
- Capex	11.5	10.0	10.0	10.5	11.0	11.5	12.0	12.5	12.9	13.4	13.8	14.2	14.6	
Capex in % of Sales	3.0 %	2.3 %	2.2 %	2.2 %	2.3 %	2.3 %	2.3 %	2.3 %	2.3 %	2.3 %	2.3 %	2.4 %	2.4 %	
Other	12.0	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)	10.5	15.1	18.2	19.5	20.2	20.9	21.5	22.0	22.5	22.9	23.2	23.5	23.7	24
PV of FCF	10.5	14.0	15.6	15.4	14.8	14.1	13.4	12.7	12.0	11.3	10.6	9.9	9.3	152
share of PVs	12.68 %			39.13 %										48.19 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	26.25 %	Financial Strength	1.35
Cost of debt (after tax)	3.5 %	Liquidity (share)	1.70
Market return	7.00 %	Cyclicality	1.45
Risk free rate	1.50 %	Transparency	1.50
		Others	1.50
WACC	8.11 %	Beta	1.50

Valuation (m)

Present values 2029e	164		
Terminal Value	152		
Financial liabilities	93		
Pension liabilities	1		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	42	No. of shares (m)	29.5
Equity Value	264	Value per share (EUR)	8.96

Sensitivity Value per Share (EUR)

Beta	WACC	Terminal Growth							Beta	WACC	Delta EBIT-margin						
		1.25 %	1.50 %	1.75 %	2.00 %	2.25 %	2.50 %	2.75 %			-1.5 pp	-1.0 pp	-0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+1.5 pp
1.75	9.1 %	7.11	7.23	7.36	7.49	7.64	7.79	7.96	1.75	9.1 %	4.94	5.79	6.64	7.49	8.34	9.19	10.05
1.62	8.6 %	7.71	7.85	8.01	8.17	8.35	8.54	8.75	1.62	8.6 %	5.43	6.34	7.26	8.17	9.08	10.00	10.91
1.56	8.4 %	8.04	8.20	8.37	8.55	8.75	8.96	9.20	1.56	8.4 %	5.71	6.65	7.60	8.55	9.50	10.45	11.39
1.50	8.1 %	8.39	8.57	8.76	8.96	9.18	9.42	9.68	1.50	8.1 %	6.00	6.99	7.97	8.96	9.95	10.93	11.92
1.44	7.9 %	8.78	8.97	9.18	9.41	9.65	9.92	10.22	1.44	7.9 %	6.33	7.35	8.38	9.41	10.43	11.46	12.48
1.38	7.6 %	9.19	9.40	9.64	9.89	10.17	10.47	10.81	1.38	7.6 %	6.68	7.75	8.82	9.89	10.96	12.03	13.10
1.25	7.1 %	10.12	10.39	10.68	11.00	11.36	11.75	12.19	1.25	7.1 %	7.49	8.66	9.83	11.00	12.17	13.35	14.52

- The Beta reflects the cyclicality of the business and the high volatility of the stock.
- The line Other reflects the assumed purchase price for Shanghai Cisans

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	2013	2014	2015	2016	2017e	2018e	2019e	
Net Income before minorities	10.2	10.0	10.6	8.3	16.0	18.3	22.1	
+ Depreciation + Amortisation	6.3	10.0	12.4	12.0	8.8	9.2	9.0	
- Net Interest Income	-2.4	-3.8	-3.6	-2.8	-2.8	-2.8	-2.8	
- Maintenance Capex	2.9	3.5	4.9	4.4	5.8	5.0	5.0	
+ Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
= Free Cash Flow Potential	15.9	20.3	21.7	18.8	21.9	25.3	29.0	
FCF Potential Yield (on market EV)	8.4 %	11.8 %	12.3 %	8.4 %	8.1 %	9.7 %	11.7 %	
WACC	8.11 %	8.11 %	8.11 %	8.11 %	8.11 %	8.11 %	8.11 %	
= Enterprise Value (EV)	189.3	171.6	176.8	225.3	269.1	260.1	248.3	
= Fair Enterprise Value	196.4	250.4	267.7	232.4	269.9	312.5	357.4	
- Net Debt (Cash)	69.9	69.9	69.9	69.9	35.0	26.1	14.3	
- Pension Liabilities	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
- 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	125.4	179.5	196.8	161.5	233.9	285.4	342.1	
Aktienanzahl (Mio.)	26.8	26.8	26.8	26.8	27.8	29.5	29.5	
= Fair value per share (EUR)	4.68	6.70	7.34	6.03	8.41	9.69	11.61	
premium (-) / discount (+) in %					6.4 %	22.5 %	46.8 %	
Sensitivity Fair value per Share (EUR)								
	11.11 %	2.46	3.80	4.23	3.35	5.46	6.82	8.34
	10.11 %	2.94	4.41	4.88	3.92	6.13	7.59	9.21
	9.11 %	3.53	5.16	5.68	4.62	6.93	8.52	10.28
WACC	8.11 %	4.26	6.09	6.68	5.48	7.94	9.69	11.61
	7.11 %	5.20	7.29	7.96	6.59	9.23	11.18	13.32
	6.11 %	6.44	8.87	9.65	8.06	10.94	13.16	15.58
	5.11 %	8.17	11.08	12.01	10.11	13.32	15.92	18.74

