October 09th, 2017

Europa | Germany | Auto Supplier

# DR. KALLIWODA RESEARCH GmbH

# **Update**

# **BUY**

Target Price: EUR 105

Industry:	Automotive Supplier
Country:	Germany
ISIN:	DE0005558696
Bloomberg:	PGNG.DE
Reuters:	PGN GR
Website:	www.paragon.ag

Last Price:		89.00
	High	Low
Price 52 W.:	95.28	34.55
Market Cap. (EURm)		402.84
No. of Shares (in m)		4.53

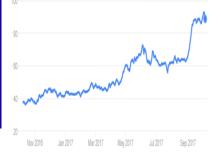
#### Shareholders

Klaus-Dieter Frers	50.01%
Free Float	49.99%

Performance	
4 Weeks	27%
26 Weeks	84%
52 Weeks	147%

Dividend	in EUR	in %
2011	0.25	4.20%
2012	0.35	3.81%
2013	0.25	2.38%
2014	0.25	1.76%
2015	0.25	0.79%
2016	0.25	0.41%

# 1-year Chart



#### **Analyst**

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Also see our Bloomberg page: KALL

# paragon AG

# well positioned for further expansion

- The remarkable operative efficiency in the Electronics and Electromobility operating segments was a crucial factor in the company's expansion in the 6M/2017. EBITDA increased 17.7% to €8.0m (former year: € 6.8 million), which translats to an EBITDA margin of 14.5% (previous year: 13.9%). the paragon Group significantly enhanced group's net income of € 1.6million in the last 6M period (previous year: €0.7m).
- With considerable contacts in place, good long-term awareness in its cumulative order book increase to €1.6bln, we consider that paragon Group well positioned for further expansion. Although the Company is actually offering significant market value, sales and income growth, we feel the serious acceleration will start from 2018 or late 2017 onwards.
- We still believe that the main driver will be the demonstration of the Company's potential to speed up manufacturing in electromobility, by means of boosting automated serial production of battery modules for intralogistics applications. Although global sales dynamics decreased during the second half of the year, the company managed to grow faster than industry, therefore, we still expect the company to generate €105m by 2019 in this sector.
- Under those circumstances, we keep increase our end-term revenue and income estimates for the Company anticipating the increase of sales by 24.6% (CAGR 2016-19E) and improvement in net income to above € 11.6m by 2019E. The stock has a rating Accumulate with a Target Price of € 105 based on DCF.

#### **Key Figures**

EURm	2012	2013	2014	2015	2016	2017E	2018E	2019E
Net sales	70.4	73.9	79.0	95.0	102.8	128.5	165.8	198.9
EBITDA	11.8	12.5	10.5	14.2	16.1	23.8	29.4	32.8
EBIT	7.8	7.9	6.2	7.8	8.9	15.1	18.1	21.2
Net income	4.6	3.9	2.8	3.4	3.6	7.1	9.1	11.7
EPS	1.1	1.0	0.7	0.8	0.8	1.6	2.0	2.6
BVPS	3.2	3.9	4.2	4.7	7.7	9.1	10.9	13.0
RoE	40.6%	27.3%	16.8%	18.6%	13.3%	18.8%	20.2%	21.6%
EBIT margin	11.0 %	10.7 %	7.9 %	8.2 %	8.7 %	11.7 %	10.9 %	10.7 %
P/E	79.0x	92.8x	132.0x	107.6x	111.9x	56.4x	44.1x	34.5x
P/BVPS	28.1x	23.0x	21.3x	19.7x	11.9x	9.9x	8.3x	6.9x
EV/EBITDA	36.8x	34.8x	41.3x	30.6x	27.0x	18.2x	14.8x	13.3x

# Content

1	Company Profile	3
1.1	Products and Market Share	3
1.2	Clients	3
1.3	Strategic partnership	4
1.4	Corporate structure	4
2	SWOT	5
3	Valuation	6
a.	WACC	6
b.	DCF	6
4	Financials	7
4.1	Financial Performance in 2Q/2017	7
5	Outlook	9
6	Shareholder's Structure	10
7	Profit and Loss Statement	11
8	Balance Sheet	12
9	Cash Flow Statement	13
10	Ratios	13
Con	ntacts	15
Dis	claimer	16
Esse	ential information, disclosures and disclaimer	16

