

<b>Buy</b> <b>EUR 21.30</b>  Price <b>EUR 15.90</b> Upside <b>34.0 %</b>	<b>Value Indicators:</b> EUR DCF: 21.32 FCF-Value Potential 19-20: 21.76 SotP 19-20: 13.07	<b>Share data:</b> Bloomberg: IBU GR Reuters: IBU.DE ISIN: DE000A0XYHT5	<b>Description:</b> Thermal treatment of inorganic materials (service provider), Organometallics (producer)
	<b>Market Snapshot:</b> EUR m Market cap: 63.60 No. of shares (m): 4.00 EV: 69.64 Freefloat MC: 19.72 Ø Trad. Vol. (30d): 26.23 th	<b>Shareholders:</b> Freefloat 31.0 % Weitz family 39.7 % Management (incl. CEO Weitz) 29.3 %	<b>Risk Profile (WRe):</b> 2018e Beta: 1.4 Price / Book: 2.1 x Equity Ratio: 59 % Net Fin. Debt / EBITDA: 1.6 x Net Debt / EBITDA: 1.6 x

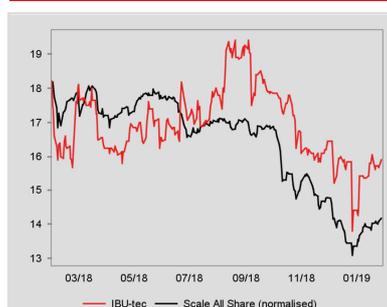
## Making further inroads into new battery material markets

IBU-tec has teamed up with Varta Microbattery GmbH and the Jülich Reaserch Center (Germany) as well as three other partners in a new research cooperation. The partners have joined forces to develop a new, iron-based, slurry air battery for stationary, high-capacity energy storage. The three-year research project is funded by the German Federal Ministry of Education and Research (BMBF) and will become active by February 2019. IBU-tec will process development for iron oxide particles production, a key component for this new class of battery materials and starting material for iron slurry electrodes. The technological innovation allowing for the development and production of these new battery materials is unique and comprehensively patented to IBU-tec's pulsation reactor technology.

The development of all-iron redox flow batteries might be crucial to provide stationary energy storage systems with a high capacity and a long lifetime at substantially lower costs than e.g. existing lithium-ion based storage systems. In addition, this battery type promises to employ only raw materials that are abundant. Technologically, the key to success is the development of efficient slurry negative electrodes with enhanced conductivity. This will require employing particles that are of optimum form and have the correct surface treatment to reduce the ohmic resistance of the slurry. The next step would be the development of an industrial process that allows for the mass production of said particles. Once available, this new battery type should have a huge impact on the energy storage market, fueling demand for stationary energy storage systems. Considering IBU-tec's competence in the heat treatment of solids and its expertise in upscaling processes from laboratory-size to industrial production, especially when it comes to battery materials, we regard the JV as well suited for the task.

While the new JV is likely to have little positive financial impact initially, it could become a game-changer as it should provide IBU-tec with a head-start as provider of materials for this new battery type, once development is successful. It also highlights that IBU-tec is well regarded in the industry as a partner based on its technological capabilities. Already today battery materials for stationary energy storage and the automotive industry comprise a substantial part of IBU-tec's product portfolio. The company is not restrained by a commitment to a single technological solution. It provides material for most of the existing battery types as well as participating in the development of new materials for upcoming technical solutions. Especially considering that IBU-tec is increasingly able to use its patented pulsation reactor for new solutions in battery materials, its competitive position is strengthening. Battery materials are expected to represent a significant growth driver for the company in the short term and in the long term.

We regard the new JV as further confirmation of our investment case that IBU-tec will continue to significantly benefit from high growth rates in the battery materials sector. As we regard the initial financial impact of the JV as minor, we have not revised our earnings estimates. Thus, we stick to our Buy rating as well as to our PT of EUR 21.30 (Based on a DCF calculation).