Peer Group										
Company	Price	EV / Sales		EV / EBITDA		EV / EBIT		P / E		EPS CAGR (16-19e)
		17e	18e	17e	18e	17e	18e	17e	18e	
Prices in local currency										
Andritz	45.75	0.7	7.3	6.8	9.8	9.0	15.6	15.0	6.1 %	
Automation Tooling Systems	15.05	1.3	10.9	9.7	14.7	12.8	22.3	19.8	13.8 %	
DMG Mori Seiki	46.80	-	-	-	-	-	35.2	26.1	-	
Dürr	105.50	1.0	9.5	8.8	12.0	11.0	18.9	17.9	6.7 %	
Industria Macchine	72.45	2.0	13.7	11.8	16.4	14.2	29.8	25.7	11.7 %	
Krones	104.70	0.8	8.8	7.9	12.1	10.9	18.4	17.0	7.9 %	
Manz	37.02	0.7	11.2	7.8	28.8	11.9	56.4	17.1	-	
Mikron Holding	6.82	-	-	-	-	-	-	-	-	
Average		1.1	10.2	8.8	15.6	11.6	28.1	19.8	9.3 %	
Median		0.9	10.2	8.3	13.4	11.4	22.3	17.9	6.1 %	
MAX Automation	7.91	0.7	8.5	6.8	11.8	9.0	13.6	12.8	34.2 %	
Delta to median		-22.2 %	-16.2 %	-18.3 %	-11.9 %	-21.6 %	-38.9 %	-28.8 %	458.5 %	

- Closest peers and competitors are Andritz (through Schuler), ATS and Dürr.
- Manz and DMG are not active in M.A.X.'s business areas but they are perceived as high-tech automation specialist.

Valuation								
	2013	2014	2015	2016	2017e	2018e	2019e	
Price / Book	1.3 x	1.2 x	1.3 x	1.4 x	1.6 x	1.5 x	1.3 x	
Book value per share ex intangibles	1.14	1.32	1.28	1.58	2.51	3.03	3.65	
EV / Sales	0.7 x	0.5 x	0.5 x	0.7 x	0.7 x	0.6 x	0.6 x	
EV / EBITDA	8.1 x	6.1 x	5.5 x	9.2 x	8.5 x	6.8 x	5.7 x	
EV / EBIT	11.1 x	9.5 x	8.9 x	18.2 x	11.8 x	9.0 x	7.2 x	
EV / EBIT adj.*	10.4 x	7.8 x	7.1 x	13.0 x	10.9 x	8.5 x	6.9 x	
P / FCF	7.4 x	11.3 x	5.6 x	n.a.	10.9 x	17.8 x	14.4 x	
P / E	12.2 x	12.4 x	13.4 x	18.6 x	13.6 x	12.8 x	10.5 x	
P / E adj.*	12.2 x	9.5 x	10.0 x	14.4 x	12.8 x	12.6 x	10.5 x	
Dividend Yield	3.2 %	3.3 %	3.0 %	2.6 %	1.9 %	1.9 %	1.9 %	
FCF Potential Yield (on market EV)	8.4 %	11.8 %	12.3 %	8.4 %	8.1 %	9.7 %	11.7 %	

*Adjustments made for: -

Company Specific Items							
	2013	2014	2015	2016	2017e	2018e	2019e
EBIT before PPA	18.2	20.5	24.7	17.4	24.7	30.7	35.8
Margin	6.7 %	5.8 %	6.4 %	5.2 %	6.4 %	7.2 %	8.0 %
Order intake	248.3	339.3	363.7	395.7	0.0	0.0	0.0
Order backlog	154.7	143.1	135.2	193.8	0.0	0.0	0.0

