

Nabaltec

Germany - Chemicals/ Specialty Chemicals



HAUCK & AUFHÄUSER
PRIVATBANKIERS SEIT 1796

Buy (old: Buy)

Price target: EUR 44.00 (old: EUR 39.00)

Price: EUR 30.30 **Next result:** Final Q4 2018 30.04.19
Bloomberg: NTG@GR **Market cap:** EUR 263.1 m
Reuters: NTGG.DE **Enterprise Value:** EUR 332.0 m

21-March-19

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The magic word is “boehmite”; chg est and PT up

After being on the road with the CEO and having visited Nabaltec's production in Germany, we return highly convinced of **the company's ample earnings growth potential**, resting on three pillars:

- Boehmite.** With only two major players (Nabaltec and Estone), the niche market for boehmite used as coating solution for separation foils within lithium-ion batteries for EV's looks highly attractive. The strong volume growth expectations for 2019 (+75% to 3.5kt) are only the beginning, in our view. Being exposed to the soaring EV market, relevant sales volumes should become visible by 2022/23E. In our view, **Nabaltec's boehmite has the potential to generate € 55-60m sales and ~€ 20m EBIT by 2023. A DCF for boehmite only implies a value of € 16-25 per share** (see page 4).
- Nashtec - from burdening to boosting the P&L.** In 2018, the conversion/built-up of Nashtec burdened the group's EBIT by c. € 4m. These one-offs are now fading off. For the FY19, Nashtec should be at least EBIT break-even with the potential to positively contribute to group earnings. Nabaltec is also building up a 2nd US plant at a strategically well positioned former DuPont site in Chattanooga, TN, looks set to contribute 30kt ground ATH by the end of 2021E. This plant will also produce 5kt of high-margin surface treated ATH for rubber applications. So far, this market is dominated by J.M. Huber.
- Over-delivering on FY19 guidance likely.** Management guided for sales of €190-195m and an EBIT margin of 10-12%. Yet, this guidance factors in macro headwinds (e.g. Brexit and a slowing global economy) in course of the year. In our view, Nabaltec should beat the margin guidance, fuelled by the price increases, ample growth of high-margin boehmite and fading one-offs related to Nashtec.

The fact the **adj. EBIT margin already exceeded 12% in 2018P**, provides us with additional confidence in Nabaltec over delivering in the FY19 margin guidance.

Action: Estimates are increased to incorporate the announced price increase. FY 2021 estimates are also introduced.

In order to better reflect the positive P&L impact of the two new plants in the US and the boehmite ramp-up, **we roll valuation to FCFY 2021E, yielding a new PT of € 44** (old: € 39), **BUY.** –continued–

| Y/E 31.12 (EUR m) | 2015 | 2016 | 2017 | 2018P | 2019E | 2020E | 2021E |
|---------------------|--------|--------|--------|--------|--------|--------|--------|
| Sales | 151.3 | 159.2 | 168.6 | 176.7 | 200.1 | 220.1 | 238.6 |
| Sales growth | 6 % | 5 % | 6 % | 5 % | 13 % | 10 % | 8 % |
| EBITDA | 24.6 | 22.9 | 30.0 | 30.6 | 40.0 | 46.2 | 50.5 |
| EBIT | 14.5 | 12.2 | 18.3 | 18.5 | 26.0 | 30.8 | 34.5 |
| Net income | 6.7 | 5.3 | 11.4 | 11.5 | 17.1 | 20.5 | 23.5 |
| Net debt | 41.3 | 36.4 | 25.9 | 32.0 | 29.3 | 17.1 | -1.4 |
| Net gearing | 71.7 % | 63.6 % | 30.6 % | 34.4 % | 27.9 % | 14.6 % | -1.0 % |
| Net Debt/EBITDA | 1.7 | 1.6 | 0.9 | 1.0 | 0.7 | 0.4 | 0.0 |
| EPS pro forma | 0.84 | 1.07 | 1.30 | 1.30 | 1.94 | 2.33 | 2.67 |
| CPS | 1.15 | 1.88 | 1.90 | 1.37 | 1.84 | 2.04 | 2.80 |
| DPS | 0.15 | 0.15 | 0.18 | 0.20 | 0.24 | 0.30 | 0.40 |
| Dividend yield | 0.5 % | 0.5 % | 0.6 % | 0.7 % | 0.8 % | 1.0 % | 1.3 % |
| Gross profit margin | 48.2 % | 49.3 % | 50.8 % | 52.0 % | 53.2 % | 53.6 % | 53.6 % |
| EBITDA margin | 16.3 % | 14.4 % | 17.8 % | 17.3 % | 20.0 % | 21.0 % | 21.2 % |
| EBIT margin | 9.6 % | 7.7 % | 10.9 % | 10.5 % | 13.0 % | 14.0 % | 14.4 % |
| ROCE | 8.9 % | 7.1 % | 10.0 % | 9.9 % | 12.6 % | 15.5 % | 16.1 % |
| EV/sales | 2.0 | 2.0 | 1.9 | 1.9 | 1.6 | 1.4 | 1.3 |
| EV/EBITDA | 12.5 | 13.7 | 10.9 | 10.8 | 8.2 | 7.2 | 5.9 |
| EV/EBIT | 21.3 | 25.6 | 17.8 | 17.9 | 12.7 | 10.3 | 8.7 |
| PER | 35.6 | 28.0 | 23.0 | 22.9 | 15.4 | 12.8 | 11.2 |
| Adjusted FCF yield | 4.1 % | 3.6 % | 5.5 % | 5.5 % | 7.8 % | 9.6 % | 11.3 % |

Source: Company data, Hauck & Aufhäuser Close price as of: 20.03.2019



Source: Company data, Hauck & Aufhäuser

High/low 52 weeks: 30.30 / 21.00

Price/Book Ratio: 2.9

Relative performance (SDAX):

3 months -
6 months -
12 months -

Changes in estimates

| | | Sales | EBIT | EPS |
|------|------|-------|-------|-------|
| 2019 | old: | 193.9 | 22.8 | 1.68 |
| | Δ | 3.2% | 14.0% | 15.6% |
| 2020 | old: | 219.1 | 29.0 | 2.18 |
| | Δ | 0.4% | 6.4% | 6.9% |
| 2021 | old: | | | |
| | Δ | | | |

Key share data:

Number of shares: (in m pcs) 8.8
 Authorised capital: (in € m) 3.2
 Book value per share: (in €) 10.6
 Ø trading volume: (12 months) 2,200

Major shareholders:

Free Float 44.0 %
 Family Heckmann 28.3 %
 Family Witzany 27.2 %

Company description:

Nabaltec is focused on the production of functional fillers for plastics such as non-hazardous and non-toxic flame retardants used in electrical and electronic equipment.