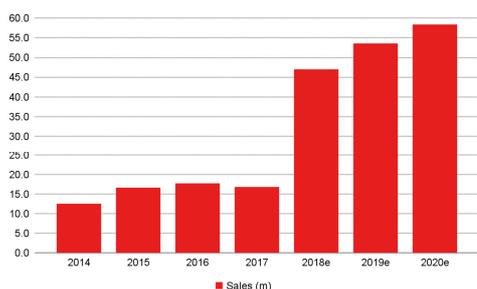


Rel. Performance vs Scale All	
1 month:	4.4 %
6 months:	6.6 %
Year to date:	4.4 %
Trailing 12 months:	10.1 %

### Company events:

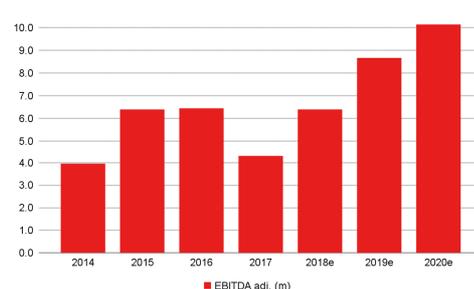
FY End: 31.12. in EUR m	CAGR (17-20e)	2014	2015	2016	2017	2018e	2019e	2020e
<b>Sales</b>	51.5 %	12.54	16.65	17.74	16.81	47.00	53.58	58.40
Change Sales yoy		n.a.	32.8 %	6.6 %	-5.3 %	179.6 %	14.0 %	9.0 %
Gross profit margin		92.2 %	92.9 %	92.5 %	90.9 %	50.9 %	49.3 %	49.1 %
<b>EBITDA</b>	56.2 %	3.96	6.40	6.20	2.66	6.40	8.67	10.15
Margin		31.6 %	38.4 %	35.0 %	15.9 %	13.6 %	16.2 %	17.4 %
<b>EBIT</b>	138.8 %	2.61	4.64	4.14	0.36	2.03	3.49	4.85
Margin		20.8 %	27.9 %	23.3 %	2.1 %	4.3 %	6.5 %	8.3 %
<b>Net income</b>	169.7 %	1.81	3.14	2.83	0.17	1.23	2.27	3.34
<b>EPS</b>	169.7 %	0.60	1.05	0.94	0.04	0.31	0.57	0.83
<b>EPS adj.</b>	22.7 %	0.60	1.05	1.02	0.45	0.31	0.57	0.83
<b>DPS</b>	15.4 %	0.00	0.00	0.00	0.13	0.15	0.18	0.20
Dividend Yield		n.a.	n.a.	n.a.	0.7 %	0.9 %	1.1 %	1.3 %
<b>FCFPS</b>		-0.10	0.70	-0.31	-0.34	-2.52	1.21	1.28
<b>FCF / Market cap</b>		n.a.	n.a.	n.a.	-2.0 %	-6.0 %	7.6 %	8.1 %
<b>EV / Sales</b>		n.a.	n.a.	n.a.	3.4 x	1.6 x	1.3 x	1.1 x
<b>EV / EBITDA</b>		n.a.	n.a.	n.a.	21.7 x	11.6 x	8.0 x	6.5 x
<b>EV / EBIT</b>		n.a.	n.a.	n.a.	162.2 x	36.6 x	19.9 x	13.6 x
<b>P / E</b>		n.a.	n.a.	n.a.	413.6 x	51.7 x	28.0 x	19.1 x
<b>P / E adj.</b>		n.a.	n.a.	n.a.	39.0 x	51.7 x	28.0 x	19.1 x
<b>FCF Potential Yield</b>		n.a.	n.a.	n.a.	1.8 %	5.5 %	8.8 %	10.7 %
<b>Net Debt</b>		2.18	0.37	1.95	-12.69	10.52	6.04	2.15
<b>ROCE (NOPAT)</b>		32.9 %	27.5 %	20.6 %	1.2 %	4.8 %	6.7 %	9.9 %
<b>Guidance:</b>		FY 2018: EBITDA EUR 5.5-7.0m, sales: EUR 45-50m						