Consolidated profit & loss

In EUR m	2013	2014	2015	2016	2017e	2018e	2019e
Sales	270.1	351.4	384.0	337.1	386.3	428.5	449.9
Change Sales yoy	10.6 %	30.1 %	9.3 %	-12.2 %	14.6 %	10.9 %	5.0 %
Increase / decrease in inventory	0.1	-3.4	-3.5	2.6	2.0	0.5	0.5
Own work capitalised	1.3	4.3	2.0	3.1	2.0	2.0	2.0
Total Sales	271.5	352.4	382.6	342.8	390.3	431.0	452.4
Material expenses	137.6	184.0	197.4	175.6	202.8	222.8	234.0
Gross profit	133.9	168.4	185.2	167.2	187.5	208.2	218.5
<i>Gross profit margin</i>	<i>49.6 %</i>	<i>47.9 %</i>	<i>48.2 %</i>	<i>49.6 %</i>	<i>48.5 %</i>	<i>48.6 %</i>	<i>48.6 %</i>
Personnel expenses	77.4	103.0	110.2	106.6	114.5	125.0	128.0
Other operating income	4.9	10.7	14.1	9.8	9.0	9.0	9.0
Other operating expenses	38.1	48.2	56.7	46.0	50.5	54.0	56.0
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	23.3	28.0	32.3	24.4	31.5	38.2	43.5
<i>Margin</i>	<i>8.6 %</i>	<i>8.0 %</i>	<i>8.4 %</i>	<i>7.2 %</i>	<i>8.2 %</i>	<i>8.9 %</i>	<i>9.7 %</i>
Depreciation of fixed assets	4.2	4.9	5.2	5.0	4.3	5.0	5.5
EBITA	19.1	23.1	27.0	19.4	27.2	33.2	38.0
Amortisation of intangible assets	2.1	5.1	7.1	7.0	4.5	4.2	3.5
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	17.0	18.0	19.9	12.4	22.7	29.0	34.5
<i>Margin</i>	<i>6.3 %</i>	<i>5.1 %</i>	<i>5.2 %</i>	<i>3.7 %</i>	<i>5.9 %</i>	<i>6.8 %</i>	<i>7.7 %</i>
EBIT adj.	18.2	21.9	24.8	17.4	24.7	30.7	35.8
Interest income	0.0	0.2	0.2	0.1	0.1	0.1	0.1
Interest expenses	2.0	4.0	3.8	2.9	2.9	2.9	2.9
Other financial income (loss)	-0.4	0.0	0.0	0.0	0.0	0.0	0.0
EBT	14.6	14.2	16.3	9.5	19.9	26.1	31.6
<i>Margin</i>	<i>5.4 %</i>	<i>4.0 %</i>	<i>4.2 %</i>	<i>2.8 %</i>	<i>5.1 %</i>	<i>6.1 %</i>	<i>7.0 %</i>
Total taxes	4.5	4.2	5.7	1.2	3.9	7.8	9.5
Net income from continuing operations	10.2	10.0	10.6	8.3	16.0	18.3	22.1
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	10.2	10.0	10.6	8.3	16.0	18.3	22.1
Minority interest	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Net income	10.2	10.0	10.2	8.3	16.0	18.3	22.1
<i>Margin</i>	<i>3.8 %</i>	<i>2.9 %</i>	<i>2.7 %</i>	<i>2.5 %</i>	<i>4.1 %</i>	<i>4.3 %</i>	<i>4.9 %</i>
Number of shares, average	26.8	26.8	26.8	26.8	27.8	29.5	29.5
EPS	0.38	0.37	0.38	0.31	0.58	0.62	0.75
EPS adj.	0.38	0.48	0.51	0.40	0.62	0.63	0.75

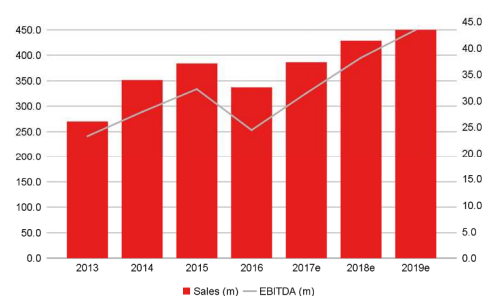
*Adjustments made for:

Guidance: 2017e: Sales of at least EUR 370m, EBIT before PPA of EUR 22-25m.