# 1 Company Profile

paragon AG (the Company thereafter) was founded in 1988 as an electronics manufacturer. The company's headquarters are located in Delbruck (North Rhine-Westphalia). Other Company's divisions are based in Suhl, St. Georgen, Bexbach and Nuremberg (production or development). The paragon AG has also finished to build a battery production plant in Texas (USA) and a factory in Kunshan (greater Suzhou region).

#### 1.1 Products and Market Share

Founded as a contract manufacturer for electronics, paragon is now a pure Tier 1 automotive supplier. Its main focus relies on auto electronics for interior products to enhance the health, comfort, communication and efficiency. The product catalog includes more than 170 products with a capacity of over 15 million units produced per annum, in addition to its 250 patents owned.

Divisions		
Sensors	Acoustics	Electromobility
Air quality sensor AQS Air improvement system Air treatment system Clutck travel sensor All gear sensor Start-stop sensor	Microphone Seatbelt microphone blet mic	Energy Storage Powerpack Motor Controller MoDrive DC/DC Converter DCCon Onboard Charger ChargeON
Cockpit	kinematics	
Interfaces	Aerodynamic	
Cradles & Consoles	Comfort	
cTablet docking station	Convertible tops	
Instruments	Safety	

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Many of paragon's products own its unique features, such as the Voltabox battery systems, when they come to fruition in the enhancement of electromobility for commercial vehicles. The sensors, besides, can be softer and simultaneously faster gearshift, as well as for the vehicle manufacturer resulting in economic benefits, where a separate reverse gear sensor is no longer required.

#### 1.2 Clients

Controls

**Stepper Motors** 

Reversing camera system

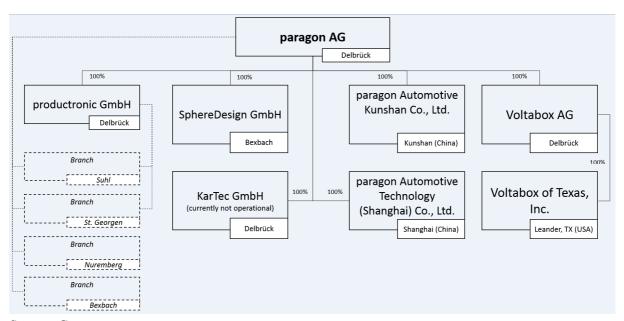
paragon AG maintains long-term customer relationship, which is translated in the fact that its over 170 products are currently demanded by 23 customers for 172 vehicle models, where the largest automotive producers, Audi, VW, Daimler, BMW and Porsche, cover approximately about 77% of total sales (end of 2015). Even though the company is increasingly receiving new orders from new products and developed applications, such as CO<sup>2</sup> sensors, wireless charging products or new innovative belt microphones.

# 1.3 Strategic partnership

In mid June, 2016, the Company announced that, Voltabox, a subsidiary of paragon AG, based in Austin, Texas, has arranged an exclusive strategic partnership with Joy Global to produce smart battery systems for mining equipment. The first supply of complex battery systems is intended for fiscal year 2017. The battery management system is developed by designers in this sort of way that the accessible energy is optimized for an entire shift of work in the mines whilst making the most of the entire battery life. This symbolizes a substantial enhancement over the lead-acid batteries presently utilized by mine operators. The client is seen to account for close to fifty percent of Voltabox's total order backlog.

paragon has regularly demonstrated its capability to pioneer and provide leading-edge technology development for both top tier automotive OEMs and significantly for blue-chip clients throughout its Electromobility division. Responding to several emerging global topics, paragon has placed itself as a strategic partner to many global players, such as recent announcements with Joy Global and KUKA, both of which consider the group into new and developing end-markets and further minimize dependence on pure automotive drivers. While electromobility is turn out to be the main driver over the medium term, the Group's core businesses carry on to expand with technology advancement and international reach.