**Sales development**  
in EUR m



Source: Warburg Research

**EBITDA (adjusted) development**  
in EUR m



Source: Warburg Research

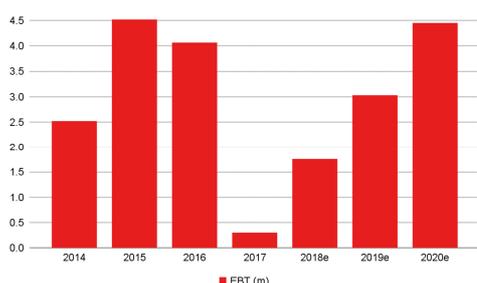
**Company Background**

- IBU-tec, which is based in Weimar, Germany, was founded in 1885 as a manufacturer of decorative stone from travertine and cast stone from quicklime.
- In 1975 the Weimar SKET institute took over the site and began using it as a pilot plant. This led to the installation of the first rotary kiln. Analysis, trials and measurements became core competences.
- Following German reunification, the institute was privatized in 1993. Catalyst research started in 2001 when Ulrich Weitz became CEO. The company went public in 2017.
- In 2018, IBU-tec announced the acquisition of organometallic compounds producer BNT Chemicals (Bitterfeld, Germany) and acquired a site to build a new production facility in Bitterfeld.
- In H1 2018, IBU-tec employed about 150 people. The company operated 16 rotary kilns, 8 pulsation reactors as well as equipment for pre- and post-treatment of solid materials

**Competitive Quality**

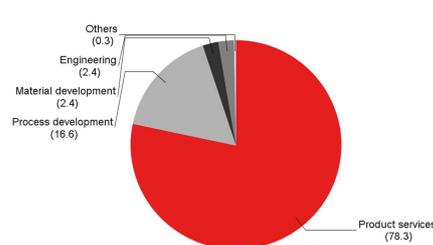
- The company provides R&D capabilities, services and toll manufacturing for the thermal processing of inorganic solid materials
- Following the acquisition of BNT Chemicals, the company is set to expand into upstream activities of solid material handling, e.g. the preparation of the repective solid materials which includes the handling of liquids
- It is a service provider for a very wide range of customer industries which includes battery material providers, manufacturers of mobile catalysts, implant producers and others
- As a supplier of services and production capacities, the company mostly competes with customers' own R&D and their respective production facilities

**EBT development**  
in EUR m



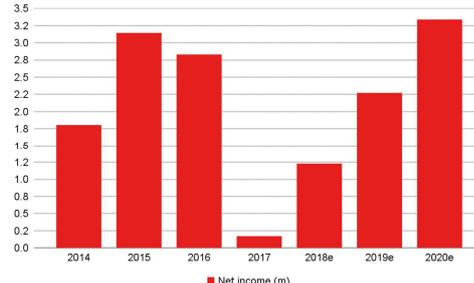
Source: Warburg Research

**Sales by segments**  
2017; 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
	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	
Sales	47.00	53.58	58.40	61.91	65.62	69.56	73.73	78.16	82.45	86.58	90.47	94.09	97.38	1.0 %
Sales change	179.6 %	14.0 %	9.0 %	6.0 %	6.0 %	6.0 %	6.0 %	6.0 %	5.5 %	5.0 %	4.5 %	4.0 %	3.5 %	
EBIT	2.03	3.49	4.85	5.34	5.86	6.49	7.17	7.83	8.51	9.20	9.88	10.56	11.69	
EBIT-margin	4.3 %	6.5 %	8.3 %	8.6 %	8.9 %	9.3 %	9.7 %	10.0 %	10.3 %	10.6 %	10.9 %	11.2 %	12.0 %	
Tax rate (EBT)	30.0 %	25.0 %	25.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	
NOPAT	1.42	2.62	3.64	3.84	4.22	4.67	5.16	5.64	6.13	6.62	7.12	7.60	8.41	
Depreciation	4.37	5.18	5.30	5.62	5.82	5.97	6.10	6.23	6.33	6.39	6.40	6.38	5.84	
in % of Sales	9.3 %	9.7 %	9.1 %	9.1 %	8.9 %	8.6 %	8.3 %	8.0 %	7.7 %	7.4 %	7.1 %	6.8 %	6.0 %	
Changes in provisions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Change in Liquidity from														
- Working Capital	8.34	-0.01	0.70	0.62	0.66	0.69	0.73	0.77	0.74	0.70	0.65	0.59	0.52	
- Capex	8.85	3.50	4.00	4.05	3.97	3.86	3.72	3.95	4.16	4.37	4.57	4.75	4.92	
Capex in % of Sales	18.8 %	6.5 %	6.8 %	6.5 %	6.0 %	5.5 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Free Cash Flow (WACC Model)	-11.40	4.30	4.24	4.78	5.41	6.08	6.81	7.16	7.56	7.94	8.30	8.64	8.82	
PV of FCF	-11.40	4.01	3.69	3.88	4.09	4.29	4.48	4.39	4.32	4.23	4.13	4.01	3.81	58
share of PVs	-3.87 %			43.44 %										60.42 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	35.00 %	Financial Strength	1.00
Cost of debt (after tax)	3.6 %	Liquidity (share)	2.00
Market return	7.00 %	Cyclicality	1.00
Risk free rate	1.50 %	Transparency	2.00
		Others	1.00
<b>WACC</b>	<b>7.24 %</b>	<b>Beta</b>	<b>1.40</b>