Boehmite with game-changer potential

Over the past years, boehmite had no noticeable impact on Nabaltec's P&L. However, this looks set to considerably change, particularly true for the group's EBIT. **In 2018 alone, boehmite accounted for 4% of group sales and almost 11% of EBIT (eH&A).**

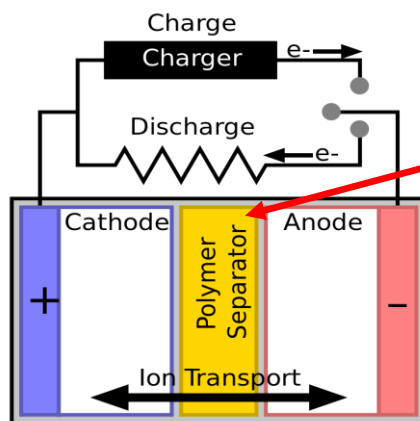
What is boehmite and what is it used for?

Simply put, boehmite is a white powder (aluminum oxide-hydroxide) with high-temperature resistance. Up until 2-3 years ago, it was primarily used in catalytic converters or as flame retardant in printed circuit boards.

However, with the market for e-mobility slowly starting to develop, boehmite is also finding increasing use as **coating material for separator foils within the lithium-ion batteries of EVs and hybrids**. Here is why:

Within a lithium-ion battery, the separator is a permeable membrane placed between the battery's anode and cathode. Its main function is to keep the two electrodes apart in order to prevent electrical short circuits while at the same time allowing the electrically charged ions to pass through, effectively **closing the circuit and enabling charging and discharging**, as displayed below.

Schematic of a lithium-ion battery



Coated with boehmite, increasing safety while allowing for high performance

Source: Wikipedia, Hauck & Aufhäuser

Generally, these separators are made of an incredibly thin (2-4 μm) plastic sheet that has the right pore size to allow the ions to pass through while keeping all other components blocked. **The thinner the separator, the higher the energy density and the quicker a battery can be charged or discharged**, which is particularly important for EVs as range and long charging times are keeping people from buying EVs.

However, there is a major issue with a thin foil. **The thinner it gets, the higher the thermal shrinkage**. This is particularly problematic when exposed to high temperatures (e.g. during fast charging and discharging) as these can cause the foil to shrink and thus no longer separate anode and cathode, **causing a short circuit and setting the battery on fire**.

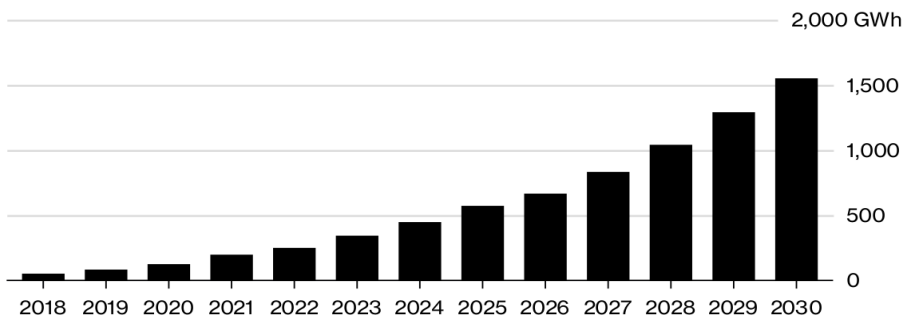
There are only two options to counteract the heat shrinkage issue. On one hand, the thickness of the foil could be increased, which again would offset the necessary benefits from an ultra-thin foil. On the other hand, **the foil can be coated with fine, highly heat resistant particles such as boehmite**.

By coating the plastic separator foil, the thermal shrinkage can significantly be decreased without sacrificing any performance benefits. **At an average cost of only € 10 per car, this offers OEMs a notable safety increase at a relatively low cost.**

Underlying market growth about to soar

Generally speaking, **demand for boehmite highly depends on the produced battery capacities**, which are measured in GWh. Importantly, demand growth is seen to clearly accelerate from 2022E onwards, as displayed in the graph below.

Passenger car related battery demand for pure Evs in GWh



Source: Bloomberg New Energy Finance; Hauck & Aufhäuser

The anticipated strong increase in battery capacities is seen to be driven by **soaring sales volumes of purely electric vehicles** due to (1) regulatory requirements (e.g. California, France, and the United Kingdom have proclaimed that they will end sales of ICEs by 2040), (2) continuously increasing usability (higher range and shorter charging times and (3) a rising awareness towards environmental friendlier transportation.

As a rule of thumb, **100GWh of battery capacity would require c. 10kt of boehmite**. Accordingly, the market for boehmite could increase to roughly 160kt by 2030E, implying a **global sales volume of around € 480m** (at a 100% acceptance rate). Yet, a 100% acceptance rate seems unlikely as high grade alumina could be used as an alternative, also produced by Nabaltec at similar financials. However, **boehmite offers production advantages as it is less abrasive to the coating machinery and the foil itself**.

Keep in mind, this graph only captures the potential related to purely electrical passenger cars, not hybrids or commercial vehicles.

Moreover with safety concerns continuously being on the rise, **boehmite could also find its way into energy storage solutions**, a strongly growing market which is fuelled by the unstoppable trend towards renewable energies (eH&A).

Implications for Nabaltec

As of now, there are only two major players in the market capable of producing large quantities of suitable boehmite for separators; Nabaltec and Estone (China).

In fact, Nabaltec is already working with various cell and foil producers also from China and looks set to also reap the benefits from growing battery productions.

Sales volumes of boehmite have increased by 60% yoy to 2kt in FY18, in-line with the overall growth of the EV market. This ample growth **should continue going forward, if not further accelerate** (+75% yoy to 3.5kt for FY19; eH&A).

Volume-wise, this seems rather neglectable at a first glance. However, at an average selling price of 3,500 €/t and a 30% EBIT margin, **these low volumes imply sales of € 12.2m and € 3.7m EBIT**. By June this year, Nabaltec will have a capacity for 7.5k tonnes, enough to generate € 26m sales and € 7.8m EBIT at current prices.

Importantly, capex requirements for building up additional capacities are significantly lower compared to the rest of the business, resulting in impressive **capital turns of around 3x** (currently 1x).