#### 1.4 Corporate structure



Source: Company

# 2 SWOT

# **Strengths**

- Combination of innovation and integration of force through company-wide culture of innovation with a focus in developing new products, while observing the product integration into the overall system for the automobile manufacturers; by First-Mover-Advantage and high success rate of bringing products to the market. Over 170 products and 250 patents.
- Products with unique features in niche markets with high quantities in automated manufacturing. Therefore high margins and strong market position in several areas.
- **Direct supplier** with many years of customer loyalty, knowing what customers want, means entry-market barriers.
- Growth potential across all divisions, supported by blue-chip customer base.

#### Weaknesses

- High business risk due to strong sales focus on three German automotive manufacturers in the premium area, tempered by long-term customer relationships under contracts, all model series, and the relatively small dependence of premium manufacturers.
- •Low negotiating power with customers and suppliers in the low-selling environment of numerous competitors mitigated by the relatively higher willingness to pay the premium end-user customers.
- •Strong competition with high pressure to innovate, since more than half of key innovations are taking place in the field of electronics.

# **Opportunities**

- Increasing use of paragon products in the compact and mid-range through new technologies and efficient production with a high degree of automation and economies of scale, eg. Air quality.
- Growth and diversification through the field of electric mobility by expanding the customer base to smaller commercial vehicles in domestic and urban areas, where applications are already in use for electric mobility.
- Reduction of product-specific integration costs for the customer through development of applications to support the vehicle installation can be a significant competitive advantage.
- Considerable pipeline of new product introductions arriving at market via R&D investment

#### Risks

- Products are not expected to develop their potential and the number of units produced cannot cover the costs. paragon AG tries to avoid this by an intensive dialogue with automobile manufacturers.
- Competitor may displace paragon of revenueimportant market niches.
- An unexpected slump in the automobile industry may lead to liquidity difficulties at paragon.
- Significant production increase needs to be delivered

# 3 Valuation

Our DCF model for paragon AG indicates a 12-month fair value of  $\leq$  105 per share. Although some delays and one-time effects may occur in 2017 in the electromobility business, we have estimated significant profitability contributions in the upcoming years from this division while the automotive divisions in our forecasts should impact more from 2018.

# a. WACC

The discount rate was calculated by deriving the weighted cost of capital. We assumed that the target capital structure will not change in the subsequent business years. Figuring a risk prime follows the CAPM and covers in particular the systemic risks (market risk prime exp. company specific risk).

WACC assumptions	
Equity	
Long-term risk free rate	2.0%
Market risk premium	5.8%
Beta	1.00
Equity costs	7.8%
Debt	
Debt costs (before tax)	3.2%
Taxe rate on debt interest	30.0%
Debt costs (after tax)	2.2%
Equity value	61.0%
Debt Value	39.0%
Gearing	63.8%
WACC	5.6%

Source: Company, Dr. Kalliwoda Research GmbH © Copyright 2017

#### b. DCF

Discounted-Cash-Flow-Modell (	Basis 06/2017)
EUR m	
Net sales	
(y-o-y change)	
BIT	
(EBIT margin)	
NOPLAT	
- Depreciation and Amortization	
Net operating cash flow	
Total investments (Capex and WC)	
Capital expenditure	
Working capital	
Free cash flow (FCF)	
PV of FCF's	
V of FCFs in explicit period	14.2
V of FCFs in terminal period	467.4
nterprise value (EV)	481.6
Net cash / - net debt	-31.7
Investitionen / - Minderheiten	0.0
hareholder value	449.9
lumber of shares outstanding (m)	4.5
VACC	5.6%
Cost of equity	7.8%
Pre-tax cost of debt	3.2%
Normal tax rate	30.0%
After-tax cost of debt	2.2%
Share of equity	61.0%
Share of debt	39.0%

Source: Company, Dr. Kalliwoda Research GmbH © Copyright 2017

Fair value per share in € (today)
Fair value per share in € (in 12 months)