Valuation (m)

Present values 2030e	38		
Terminal Value	58		
Financial liabilities	15		
Pension liabilities	0		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	4	No. of shares (m)	4.0
<b>Equity Value</b>	<b>85</b>	<b>Value per share (EUR)</b>	<b>21.32</b>

Sensitivity Value per Share (EUR)

Beta	WACC	Terminal Growth							Beta	WACC	Delta EBIT-margin						
		0.25 %	0.50 %	0.75 %	1.00 %	1.25 %	1.50 %	1.75 %			-0.8 pp	-0.5 pp	-0.3 pp	+0.0 pp	+0.3 pp	+0.5 pp	+0.8 pp
1.68	8.2 %	16.24	16.57	16.92	17.29	17.69	18.12	18.58	1.68	8.2 %	15.79	16.29	16.79	17.29	17.79	18.29	18.79
1.54	7.7 %	17.89	18.28	18.70	19.15	19.64	20.17	20.74	1.54	7.7 %	17.53	18.07	18.61	19.15	19.69	20.23	20.77
1.47	7.5 %	18.79	19.23	19.69	20.20	20.74	21.33	21.96	1.47	7.5 %	18.51	19.07	19.63	20.20	20.76	21.32	21.88
1.40	7.2 %	19.77	20.25	20.77	21.32	21.93	22.58	23.30	1.40	7.2 %	19.57	20.15	20.74	21.32	21.91	22.49	23.08
1.33	7.0 %	20.82	21.35	21.92	22.55	23.22	23.96	24.76	1.33	7.0 %	20.71	21.32	21.93	22.55	23.16	23.77	24.38
1.26	6.7 %	21.95	22.54	23.18	23.88	24.63	25.46	26.38	1.26	6.7 %	21.96	22.60	23.24	23.88	24.51	25.15	25.79
1.12	6.2 %	24.51	25.24	26.04	26.92	27.89	28.96	30.14	1.12	6.2 %	24.81	25.51	26.22	26.92	27.62	28.33	29.03

- The company's beta value reflects limited liquidity (strategic investors hold 69% of the shares)

## 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	2014	2015	2016	2017	2018e	2019e	2020e	
Net Income before minorities	1.81	3.14	2.83	0.17	1.23	2.27	3.34	
+ Depreciation + Amortisation	1.35	1.76	2.07	2.31	4.37	5.18	5.30	
- Net Interest Income	-0.09	-0.12	-0.07	-0.06	-0.27	-0.46	-0.40	
- Maintenance Capex	0.98	1.14	1.18	1.52	1.77	1.75	2.00	
+ Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>= Free Cash Flow Potential</b>	<b>2.26</b>	<b>3.88</b>	<b>3.79</b>	<b>1.01</b>	<b>4.10</b>	<b>6.16</b>	<b>7.03</b>	
FCF Potential Yield (on market EV)	n/a	n/a	n/a	1.8 %	5.5 %	8.8 %	10.7 %	
WACC	7.24 %	7.24 %	7.24 %	7.24 %	7.24 %	7.24 %	7.24 %	
<b>= Enterprise Value (EV)</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>	<b>57.73</b>	<b>74.12</b>	<b>69.64</b>	<b>65.75</b>	
<b>= Fair Enterprise Value</b>	<b>31.19</b>	<b>53.53</b>	<b>52.29</b>	<b>13.99</b>	<b>56.61</b>	<b>85.11</b>	<b>97.17</b>	
- Net Debt (Cash)	-12.69	-12.69	-12.69	-12.69	10.52	6.04	2.15	
- Pension Liabilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
- Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
- Market value of minorities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
+ Market value of investments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>= Fair Market Capitalisation</b>	<b>43.88</b>	<b>66.22</b>	<b>64.97</b>	<b>26.68</b>	<b>46.09</b>	<b>79.07</b>	<b>95.02</b>	
Number of shares, average	3.00	3.00	3.00	4.00	4.00	4.00	4.00	
<b>= Fair value per share (EUR)</b>	<b>14.63</b>	<b>22.07</b>	<b>21.66</b>	<b>6.67</b>	<b>11.52</b>	<b>19.77</b>	<b>23.75</b>	
premium (-) / discount (+) in %					-27.5 %	24.3 %	49.4 %	
<b>Sensitivity Fair value per Share (EUR)</b>								
	10.24 %	8.68	12.63	12.41	5.65	7.38	13.53	16.64
	9.24 %	9.28	13.66	13.41	5.91	8.46	15.16	18.50
	8.24 %	10.02	14.93	14.66	6.25	9.80	17.19	20.81
WACC	<b>7.24 %</b>	<b>10.97</b>	<b>16.55</b>	<b>16.24</b>	<b>6.67</b>	<b>11.52</b>	<b>19.77</b>	<b>23.75</b>
	6.24 %	12.22	18.70	18.34	7.23	13.79	23.18	27.65
	5.24 %	13.95	21.66	21.23	8.00	16.92	27.89	33.03
	4.24 %	16.49	26.02	25.49	9.14	21.53	34.82	40.94