Assuming that EV volumes are ramped up as announced by leading auto manufactures, **Nabaltec's boehmite has the potential to generate € 55-60m sales and ~€ 20m EBIT by 2023E** (at stable EBIT margins). Assumptions are displayed on the following page.

DCF for boehmite itself implies a value range of € 16-25 per share

As the current valuation method (FCFY'21) does not adequately reflect the potential of boehmite, the DCF below provides an indication of the value potential for this product.

Given the high degree of variables in this model (e.g. market share of boehmite and Nabaltec, development of boehmite prices and the global EV output) we choose a conservative 12.5% WACC to compensate for those uncertainties.

Nevertheless, our DCF implies a **fair value for boehmite of € 16 per share**. If we were to decrease the WACC to 10.5% and 8.5%, the fair value would rise to € 19.5 and € 25 per share respectively. Other key assumptions include:

- EV production from IHS (Information Handling Services Inc., US)
- 50% market share of boehmite as coating for separator foils, which is gradually improving over time, driven by its production advantages compared to alumina and its significant improvement of the battery safety
- An average boehmite consumption of 3kg per EV
- A boehmite price of around 3.5 €/kg, which decreases to 3 €/kg given the automotive exposure and this industry's natural thrive to decrease costs
- A gradually decreasing market share of Nabaltec due to potential competitors entering the market
- An EBIT margin of 30%, which decreases to 25% and a 28% tax rate
- Long-term growth of conservatively 2%

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Terminal value |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|
| EV production (m units) | 3.1 | 4.5 | 7.2 | 11.5 | 15.1 | 18 | 21.2 | 25.7 | 30.7 |
| Boehmite market share | 50% | 50% | 50% | 65% | 65% | 70% | 75% | 80% | 85% |
| Avg kg per Li-battery | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Global boehmite demand (kt) | 4.7 | 6.8 | 10.8 | 22.4 | 29.4 | 37.8 | 47.7 | 61.7 | 78.3 |
| Share Nabaltec (%) | 75% | 74% | 67% | 52% | 63% | 56% | 51% | 44% | 38% |
| NTG boehmite capacity (kt) | 7.5 | 7.5 | 10.0 | 15.0 | 20.0 | 22.5 | 25.0 | 27.5 | 30.0 |
| NTG boehmite sales (kt) | 3.5 | 5.0 | 7.3 | 11.6 | 18.6 | 21.3 | 24.5 | 27.0 | 29.7 |
| | yoy | n.a. | 45% | 60% | 60% | 15% | 15% | 10% | 10% |
| Price per tonne (k€) | 3.5 | 3.4 | 3.3 | 3.1 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Sales (€ m) | 12.3 | 16.9 | 23.6 | 36.5 | 56.3 | 64.9 | 74.6 | 82.1 | 90.3 |
| | EBIT margin | 30% | 30% | 30% | 25% | 25% | 25% | 25% | 25% |
| EBIT (€m) | 3.7 | 5.1 | 7.2 | 11.1 | 14.3 | 16.5 | 19.0 | 20.8 | 22.9 |
| | yoy | n.a. | 45% | 45% | 60% | 60% | 10% | 10% | 10% |
| NOPAT (€m) | 2.7 | 3.7 | 5.2 | 8.0 | 10.3 | 11.9 | 13.6 | 15.0 | 16.5 |
| Change in w/c (€m) | | -0.8 | -1.2 | -2.3 | -3.6 | -1.5 | -1.8 | -1.3 | -1.4 |
| Capex (€m) | -3.0 | 0.0 | -2.5 | -5.0 | -5.0 | -2.5 | -2.5 | -2.5 | -2.5 |
| FCF (€m) | -0.3 | 2.9 | 1.5 | 0.7 | 1.7 | 7.8 | 9.4 | 11.2 | 12.6 |
| Present value (€m) | -0.3 | 2.3 | 1.1 | 0.4 | 1.0 | 4.0 | 4.2 | 4.5 | 123.7 |
| Fair value (€m) | 140.9 | | | | | | | | |
| Fair value per share (€) | 16.0 | | | | | | | | |

Model assumptions:

| | |
|---------------|-------|
| Tax rate | 28.0% |
| WACC (%) | 12.5% |
| LT growth (%) | 2.0% |

Source: Company data, Hauck & Aufhäuser

Recent newsflow with positive x-read for boehmite demand

CATL intends to boost battery cell factory in Germany to 100GWh. The leading Chinese battery cell manufacturer CATL has updated the plans for its German battery factory in Erfurt, giving it a boost. CATL considers a capacity of up to 100 GWh in Thuringia to be realistic, significantly higher than the originally targeted 60 GWh. The upgraded production target **could lead to 10kt of boehmite demand, alone implying a € 30m sales potential in Germany only**, while CATL's main production is in China.

SK Innovation to build a bigger US battery cell factory. SK Innovation's global production capacity is expected to increase to 60 GWh by 2022. It was recently reported that SK Innovation, due to the high demand, wanted to spend around 10 billion dollars on investments in battery cells by 2025 in order to further increase its production capacity to around 100 GWh per year by then.

LG Chem Mulls 2nd EV Battery plant in Europe. LG Chem Ltd., South Korea's leading electric vehicle (EV) battery maker, is considering a second plant in Europe to meet growing demand. LG Chem said earlier it aims to raise its EV battery production capacity to 110 GWh by 2020 from the current 34 GWh.

US plants to pave the way for additional growth for its core product (ATH)

Following roughly two years of limited volume growth due to a nearly fully utilized production at Schwandorf in Germany, the **recent investments in the US have paved the way to further grow sales volumes.**

In detail, Nabaltec is currently working on building and ramping up two plants in the US; Nashtec and Naprotec. Each producing a specific product:

Nashtec. With a targeted production capacity of 30kt fine ATH, Nashtec is currently in the process of being ramped-up. Following a € 4m EBIT loss in 2018 (eH&A), Nashtec should at least be break-even for this year, **with the potential to positively contribute to group earnings.** In our view, market growth is sufficient to absorb Nabaltec's and Huber's announced capacity expansions.

At full utilization, Nashtec has the potential to generate c. €27m sales (eH&A) with fine ATH used in cables as a flame retardant; EBIT margins in the double digits.

Naprotec. In 2018, Nabaltec decided to also increase capacities of its **coarse ATH by 30kt** annually by purchasing a strategically well positioned former DuPont site in Chattanooga, TN, and equipping it with its own machinery. This plant will produce 5kt of special ATH for rubber applications. So far, this market is dominated by J.M. Huber.

At full utilization, Naprotec has the potential to generate c. €24m sales (eH&A); EBIT margins in the double-digits.