# 4 Financials

# 4.1 Financial Performance in 2Q/2017

The remarkable operative efficiency in the Electronics and Electromobility operating segments was a crucial factor in the company's expansion in the 6M/2017. EBITDA increased 17.7% to €8.0m (former year: € 6.8 million), which translates to an EBITDA margin of 14.5% (previous year: 13.9%). the paragon Group significantly enhanced group's net income of € 1.6 million in the last 6M period (previous year: €0.7m). This may be translated to ærnings per share of €0.35 (former year: €0.16). Capitalized development costs elevated 19.6% to €75m (previous year: €6.3m), a significant percentage of which is accountable to the Electronics (51%) and Electro-mobility (28%) operating segments.

In the last 6M period, paragon AG produced sales of € 55.29m (previous year: € 48.8m), which indicates an increase of 13.3%. The best performing operating segment was Electronics with revenues of €45.8m. This segment accounts for 81% of revenues. The most growing business unit was Acoustics that registered 28.5% growth in revenues to €11.4m (6M/2016: €8.9m). EBIT for Electronics segment equalled to around €7.3m. Revenue in the Electromobility operating segment amounted to €10.6m, however EBIT was negative of €17m. Finally, sales in Mechanics segment levelled at €30.5m, that corresponds growth of 3.8% on 6M basis. EBIT was negative of €1.1m.

Total assets raised as of June 30, 2017, to €119.7m (the end of 2016: €115.6m), that is primarily accountable to the additional rise in intangible assets.

Overall, the cost structure deteriorated a bit, with increase in CoGS to Revenues ratio to 55.99%, (last year (54.32%). The personnel expense ratio increased to 30.3% (last year: 29.8%).

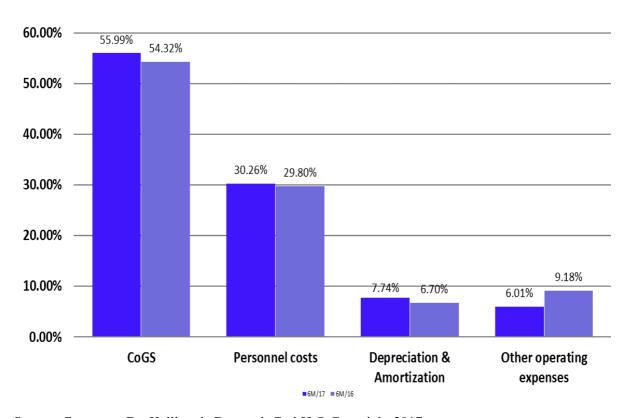
The operating cash flow lowered in the coverage period, in spite of the €1.0m higher depreciation on noncurrent assets, amounting to €1.7m (previous year: €4.7m). This development is largely as a result of a rise in other provisions and provisions for pensions. Cash flow from investing activities was reduced by €1.8m to €-9.1m in the coverage period previous year: €-10.9m), which is primarily because of substantially smaller amount of investments in property, plant and equipment. Cash and cash equivalents amounted to €8.7m as of the end of the coverage period (previous year: €5.7m).

# Key facts in 6M/2017

in EURm	6M/17	6M/16	Change
Net sales	55.29	48.82	13.3%
EBITDA	8.00	6.80	17.6%
EBITDA-Marge	14.5%	13.9%	
EBIT	3.71	3.52	5.4%
EBIT margin	6.7%	7.2%	
Net income	1.59	0.67	137.7%
Net margin	2.9%	1.4%	

Source: Company, Dr. Kalliwoda Research GmbH © Copyright 2017

# **Group Profitability 3M/2017**



# 5 Outlook

Overall, the Company reported promising results on the top line. However, the bottom line was burden be exceptionally high depreciation.

The management plans to make investments at the level of €21m in 2017, which is considerably lower than it was expected (€27m). However, some investments were shifted to the next year.