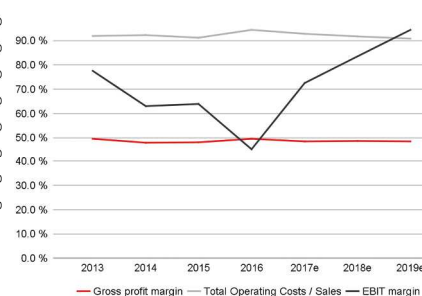
Financial Ratios

	2013	2014	2015	2016	2017e	2018e	2019e
Total Operating Costs / Sales	91.9 %	92.3 %	91.2 %	94.4 %	92.9 %	91.7 %	90.9 %
Operating Leverage	2.5 x	0.2 x	1.2 x	3.1 x	5.7 x	2.5 x	3.8 x
EBITDA / Interest expenses	11.9 x	7.1 x	8.5 x	8.3 x	10.8 x	13.0 x	14.8 x
Tax rate (EBT)	30.5 %	29.3 %	34.9 %	12.6 %	19.5 %	30.0 %	30.0 %
Dividend Payout Ratio	39.6 %	40.1 %	38.0 %	48.2 %	26.0 %	24.1 %	20.0 %
Sales per Employee	204,312	204,562	224,439	192,540	220,644	244,726	256,962

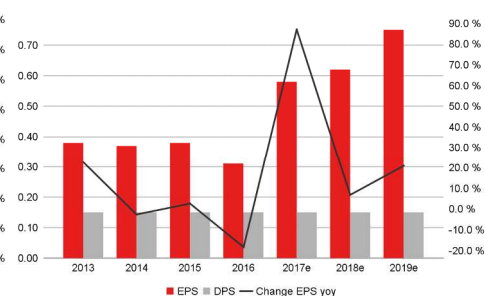
Sales, EBITDA
in EUR m



Operating Performance
in %



Performance per Share



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

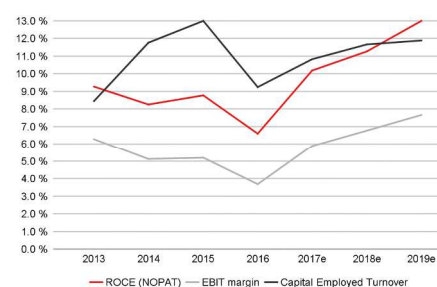
Consolidated balance sheet

In EUR m	2013	2014	2015	2016	2017e	2018e	2019e
Assets							
Goodwill and other intangible assets	63.4	64.4	72.0	68.5	67.6	66.4	65.9
thereof other intangible assets	17.5	18.4	18.8	15.4	14.4	13.2	12.7
thereof Goodwill	46.0	46.0	53.1	53.1	53.1	53.1	53.1
Property, plant and equipment	41.9	39.3	32.5	31.6	35.3	37.3	38.8
Financial assets	0.7	0.3	6.0	3.7	3.7	3.7	3.7
Other long-term assets	6.3	0.9	0.4	0.3	0.3	0.3	0.3
Fixed assets	112.3	104.8	110.9	104.2	106.9	107.7	108.7
Inventories	44.8	42.0	39.7	41.2	42.9	47.6	50.0
Accounts receivable	98.4	82.0	99.8	121.2	105.8	111.5	117.1
Liquid assets	26.3	52.4	21.4	23.0	57.9	66.8	78.7
Other short-term assets	13.9	14.2	11.5	16.7	16.7	16.7	16.7
Current assets	183.3	190.5	172.3	202.2	223.3	242.6	262.4
Total Assets	295.6	295.4	283.2	306.3	330.2	350.3	371.1
Liabilities and shareholders' equity							
Subscribed capital	26.8	26.8	26.8	26.8	29.5	29.5	29.5
Capital reserve	3.1	3.1	3.1	3.1	19.0	19.0	19.0
Retained earnings	64.4	69.6	75.7	80.0	92.0	106.1	123.9
Other equity components	-0.3	0.4	0.7	1.0	1.0	1.0	1.0
Shareholders' equity	94.0	99.8	106.2	110.8	141.5	155.6	173.3
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total equity	94.0	99.8	106.2	110.8	141.5	155.6	173.3
Provisions	13.8	15.2	16.9	10.6	10.6	10.6	10.6
thereof provisions for pensions and similar obligations	0.8	1.0	1.1	1.0	1.0	1.0	1.0
Financial liabilities (total)	90.5	100.3	61.1	92.9	92.9	92.9	92.9
thereof short-term financial liabilities	36.5	44.3	12.3	28.8	28.8	28.8	28.8
Accounts payable	58.1	45.8	54.3	61.8	55.0	61.0	64.1
Other liabilities	39.2	34.2	44.6	30.2	30.2	30.2	30.2
Liabilities	201.5	195.6	176.9	195.5	188.7	194.7	197.8
Total liabilities and shareholders' equity	295.6	295.4	283.2	306.3	330.2	350.3	371.1