Overview capacities (current/being set up/possible)

| Schwandorf | Nashtec | Naprotec |
|---|---|---|
| <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">100kt fine</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">30kt coarse</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">7.5kt boehmite</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">80kt special oxides</div> | <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">30kt fine</div> | <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">30kt coarse</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">5kt special ATH</div> |
| CURRENT | BEING SET UP | |
| <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Boehmite*</div> | POSSIBLE | <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Boehmite*</div> |
| | | |

Source: Company data, Hauck & Aufhäuser *Capacity expansions of boehmite demand on commitment of battery producers, no limitation to capacity

Over-delivering on FY19 guidance likely

For FY19, management guided for sales of €190-195m and an EBIT margin of “only” 10-12%. However, this guidance factors in significant macroeconomic headwinds (e.g. Brexit and a slowing global economy) in course of the year.

In our view, Nabaltec should not only be able to exceed on the top-line, but even more importantly on the margin (eH&A: 13%), based on:

- **Price increases of ~7.5% for all products**, which should positively impact the group’s P&L from March onwards due to the fact that we expect the higher prices to partially feed down to the bottom line.
- **Ample growth of boehmite sales; +75% yoy to 3.5kt**, implying incremental revenues of € 4.5m and € 1.5m EBIT (eH&A)
- **Fading one-offs related to the ramp-up of Nashtec** (eH&A: € 4m); in fact, management expects Nashtec to **at least be EBIT break-even** for the FY

The fact the **adj. EBIT margin already exceeded 12% in 2018P**, provides us with additional confidence in Nabaltec over delivering in the FY19 margin guidance.

Valuation with plenty of upside to current share price

Following Nabaltec’s preliminary FY18 figures, we roll-over valuation to FCFY 2021E in order to better reflect:

- **The earnings contribution from Nashtec and Naprotec**, which have so far lifted net debt and diluted earnings
- **Ample earnings growth stemming from boehmite**. Yet, keep in mind that ‘21E figures still do not reflect its full earnings potential as relevant demand will not kick-in until 2022/23E with SK Innovation & CATL significantly ramping up their battery cell production in Europe. In 2021E, boehmite is seen to only contribute ~ € 7m EBITDA, below the € 22m we could be seeing by 2022/23E.

The adj. Free Cash Flow Yield model **implies a new PT of € 44 per share** (old: € 39).

| FCF yield, year end Dec. 31 | 2017 | 2018P | 2019E | 2020E | 2021E | |
|--|---------------|---------------|--------------|--------------|--------------|------|
| EBITDA | 30.0 | 30.6 | 40.0 | 46.2 | 50.5 | |
| - Maintenance capex | 7.5 | 8.0 | 10.0 | 10.0 | 10.0 | |
| - Minorities (EBIT) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| - tax expenses | 4.3 | 4.5 | 6.6 | 7.9 | 9.0 | |
| = Adjusted Free Cash Flow | 18.2 | 18.1 | 23.4 | 28.3 | 31.4 | |
| Actual Market Cap | 244.6 | 244.6 | 244.6 | 244.6 | 244.6 | |
| + Net debt (cash) | 25.9 | 32.0 | 29.3 | 17.1 | -1.4 | |
| + Pension provisions | 36.8 | 36.8 | 36.8 | 36.8 | 36.8 | |
| + Off balance sheet financing | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| + Adjustments prepayments | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| - Financial assets | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | |
| - Dividend payment | -1.2 | -1.2 | -1.5 | -1.8 | -2.1 | |
| <i>EV Reconciliations</i> | <i>61.4</i> | <i>67.6</i> | <i>64.5</i> | <i>52.1</i> | <i>33.2</i> | |
| = Actual EV* | 306.1 | 312.2 | 309.2 | 296.7 | 277.9 | |
| Adjusted Free Cash Flow yield | 6.0% | 5.8% | 7.6% | 9.5% | 11.3% | |
| Sales | 168.6 | 176.7 | 200.1 | 220.1 | 238.6 | |
| Actual EV/sales | 1.8x | 1.8x | 1.5x | 1.3x | 1.2x | |
| Hurdle rate | 7.5% | 7.5% | 7.5% | 7.5% | 7.5% | |
| FCF margin | 10.8% | 10.3% | 11.7% | 12.9% | 13.2% | |
| Fair EV/sales | 1.4x | 1.4x | 1.6x | 1.7x | 1.8x | |
| Fair EV | 243.2 | 241.8 | 312.3 | 377.4 | 418.8 | |
| - <i>EV Reconciliations</i> | <i>61.4</i> | <i>67.6</i> | <i>64.5</i> | <i>52.1</i> | <i>33.2</i> | |
| Fair Market Cap | 181.8 | 174.3 | 247.7 | 325.3 | 385.6 | |
| No. of shares (million) | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | |
| Fair value per share | 20.7 | 19.8 | 28.2 | 37.0 | 43.8 | |
| Premium (-) / discount (+) in % | -25.7% | -28.8% | 1.3% | 33.0% | 57.6% | |
| Sensitivity analysis fair value | | | | | | |
| | 7.5% | 20.7 | 19.8 | 28.2 | 37.0 | 43.8 |
| Hurdle rate | 10.0% | 13.8 | 12.9 | 19.3 | 26.2 | 31.9 |
| | 12.5% | 9.6 | 8.8 | 14.0 | 19.8 | 24.8 |
| | 15.0% | 6.8 | 6.1 | 10.4 | 15.5 | 20.0 |