In the second quarter, the company announced that modular kit for prismatic lithium-nickel-manganese-cobalt oxide battery modules (NMC cells) for forklifts received UL safety certification for the USA. This development is an important milestone in the Company's journey into entering US market for intralogistics. On 4 September, the US market presence of Voltabox was strengthen by the announcement to receive a substantial order from Kiepe Electric to deliver battery systems for 185 trolleybuses in San Francisco.

On 11 September 2017, the Management Board of paragon AG announced take Voltabox AG public. Voltabox plans to issue 5m new shares plus an option. If all shares are placed, Voltabox AG will generate between €116.5m (€20 per share) and €139.8m (€24 pehare) and paragon AG up to €12m. We argue that this move is beneficial for current shareholders of paragon AG because it should, give Voltabox more flexibility for additional external growth through acquisitions and inflow of cash from repayment of shareholder loan to paragon AG.

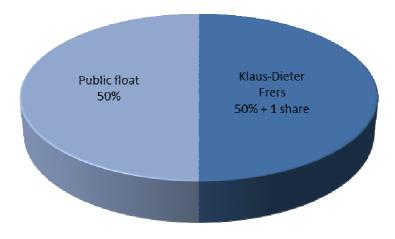
We still believe that the main driver will be the demonstration of the Company's potential to speed up manufacturing in electromobility, by means of boosting automated serial production of battery modules for intralogistics applications. Although global sales dynamics decreased during the second half of the year, the company managed to grow faster than industry, therefore, we still expect the company to generate €105m by 2019 in this sector.

Looking at the future financials, we expect top line to expand on the both qoq and yoy basis at a double digit clip as the Company should record improving revenues in 2017. Recent investments, particularly in the development of production sites in Germany, the U.S. and, most recently, in China, should begin to feed thru the P&L and this effect ought to be visible also in the following periods. Overall, we expect total sales to reach €128.5m in 2017, which constitute a25% yoy jump.

We hold our favourable view of the Company due to its very careful business attitude, balanced growth prospects and strong current efficiency. With a fundamental upside to our 12M EFV, we think the Company may offer a value on top of a balanced business growth.

Under those circumstances, we keep increase our end-term revenue and income estimates for the Company anticipating the increase of sales by 24.6% (CAGR 2016-19E) and improvement in net income to above € 11.6m by 2019E. The stock has a rating Accumulate with a Target Price of € 105 based on DCF.