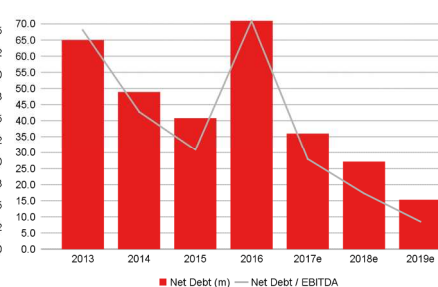
Financial Ratios

	2013	2014	2015	2016	2017e	2018e	2019e
Efficiency of Capital Employment							
Operating Assets Turnover	2.1 x	3.0 x	3.3 x	2.5 x	3.0 x	3.2 x	3.2 x
Capital Employed Turnover	1.7 x	2.4 x	2.6 x	1.9 x	2.2 x	2.3 x	2.4 x
ROA	9.1 %	9.6 %	9.2 %	8.0 %	15.0 %	17.0 %	20.4 %
Return on Capital							
ROCE (NOPAT)	9.3 %	8.3 %	8.8 %	6.6 %	10.2 %	11.3 %	13.0 %
ROE	11.1 %	10.3 %	9.9 %	7.7 %	12.7 %	12.3 %	13.5 %
Adj. ROE	11.1 %	13.2 %	13.2 %	10.0 %	13.7 %	12.5 %	13.5 %
Balance sheet quality							
Net Debt	65.0	48.9	40.8	70.9	36.0	27.1	15.3
Net Financial Debt	64.1	47.9	39.7	69.9	35.0	26.1	14.3
Net Gearing	69.1 %	49.0 %	38.4 %	64.0 %	25.5 %	17.4 %	8.8 %
Net Fin. Debt / EBITDA	275.3 %	171.4 %	123.1 %	286.1 %	111.1 %	68.3 %	32.8 %
Book Value / Share	3.5	3.7	4.0	4.1	4.8	5.3	5.9
Book value per share ex intangibles	1.1	1.3	1.3	1.6	2.5	3.0	3.6

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

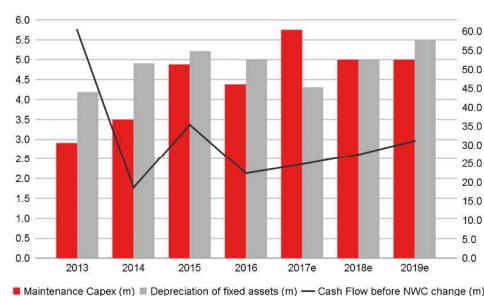
In EUR m	2013	2014	2015	2016	2017e	2018e	2019e
Net income	10.2	10.0	10.6	8.3	16.0	18.3	22.1
Depreciation of fixed assets	4.2	4.9	5.2	5.0	4.3	5.0	5.5
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	2.1	5.1	7.1	7.0	4.5	4.2	3.5
Increase/decrease in long-term provisions	0.0	0.2	0.1	0.0	0.0	0.0	0.0
Other non-cash income and expenses	44.0	-1.5	12.4	2.0	0.0	0.0	0.0
Cash Flow before NWC change	60.4	18.7	35.4	22.4	24.8	27.5	31.1
Increase / decrease in inventory	-7.3	0.2	2.3	-4.2	-1.7	-4.7	-2.4
Increase / decrease in accounts receivable	-45.0	14.3	-14.3	-22.0	15.4	-5.7	-5.6
Increase / decrease in accounts payable	14.5	-15.4	4.1	7.4	-6.8	6.0	3.1
Increase / decrease in other working capital positions	0.0	0.0	6.8	-19.6	0.0	0.0	0.0
Increase / decrease in working capital (total)	-37.8	-0.9	-1.2	-38.3	7.0	-4.4	-4.9
Net cash provided by operating activities [1]	22.6	17.8	34.2	-15.9	31.7	23.1	26.2
Investments in intangible assets	-1.0	-2.0	-3.4	-3.7	-3.5	-3.0	-3.0
Investments in property, plant and equipment	-4.9	-5.0	-6.3	-5.0	-8.0	-7.0	-7.0
Payments for acquisitions	-34.9	0.0	-7.6	-1.5	0.0	0.0	0.0
Financial investments	0.0	0.1	1.7	0.3	0.0	0.0	0.0
Income from asset disposals	0.2	7.4	3.3	1.6	0.0	0.0	0.0
Net cash provided by investing activities [2]	-40.5	-2.3	-15.8	-9.0	-11.5	-10.0	-10.0
Change in financial liabilities	61.0	14.4	-41.6	32.3	0.0	0.0	0.0
Dividends paid	-4.0	-4.0	-4.0	-4.0	-4.0	-4.2	-4.4
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	18.7	0.0	0.0
Other	-35.5	0.0	-4.1	-1.9	0.0	0.0	0.0
Net cash provided by financing activities [3]	21.4	10.3	-49.8	26.4	14.6	-4.2	-4.4
Change in liquid funds [1]+[2]+[3]	3.6	25.8	-31.3	1.5	34.9	8.9	11.8
Effects of exchange-rate changes on cash	-0.1	0.2	0.3	0.1	0.0	0.0	0.0
Cash and cash equivalent at end of period	26.3	52.4	21.4	23.0	57.9	66.8	78.7