Source: Company data, Hauck & Aufhäuser

Financials

| Profit and loss (EUR m) | 2015 | 2016 | 2017 | 2018P | 2019E | 2020E | 2021E |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Net sales | 151.3 | 159.2 | 168.6 | 176.7 | 200.1 | 220.1 | 238.6 |
| <i>Sales growth</i> | 5.6 % | 5.2 % | 5.9 % | 4.8 % | 13.2 % | 10.0 % | 8.4 % |
| Increase/decrease in finished goods and work-in-process | 1.9 | 0.4 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total sales | 153.2 | 159.6 | 170.1 | 176.7 | 200.1 | 220.1 | 238.6 |
| Other operating income | 2.8 | 2.2 | 4.5 | 2.7 | 2.4 | 3.1 | 3.3 |
| Material expenses | 80.3 | 80.9 | 83.7 | 84.8 | 93.6 | 102.1 | 110.7 |
| Personnel expenses | 26.8 | 31.7 | 31.3 | 32.9 | 36.2 | 39.6 | 42.9 |
| Other operating expenses | 24.3 | 26.2 | 29.6 | 31.1 | 32.6 | 35.2 | 37.8 |
| Total operating expenses | 128.6 | 136.7 | 140.1 | 146.1 | 160.0 | 173.8 | 188.1 |
| EBITDA | 24.6 | 22.9 | 30.0 | 30.6 | 40.0 | 46.2 | 50.5 |
| Depreciation | 10.2 | 10.7 | 11.7 | 12.1 | 14.0 | 15.4 | 16.0 |
| EBITA | 14.5 | 12.2 | 18.3 | 18.5 | 26.0 | 30.8 | 34.5 |
| Amortisation of goodwill | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Amortisation of intangible assets | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Impairment charges | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| EBIT (inc revaluation net) | 14.5 | 12.2 | 18.3 | 18.5 | 26.0 | 30.8 | 34.5 |
| Interest income | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Interest expenses | 3.9 | 3.3 | 2.7 | 2.6 | 2.4 | 2.4 | 2.0 |
| Other financial result | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Financial result | -3.7 | -3.1 | -2.6 | -2.6 | -2.3 | -2.4 | -1.9 |
| Recurring pretax income from continuing operations | 10.8 | 9.2 | 15.7 | 15.9 | 23.7 | 28.4 | 32.5 |
| Extraordinary income/loss | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Earnings before taxes | 10.8 | 9.2 | 15.7 | 15.9 | 23.7 | 28.4 | 32.5 |
| Taxes | 3.4 | 3.9 | 4.3 | 4.5 | 6.6 | 7.9 | 9.0 |
| Net income from continuing operations | 7.4 | 5.3 | 11.4 | 11.5 | 17.1 | 20.5 | 23.5 |
| Result from discontinued operations (net of tax) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Net income | 7.4 | 5.3 | 11.4 | 11.5 | 17.1 | 20.5 | 23.5 |
| Minority interest | 0.7 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Net profit (reported) | 6.7 | 5.3 | 11.4 | 11.5 | 17.1 | 20.5 | 23.5 |
| Average number of shares | 8.0 | 8.0 | 8.3 | 8.8 | 8.8 | 8.8 | 8.8 |
| EPS reported | 0.84 | 0.67 | 1.39 | 1.30 | 1.94 | 2.33 | 2.67 |

| Profit and loss (common size) | 2015 | 2016 | 2017 | 2018P | 2019E | 2020E | 2021E |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Net sales | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Increase/decrease in finished goods and work-in-process | 1.3 % | 0.2 % | 0.9 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| Total sales | 101.3 % | 100.2 % | 100.9 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Other operating income | 1.9 % | 1.4 % | 2.7 % | 1.5 % | 1.2 % | 1.4 % | 1.4 % |
| Material expenses | 53.1 % | 50.8 % | 49.7 % | 48.0 % | 46.8 % | 46.4 % | 46.4 % |
| Personnel expenses | 17.7 % | 19.9 % | 18.6 % | 18.6 % | 18.1 % | 18.0 % | 18.0 % |
| Other operating expenses | 16.1 % | 16.5 % | 17.5 % | 17.6 % | 16.3 % | 16.0 % | 15.9 % |
| Total operating expenses | 85.0 % | 85.8 % | 83.1 % | 82.7 % | 80.0 % | 79.0 % | 78.9 % |
| EBITDA | 16.3 % | 14.4 % | 17.8 % | 17.3 % | 20.0 % | 21.0 % | 21.2 % |
| Depreciation | 6.7 % | 6.7 % | 6.9 % | 6.8 % | 7.0 % | 7.0 % | 6.7 % |
| EBITA | 9.6 % | 7.7 % | 10.9 % | 10.5 % | 13.0 % | 14.0 % | 14.4 % |
| Amortisation of goodwill | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| Amortisation of intangible assets | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| Impairment charges | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| EBIT (inc revaluation net) | 9.6 % | 7.7 % | 10.9 % | 10.5 % | 13.0 % | 14.0 % | 14.4 % |
| Interest income | 0.2 % | 0.2 % | 0.1 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| Interest expenses | 2.6 % | 2.1 % | 1.6 % | 1.5 % | 1.2 % | 1.1 % | 0.8 % |
| Other financial result | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| Financial result | neg. | neg. | neg. | neg. | neg. | neg. | neg. |
| Recurring pretax income from continuing operations | 7.1 % | 5.8 % | 9.3 % | 9.0 % | 11.8 % | 12.9 % | 13.6 % |
| Extraordinary income/loss | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| Earnings before taxes | 7.1 % | 5.8 % | 9.3 % | 9.0 % | 11.8 % | 12.9 % | 13.6 % |
| Tax rate | 31.5 % | 42.3 % | 27.2 % | 28.0 % | 27.8 % | 27.8 % | 27.8 % |
| Net income from continuing operations | 4.9 % | 3.3 % | 6.8 % | 6.5 % | 8.6 % | 9.3 % | 9.8 % |
| Income from discontinued operations (net of tax) | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| Net income | 4.9 % | 3.3 % | 6.8 % | 6.5 % | 8.6 % | 9.3 % | 9.8 % |
| Minority interest | 0.5 % | neg. | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| Net profit (reported) | 4.4 % | 3.4 % | 6.8 % | 6.5 % | 8.6 % | 9.3 % | 9.8 % |