# 6 Shareholder's Structure



# 7 Profit and Loss Statement

Profit and Loss Statement								
	Fiscal year							
in mEUR	2012	2013	2014	2015	2016	2017E	2018E	2019E
Net sales	70.45	73.88	79.04	94.99	102.80	128.50	165.77	198.92
Change in inventories	0.57	0.26	0.79	1.44	-0.90	0.40	0.43	0.34
Capitalised assets	2.03	1.68	5.15	12.75	14.60	13.68	14.14	13.91
other operating income	2.02	1.10	1.35	3.18	1.10	1.12	1.14	1.16
Total Output	75.05	76.91	86.33	112.37	117.60	143.69	181.47	214.33
Cost of goods sold	-36.95	-36.27	-41.85	-55.52	-57.04	-74.15	-92.73	-107.38
Gross profit	38.10	40.64	44.48	56.85	60.56	69.55	88.74	106.95
Personnel costs	-18.85	-19.60	-21.76	-26.31	-29.20	-33.05	-41.92	-49.72
Depreciation & Amortization	-3.89	-19.60	-21.76 -4.27	-6.29	-29.20 -7.20	-8.74	-41.92	-49.72
Write-downs	-0.14	-0.27	-0.02	-0.29	0.00	0.00	0.00	0.00
Other operating expenses	-7.45	-8.54	-12.20	-16.33	-15.20	-12.67	-17.40	-24.47
EBIT		7.92	6.25	7.81		15.09		21.22
Net financial results	7.78 -1.08	-1.49	-1.96	-2.79	<b>8.96</b> -3.20	-4.10	<b>18.15</b> -4.48	-4.55
EBT	6.70	6.43	4.29	5.02	5.76	10.99	13.67	16.67
Income taxes	-2.07	-2.49	-1.51	-1.62	-2.20	-3.85	-4.54	-5.00
Minority interests	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net income / loss	4.64	3.95	2.78	3.40	3.56	7.14	9.13	11.67
EPS	1.13	0.96	0.67	0.83	0.80	1.58	2.02	2.58
Change y-o-y								
Net sales	n.a	4.87%	6.98%	20.18%	8.22%	25.00%	29.00%	20.00%
Total Output	n.a	2.47%	12.25%	30.16%	4.66%	22.19%	26.29%	18.10%
Cost of goods sold	n.a	-1.85%	15.39%	32.66%	2.74%	30.00%	25.07%	15.79%
Gross profit	n.a	6.67%	9.45%	27.80%	6.53%	14.83%	27.60%	20.52%
Personnel costs	n.a	3.98%	10.98%	20.92%	11.00%	13.18%	26.84%	18.61%
Depreciation & Amortization	n.a	10.91%	-1.02%	47.55%	14.49%	21.28%	29.00%	2.35%
Other operating expenses	n.a	14.59%	42.85%	33.92%	-6.93%	-16.63%	37.32%	40.62%
EBIT Net financial results	n.a	1.88%	-21.13%	24.95%	14.74%	68.41%	20.28%	16.92%
EBT	n.a	38.35% -3.99%	31.68% -33.36%	42.05% 17.12%	14.82% 14.70%	28.13% 90.79%	9.15% 24.43%	1.68% 21.91%
Income taxes	n.a n.a	20.34%	-39.15%	7.01%	35.97%	74.95%	17.94%	10.16%
Net income /loss	n.a	-14.82%	-29.71%	22.63%	4.59%	100.58%	27.94%	27.75%
EPS -	n.a	-14.82%	-29.71%	22.63%	-3.83%	98.30%	27.94%	27.75%
Share in total revenues					2.2272			
Net sales	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Total Output	106.54 %	104.10 %	109.23 %	118.29 %	114.40 %		109.48 %	
Cost of goods sold	-52.45 %	-49.09 %	-52.95 %	-58.44 %	-55.48 %	-57.70 %	-55.94 %	-53.98 %
Gross profit	54.09 %	55.01 %	56.28 %	59.85 %	58.91 %	54.12 %	53.53 %	53.77 %
Personnel costs	-26.76 %	-26.54 %	-27.53 %	-27.69 %	-28.40 %	-25.72 %	-25.29 %	-25.00 %
Depreciation & Amortization	-5.51 %	-5.83 %	-5.40 %	-6.62 %	-7.01 %	-6.80 %	-6.80 %	-5.80 %
Write-downs	-0.19 %	-0.36 %	-0.02 %	-0.12 %	0.00 %	0.00 %	0.00 %	0.00 %
Other operating expenses	-10.58 %	-11.56 %	-15.43 %	-17.19 %	-14.79 %	-9.86 %	-10.50 %	-12.30 %
EBIT	11.04 %	10.72 %	7.91 %	8.22 %	8.72 %	11.74 %	10.95 %	10.67 %
Net financial results	-1.53 %	-2.02 %	-2.48 %	-2.93 %	-3.11 %	-3.19 %	-2.70 %	-2.29 %
EBT	9.51 %	8.71 %	5.42 %	5.29 %	5.60 %	8.55 %	8.25 %	8.38 %
Income taxes	-2.93 %	-3.36 %	-1.91 %	-1.70 %	-2.14 %	-3.00 %	-2.74 %	-2.51 %
Minority interests	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %
Net income / loss	6.58 %	5.34 %	3.51 %	3.58 %	3.46 %	5.56 %	5.51 %	5.87 %