Financial Ratios

	2013	2014	2015	2016	2017e	2018e	2019e
Cash Flow							
FCF	16.8	8.1	24.5	-24.6	20.2	13.1	16.2
Free Cash Flow / Sales	6.2 %	3.1 %	6.4 %	-7.3 %	5.2 %	3.1 %	3.6 %
Free Cash Flow Potential	15.9	20.3	21.7	18.8	21.9	25.3	29.0
Free Cash Flow / Net Profit	165.5 %	108.0 %	239.7 %	-296.2 %	126.4 %	71.6 %	73.3 %
Interest Received / Avg. Cash	0.0 %	0.4 %	0.5 %	0.4 %	0.2 %	0.1 %	0.1 %
Interest Paid / Avg. Debt	3.3 %	4.2 %	4.7 %	3.8 %	3.2 %	3.2 %	3.2 %
Management of Funds							
Investment ratio	2.2 %	2.0 %	2.5 %	2.6 %	3.0 %	2.3 %	2.2 %
Maint. Capex / Sales	1.1 %	1.0 %	1.3 %	1.3 %	1.5 %	1.2 %	1.1 %
Capex / Dep	92.2 %	70.1 %	79.0 %	72.8 %	131.0 %	108.7 %	111.1 %
Avg. Working Capital / Sales	24.5 %	23.2 %	21.3 %	27.5 %	25.2 %	22.4 %	22.3 %
Trade Debtors / Trade Creditors	169.4 %	179.0 %	183.6 %	196.2 %	192.4 %	182.8 %	182.7 %
Inventory Turnover	3.1 x	4.4 x	5.0 x	4.3 x	4.7 x	4.7 x	4.7 x
Receivables collection period (days)	133	85	95	131	100	95	95
Payables payment period (days)	154	91	100	128	99	100	100
Cash conversion cycle (Days)	8	12	-8	-12	-1	-2	-2

CAPEX and Cash Flow

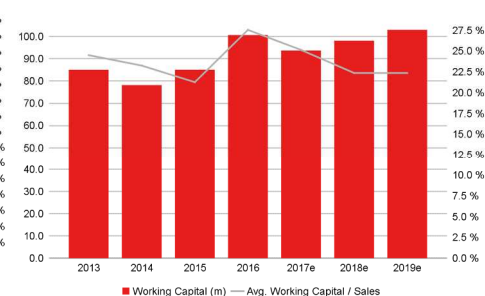
in EUR m



Free Cash Flow Generation



Working Capital



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

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Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
MAX Automation	5, 7	http://www.mmwarburg.com/disclaimer/disclaimer_en/DE000A2DA588.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	105	52
Hold	90	44
Sell	8	4
Rating suspended	0	0
Total	203	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	31	76
Hold	9	22
Sell	1	2
Rating suspended	0	0
Total	41	100

PRICE AND RATING HISTORY MAX AUTOMATION AS OF 20.11.2017



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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