Source: Company data, Hauck & Aufhäuser

| Balance sheet (EUR m) | 2015 | 2016 | 2017 | 2018P | 2019E | 2020E | 2021E |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Intangible assets | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Property, plant and equipment | 116.6 | 125.3 | 131.7 | 144.6 | 150.6 | 147.2 | 143.2 |
| Financial assets | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| FIXED ASSETS | 117.1 | 125.9 | 132.2 | 145.2 | 151.1 | 147.8 | 143.7 |
| Inventories | 30.8 | 30.9 | 33.0 | 34.6 | 38.5 | 41.5 | 45.9 |
| Accounts receivable | 5.2 | 3.1 | 4.1 | 4.3 | 4.9 | 5.3 | 5.8 |
| Other current assets | 6.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| Liquid assets | 42.3 | 36.2 | 45.9 | 38.3 | 41.1 | 21.9 | 40.4 |
| Deferred taxes | 0.0 | 1.1 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| Deferred charges and prepaid expenses | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| CURRENT ASSETS | 84.8 | 76.8 | 89.2 | 82.7 | 89.9 | 74.2 | 97.5 |
| TOTAL ASSETS | 201.9 | 202.7 | 221.4 | 227.8 | 241.0 | 222.0 | 241.3 |
| SHAREHOLDERS EQUITY | 57.5 | 57.2 | 84.5 | 93.2 | 104.9 | 117.7 | 134.9 |
| MINORITY INTEREST | 0.6 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Long-term debt | 71.3 | 71.3 | 70.4 | 70.4 | 70.4 | 39.0 | 39.0 |
| Provisions for pensions and similar obligations | 28.0 | 38.1 | 36.8 | 36.8 | 36.8 | 36.8 | 36.8 |
| Other provisions | 2.6 | 2.4 | 3.2 | 3.0 | 3.0 | 2.0 | 2.0 |
| Non-current liabilities | 101.9 | 111.8 | 110.4 | 110.2 | 110.2 | 77.8 | 77.8 |
| short-term liabilities to banks | 12.2 | 1.2 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| Accounts payable | 12.3 | 14.5 | 15.6 | 16.1 | 18.6 | 20.1 | 22.1 |
| Advance payments received on orders | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other liabilities (incl. from lease and rental contracts) | 15.9 | 16.4 | 8.3 | 7.3 | 6.3 | 5.3 | 5.3 |
| Deferred taxes | 1.5 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Deferred income | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Current liabilities | 41.9 | 33.2 | 26.5 | 24.5 | 25.9 | 26.5 | 28.5 |
| TOTAL LIABILITIES AND SHAREHOLDERS EQUITY | 201.9 | 202.7 | 221.4 | 227.8 | 241.0 | 222.0 | 241.3 |

| Balance sheet (common size) | 2015 | 2016 | 2017 | 2018P | 2019E | 2020E | 2021E |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Intangible assets | 0.3 % | 0.2 % | 0.2 % | 0.2 % | 0.2 % | 0.2 % | 0.2 % |
| Property, plant and equipment | 57.7 % | 61.8 % | 59.5 % | 63.5 % | 62.5 % | 66.3 % | 59.3 % |
| Financial assets | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| FIXED ASSETS | 58.0 % | 62.1 % | 59.7 % | 63.7 % | 62.7 % | 66.6 % | 59.6 % |
| Inventories | 15.2 % | 15.2 % | 14.9 % | 15.2 % | 16.0 % | 18.7 % | 19.0 % |
| Accounts receivable | 2.6 % | 1.5 % | 1.8 % | 1.9 % | 2.0 % | 2.4 % | 2.4 % |
| Other current assets | 3.2 % | 2.7 % | 2.5 % | 2.4 % | 2.3 % | 2.5 % | 2.3 % |
| Liquid assets | 20.9 % | 17.9 % | 20.7 % | 16.8 % | 17.0 % | 9.9 % | 16.7 % |
| Deferred taxes | 0.0 % | 0.6 % | 0.3 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| Deferred charges and prepaid expenses | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| CURRENT ASSETS | 42.0 % | 37.9 % | 40.3 % | 36.3 % | 37.3 % | 33.4 % | 40.4 % |
| TOTAL ASSETS | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| SHAREHOLDERS EQUITY | 28.5 % | 28.2 % | 38.2 % | 40.9 % | 43.5 % | 53.0 % | 55.9 % |
| MINORITY INTEREST | 0.3 % | 0.3 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| Long-term debt | 35.3 % | 35.2 % | 31.8 % | 30.9 % | 29.2 % | 17.6 % | 16.2 % |
| Provisions for pensions and similar obligations | 13.8 % | 18.8 % | 16.6 % | 16.2 % | 15.3 % | 16.6 % | 15.3 % |
| Other provisions | 1.3 % | 1.2 % | 1.5 % | 1.3 % | 1.2 % | 0.9 % | 0.8 % |
| Non-current liabilities | 50.5 % | 55.1 % | 49.9 % | 48.4 % | 45.7 % | 35.1 % | 32.2 % |
| short-term liabilities to banks | 6.1 % | 0.6 % | 0.6 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| Accounts payable | 6.1 % | 7.2 % | 7.1 % | 7.1 % | 7.7 % | 9.0 % | 9.2 % |
| Advance payments received on orders | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| Other liabilities (incl. from lease and rental contracts) | 7.9 % | 8.1 % | 3.8 % | 3.2 % | 2.6 % | 2.4 % | 2.2 % |
| Deferred taxes | 0.7 % | 0.5 % | 0.5 % | 0.5 % | 0.4 % | 0.5 % | 0.4 % |
| Deferred income | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| Current liabilities | 20.8 % | 16.4 % | 12.0 % | 10.8 % | 10.8 % | 11.9 % | 11.8 % |
| TOTAL LIABILITIES AND SHAREHOLDERS EQUITY | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

Source: Company data, Hauck & Aufhäuser

| Cash flow statement (EUR m) | 2015 | 2016 | 2017 | 2018P | 2019E | 2020E | 2021E |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Net profit/loss | 7.4 | 5.3 | 11.4 | 11.5 | 17.1 | 20.5 | 23.5 |
| Depreciation of fixed assets (incl. leases) | 10.2 | 10.7 | 11.7 | 12.1 | 14.0 | 15.4 | 16.0 |
| Amortisation of goodwill | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Amortisation of intangible assets | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Others | 2.7 | 2.8 | 3.5 | -1.3 | 0.0 | 0.0 | 0.0 |
| Cash flow from operations before changes in w/c | 20.2 | 18.8 | 26.7 | 22.3 | 31.1 | 35.9 | 39.5 |
| Increase/decrease in inventory | -3.2 | -0.1 | -2.1 | -1.6 | -3.9 | -3.0 | -4.4 |
| Increase/decrease in accounts receivable | -0.6 | 2.1 | -1.0 | -0.2 | -0.6 | -0.5 | -0.4 |
| Increase/decrease in accounts payable | 2.4 | 2.2 | 1.1 | -0.5 | -2.4 | -1.5 | -2.1 |
| Increase/decrease in other working capital positions | -1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Increase/decrease in working capital | -3.0 | 4.3 | -2.0 | -2.3 | -6.9 | -10.0 | -6.9 |
| Cash flow from operating activities | 17.2 | 23.0 | 24.7 | 20.0 | 24.2 | 25.9 | 32.6 |
| CAPEX | 13.1 | 17.0 | 23.4 | 25.0 | 20.0 | 12.0 | 12.0 |
| Payments for acquisitions | 0.0 | 0.0 | 0.6 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cash flow from investing activities | -13.1 | -17.0 | -23.9 | -25.0 | -20.0 | -12.0 | -12.0 |
| Cash flow before financing | 4.2 | 6.0 | 0.7 | -5.0 | 4.2 | 13.9 | 20.6 |
| Increase/decrease in debt position | 12.2 | -11.8 | -0.8 | -1.4 | 0.0 | -31.4 | 0.0 |
| Purchase of own shares | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Capital measures | 0.0 | 0.0 | 17.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dividends paid | 1.0 | 1.2 | 1.2 | 1.2 | 1.5 | 1.8 | 2.1 |
| Others | -0.6 | 0.6 | -6.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Effects of exchange rate changes on cash | 0.4 | 0.2 | -1.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cash flow from financing activities | 10.6 | -12.4 | 10.0 | -2.6 | -1.5 | -33.1 | -2.1 |
| Increase/decrease in liquid assets | 15.1 | -6.1 | 9.8 | -7.6 | 2.7 | -19.2 | 18.5 |
| Liquid assets at end of period | 42.3 | 36.2 | 45.9 | 38.3 | 41.1 | 21.9 | 40.4 |