# **Balance Sheet**

Balance Sheet - paragon AG								
			Fiscal ye	ear				
in mEUR	2012	2013	2014	2015	2016	2017E	2018E	2019E
Assets								
Cash and cash equivalents	14.08	17.65	13.26	8.45	14.30	13.67	11.97	12.76
Inventories	7.31	7.47	6.91	11.22	13.70	17.27	16.60	19.01
Trade accounts and notes receivables	1.79	6.04	9.76	10.38	8.40	10.91	10.26	12.71
Other current assets	2.20	1.95	2.40	2.81	3.30	6.43	6.29	7.95
Current assets	25.39	33.10	32.34	32.86	39.70	48.27	45.12	52.43
Property, plant and equipment	13.54	12.98	20.18	34.55	37.40	52.40	62.40	72.40
Sonstige immaterielle Vermögenswerte	4.91	5.60	9.44	23.96	37.20	40.70	42.20	42.50
Firmenwert	0.00	0.00	0.00	0.77	0.80	0.80	0.80	0.80
Other assets	0.12	0.25	0.47	0.41	0.40	0.56	0.72	0.86
Deferred tax assets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-current assets	18.58	18.83	30.08	59.69	75.80	94.46	106.12	116.56
Total assets	43.97	51.94	62.42	92.55	115.50	142.73	151.24	168.99
Liabilities								
Trade payables	3.04	3.36	6.12	10.72	16.40	20.84	19.82	22.95
Other liabilities	8.13	5.91	4.54	7.04	7.10	8.35	10.77	12.93
Short-term financial debt	2.39	2.86	5.50	9.34	12.40	19.40	22.40	27.40
Provisions	0.30	0.06	0.09	0.02	0.10	0.15	0.19	0.16
Current liabilities	13.86	12.18	16.24	27.12	36.00	48.74	53.18	63.44
Long-term financial debt	12.26	20.21	24.71	38.53	33.60	41.60	38.10	33.60
Special benefits	2.09	1.50	1.27	1.18	3.30	1.54	1.99	2.39
Pension obligations	2.73	1.22	1.88	2.09	2.50	2.99	1.66	1.99
Deferred tax liabilities	0.00	0.94	1.12	3.51	5.50	6.53	7.13	8.55
Other non-current liabilities	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00
Long-term liabilities	17.08	23.86	28.98	46.03	44.90	52.65	48.87	46.53
Total liabilities	30.94	36.04	45.23	73.15	80.90	101.40	102.05	109.97
Shareholders equity	13.03	15.89	17.20	19.40	34.70	41.33	49.18	59.02
Minority interests	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total equity and liabilities	43.97	51.94	62.42	92.55	115.60	142.73	151.24	168.99

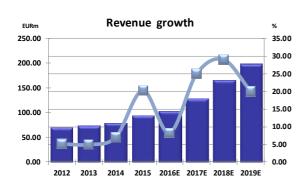
# **Cash Flow Statement**

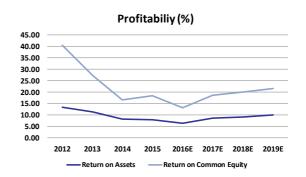
	Fiscal year							
in mEUR	2012	2013	2014	2015	2016	2017E	2018E	2019E
Net income	4.6	3.9	2.8	3.4	3.6	7.1	9.1	11.7
Depreciation & Amortisation	3.9	4.3	4.3	6.3	4.9	8.7	11.3	11.5
Others	-0.9	0.9	0.3	3.5	2.1	1.1	0.6	1.4
Change of working capital	-1.8	-4.1	-0.4	-0.3	5.2	-1.6	0.3	-1.7
Increase (-), decrease (+) in inventories	-0.4	-0.2	0.6	-4.3	-2.5	-3.6	0.7	-2.4
Increase (-), decrease (+) in trade receivables	-1.3	-4.2	-3.7	-0.6	2.0	-2.5	0.7	-2.5
Increase (+), decrease (-) in trade payable	0.0	0.3	2.8	4.6	5.7	4.4	-1.0	3.1
Others wc positions	0.0	0.0	0.0	0.0	-4.1	0.0	1.0	2.0
Net operating cash flow	5.8	5.1	6.9	12.9	16.8	13.7	22.6	23.1
Cash flow from investing	-6.2	-4.8	-15.7	-32.3	-23.3	-27.2	-22.8	-21.8
Free cash flow	-0.3	0.3	-8.7	-19.5	-6.5	-13.6	-0.1	1.3
Cash flow from financing	-0.9	3.3	4.3	14.7	12.2	12.9	-1.6	-0.5
Change in cash	-1.2	3.6	-4.4	-4.8	5.8	-0.6	-1.7	0.8
Cash, start of the year	15.3	14.1	17.6	13.3	8.5	14.3	13.7	12.0
Cash, end of the year	14.1	17.6	13.3	8.5	14.3	13.7	12.0	12.8