Source: Company data, Hauck & Aufhäuser

| Regional split (EUR m) | 2014 | 2015 | 2016 | 2017 | 2018E | 2019E | 2020E |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Domestic | 40.7 | 41.9 | 42.4 | 45.3 | 46.0 | 52.1 | 57.3 |
| yoy change | -0.4 % | 2.8 % | 1.2 % | 6.7 % | 1.7 % | 13.2 % | 10.0 % |
| Rest of Europe | 68.5 | 73.2 | 78.3 | 81.7 | 89.1 | 100.8 | 110.9 |
| yoy change | 7.8 % | 6.8 % | 7.0 % | 4.4 % | 9.0 % | 13.2 % | 10.0 % |
| NAFTA | 18.0 | 19.7 | 20.2 | 21.4 | 23.5 | 26.6 | 29.3 |
| yoy change | 24.8 % | 9.4 % | 2.6 % | 5.7 % | 10.0 % | 13.2 % | 10.0 % |
| Asia Pacific | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | 4.4 |
| yoy change | n/a | n/a | n/a | n/a | n/a | n/a | 10.0 % |
| Rest of world | 16.0 | 16.5 | 18.3 | 20.3 | 18.1 | 16.5 | 18.2 |
| yoy change | 14.7 % | 2.9 % | 10.8 % | 10.8 % | -10.6 % | -8.9 % | 10.0 % |
| TTL | 143.3 | 151.3 | 159.2 | 168.6 | 176.7 | 200.1 | 220.1 |
| yoy change | 7.8 % | 5.6 % | 5.2 % | 5.9 % | 4.8 % | 13.2 % | 10.0 % |

Source: Company data, Hauck & Aufhäuser

| Key ratios (EUR m) | 2015 | 2016 | 2017 | 2018P | 2019E | 2020E | 2021E |
|--------------------------------------|---------|---------|---------|---------|---------|---------|---------|
| P&L growth analysis | | | | | | | |
| Sales growth | 5.6 % | 5.2 % | 5.9 % | 4.8 % | 13.2 % | 10.0 % | 8.4 % |
| EBITDA growth | 10.2 % | -7.0 % | 31.0 % | 33.5 % | 33.2 % | 51.0 % | 26.1 % |
| EBIT growth | 14.2 % | -15.5 % | 49.7 % | 51.2 % | 42.0 % | 66.5 % | 32.5 % |
| EPS growth | 22.3 % | -20.4 % | 107.5 % | 95.0 % | 40.1 % | 78.9 % | 37.3 % |
| Efficiency | | | | | | | |
| Total operating costs / sales | 85.0 % | 85.8 % | 83.1 % | 82.7 % | 80.0 % | 79.0 % | 78.9 % |
| Sales per employee | 348.6 | 353.8 | 360.3 | 376.0 | 408.3 | 431.5 | n/a |
| EBITDA per employee | 56.8 | 50.9 | 64.2 | 65.1 | 81.7 | 90.6 | n/a |
| Balance sheet analysis | | | | | | | |
| Avg. working capital / sales | 15.2 % | 13.6 % | 12.1 % | 11.9 % | 11.6 % | 11.3 % | 11.4 % |
| Inventory turnover (sales/inventory) | 4.9 | 5.2 | 5.1 | 5.1 | 5.2 | 5.3 | 5.2 |
| Trade debtors in days of sales | 12.5 | 7.1 | 8.9 | 8.9 | 8.9 | 8.9 | 8.9 |
| A/P turnover [(A/P*365)/sales] | 29.6 | 33.3 | 33.9 | 33.3 | 33.9 | 33.3 | 33.9 |
| Cash conversion cycle (days) | 96.7 | 80.8 | 84.5 | 88.3 | 86.5 | 85.5 | 87.2 |
| Cash flow analysis | | | | | | | |
| Free cash flow | 4.2 | 6.0 | 1.3 | -5.0 | 4.2 | 13.9 | 20.6 |
| Free cash flow/sales | 2.7 % | 3.8 % | 0.8 % | -2.8 % | 2.1 % | 6.3 % | 8.6 % |
| FCF / net profit | 62.3 % | 112.5 % | 11.3 % | neg. | 24.7 % | 67.8 % | 87.8 % |
| Capex / depn | 128.4 % | 159.2 % | 199.8 % | 206.6 % | 142.9 % | 77.9 % | 75.0 % |
| Capex / maintenance capex | 163.3 % | 212.6 % | 292.4 % | 312.5 % | 250.0 % | 150.0 % | 150.0 % |
| Capex / sales | 8.6 % | 10.7 % | 13.9 % | 14.1 % | 10.0 % | 5.5 % | 5.0 % |
| Security | | | | | | | |
| Net debt | 41.3 | 36.4 | 25.9 | 32.0 | 29.3 | 17.1 | -1.4 |
| Net Debt/EBITDA | 1.7 | 1.6 | 0.9 | 1.0 | 0.7 | 0.4 | 0.0 |
| Net debt / equity | 0.7 | 0.6 | 0.3 | 0.3 | 0.3 | 0.1 | neg. |
| Interest cover | 3.7 | 3.7 | 6.8 | 7.1 | 11.1 | 12.8 | 17.6 |
| Dividend payout ratio | 18.0 % | 22.4 % | 13.0 % | 15.3 % | 12.3 % | 12.9 % | 15.0 % |
| Asset utilisation | | | | | | | |
| Capital employed turnover | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.1 | 1.1 |
| Operating assets turnover | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.3 | 1.4 |
| Plant turnover | 1.3 | 1.3 | 1.3 | 1.2 | 1.3 | 1.5 | 1.7 |
| Inventory turnover (sales/inventory) | 4.9 | 5.2 | 5.1 | 5.1 | 5.2 | 5.3 | 5.2 |
| Returns | | | | | | | |
| ROCE | 8.9 % | 7.1 % | 10.0 % | 9.9 % | 12.6 % | 15.5 % | 16.1 % |
| ROE | 11.6 % | 9.4 % | 13.5 % | 12.3 % | 16.3 % | 17.4 % | 17.4 % |
| Other | | | | | | | |
| Interest paid / avg. debt | 5.1 % | 4.3 % | 3.7 % | 3.6 % | 3.3 % | 4.4 % | 3.6 % |
| No. employees (average) | 434 | 450 | 468 | 470 | 490 | 510 | 0 |
| Number of shares | 8.0 | 8.0 | 8.3 | 8.8 | 8.8 | 8.8 | 8.8 |
| DPS | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 |
| EPS reported | 0.84 | 0.67 | 1.39 | 1.30 | 1.94 | 2.33 | 2.67 |
| Valuation ratios | | | | | | | |
| P/BV | 4.2 | 4.2 | 3.1 | 2.8 | 2.5 | 2.2 | 1.9 |
| EV/sales | 2.0 | 2.0 | 1.9 | 1.9 | 1.6 | 1.4 | 1.3 |
| EV/EBITDA | 12.5 | 13.7 | 10.9 | 10.8 | 8.2 | 7.2 | 5.9 |
| EV/EBITA | 21.3 | 25.6 | 17.8 | 17.9 | 12.7 | 10.3 | 8.7 |
| EV/EBIT | 21.3 | 25.6 | 17.8 | 17.9 | 12.7 | 10.3 | 8.7 |
| EV/FCF | 74.3 | 52.1 | 250.8 | -66.9 | 77.9 | 22.8 | 14.5 |
| Adjusted FCF yield | 4.1 % | 3.6 % | 5.5 % | 5.5 % | 7.8 % | 9.6 % | 11.3 % |
| Dividend yield | 0.5 % | 0.5 % | 0.6 % | 0.7 % | 0.8 % | 1.0 % | 1.3 % |