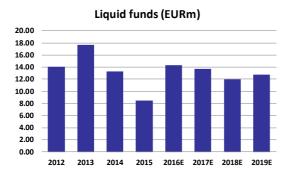
Source: Company, Dr. Kalliwoda Research GmbH © Copyright 2017

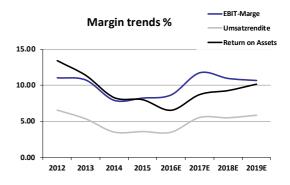
# 10 Ratios

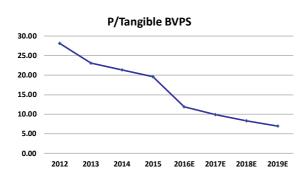
Fiscal year	2012	2013	2014	2015	2016	2017E	2018E	2019E
Gross margin	50.8%	52.8%	51.5%	50.6%	51.5%	48.4%	48.9%	49.9%
EBITDA margin	15.7%	16.3%	12.2%	12.6%	13.7%	16.6%	16.2%	15.3%
EBIT margin	10.4%	10.3%	7.2%	6.9%	8.5%	10.5%	10.0%	9.9%
Net margin	6.2%	5.1%	3.2%	3.0%	3.1%	5.0%	5.0%	5.4%
Return on equity (ROE)	40.6%	27.3%	16.8%	18.6%	13.3%	18.8%	20.2%	21.6%
Return on assets (ROA)	13.4%	11.3%	8.3%	8.0%	6.5%	8.7%	9.3%	10.1%
Return on capital employed (ROCE)	17.9%	12.2%	8.8%	8.1%	6.9%	10.4%	12.4%	14.1%
Net debt (in EURm)	0.6	5.4	16.9	39.4	31.7	47.3	48.5	48.2
Net gearing	4.4%	34.1%	98.5%	203.1%	91.4%	114.5%	98.7%	81.7%
Equity ratio	29.6%	30.6%	27.6%	21.0%	30.0%	29.0%	32.5%	34.9%
Current ratio	183.2%	271.8%	199.1%	121.2%	110.3%	99.0%	84.8%	82.6%
Quick ratio	114.6%	194.4%	141.8%	69.4%	63.1%	50.4%	41.8%	40.2%
Net interest cover	7.2	5.3	3.2	2.8	2.8	3.7	4.1	4.7
Net debt/EBITDA	0.05	0.43	1.61	2.77	1.97	1.99	1.65	1.47
CAPEX/Sales	8.2%	6.0%	19.4%	37.8%	22.7%	21.2%	13.7%	11.0%
Working capital/Sales	0.2%	8.4%	10.7%	7.0%	1.8%	4.2%	1.5%	1.9%
EV/Sales	6.2	5.9	5.5	4.6	4.2	3.4	2.6	2.2
EV/EBITDA	36.8	34.8	41.3	30.6	27.0	18.2	14.8	13.3
EV/EBIT	55.9	54.8	69.5	55.7	48.8	28.8	23.9	20.5
P/BVPS	28.1	23.0	21.3	19.7	11.9	9.9	8.3	6.9
P/E	79.0	92.8	132.0	107.6	111.9	56.4	44.1	34.5
P/FCF	-1055.4	1262.8	-42.0	-18.8	-56.3	-27.0	-2761.4	281.0

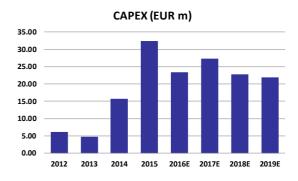












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