Source: Company data, Hauck & Aufhäuser

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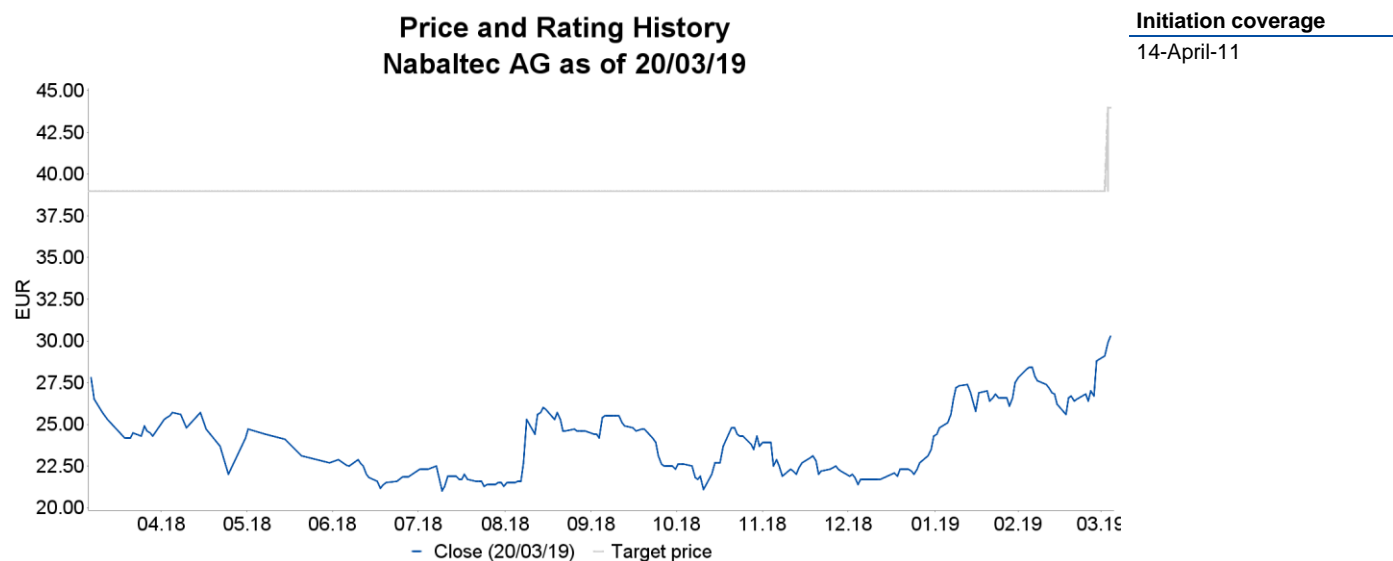
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| Company | Disclosure |
|-------------|------------|
| Nabaltec AG | 2, 3 |

Historical target price and rating changes for Nabaltec AG in the last 12 months



| Company | Date | Analyst | Rating | Target price | Close |
|-------------|------------|---------------------|--------|--------------|-----------|
| Nabaltec AG | 28.02.2019 | Sandherr, Christian | Buy | EUR 39,00 | EUR 26,90 |
| | 10.01.2019 | Sandherr, Christian | Buy | EUR 39,00 | EUR 22,30 |
| | 29.11.2018 | Sandherr, Christian | Buy | EUR 39,00 | EUR 22,40 |
| | 05.11.2018 | Sandherr, Christian | Buy | EUR 39,00 | EUR 24,80 |
| | 27.08.2018 | Sandherr, Christian | Buy | EUR 39,00 | EUR 24,40 |
| | 05.07.2018 | Sandherr, Christian | Buy | EUR 39,00 | EUR 21,50 |

| | | | | |
|------------|---------------------|-----|-----------|-----------|
| 04.05.2018 | Sandherr, Christian | Buy | EUR 39,00 | EUR 24,70 |
| 03.04.2018 | Sandherr, Christian | Buy | EUR 39,00 | EUR 24,20 |

Hauck & Aufhäuser distribution of ratings and in proportion to investment banking services

| | | |
|-------------|---------|---------|
| Buy | 65.33 % | 84.21 % |
| Sell | 12.00 % | 0.00 % |
| Hold | 22.67 % | 15.79 % |

Date of publication creation: 21/03/2019 08:21 AM

Date of publication dissemination: 21/03/2019 08:23 AM

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