■ Historical volatility of the value indication is due to cyclical operative development, portfolio changes.

## Peer Group

Company	Price	EV / Sales		EV / EBITDA		EV / EBIT		P / E		EPS CAGR (17-20e)
		18e	19e	18e	19e	18e	19e	18e	19e	
Prices in local currency										
Average		-	-	-	-	-	-	-	-	-
Median		-	-	-	-	-	-	-	-	-
<b>IBU-tec</b>	<b>15.90</b>	<b>1.6</b>	<b>11.6</b>	<b>8.0</b>	<b>36.6</b>	<b>19.9</b>	<b>51.7</b>	<b>28.0</b>	<b>169.7 %</b>	
Delta to median		-	-	-	-	-	-	-	-	-

## Valuation

	2014	2015	2016	2017	2018e	2019e	2020e
Price / Book	n.a.	n.a.	n.a.	2.3 x	2.1 x	2.0 x	1.9 x
Book value per share ex intangibles	2.98	3.79	4.50	7.42	6.86	7.16	7.46
EV / Sales	n.a.	n.a.	n.a.	3.4 x	1.6 x	1.3 x	1.1 x
EV / EBITDA	n.a.	n.a.	n.a.	21.7 x	11.6 x	8.0 x	6.5 x
EV / EBIT	n.a.	n.a.	n.a.	162.2 x	36.6 x	19.9 x	13.6 x
EV / EBIT adj.*	n.a.	n.a.	n.a.	29.0 x	36.6 x	19.9 x	13.6 x
P / FCF	n.a.	n.a.	n.a.	n.a.	n.a.	13.1 x	12.4 x
P / E	n.a.	n.a.	n.a.	413.6 x	51.7 x	28.0 x	19.1 x
P / E adj.*	n.a.	n.a.	n.a.	39.0 x	51.7 x	28.0 x	19.1 x
Dividend Yield	n.a.	n.a.	n.a.	0.7 %	0.9 %	1.1 %	1.3 %
FCF Potential Yield (on market EV)	n.a.	n.a.	n.a.	1.8 %	5.5 %	8.8 %	10.7 %

\*Adjustments made for: Restructuring costs, value adjustments, one-off earnings/losses

**Consolidated profit & loss**

In EUR m	2014	2015	2016	2017	2018e	2019e	2020e
<b>Sales</b>	<b>12.54</b>	<b>16.65</b>	<b>17.74</b>	<b>16.81</b>	<b>47.00</b>	<b>53.58</b>	<b>58.40</b>
Change Sales yoy	n.a.	32.8 %	6.6 %	-5.3 %	179.6 %	14.0 %	9.0 %
Increase / decrease in inventory	0.01	0.14	0.14	0.26	0.27	0.15	0.15
Own work capitalised	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Sales</b>	<b>12.55</b>	<b>16.80</b>	<b>17.88</b>	<b>17.07</b>	<b>47.27</b>	<b>53.73</b>	<b>58.55</b>
Material expenses	0.98	1.33	1.47	1.78	23.33	27.32	29.87
<b>Gross profit</b>	<b>11.56</b>	<b>15.47</b>	<b>16.41</b>	<b>15.29</b>	<b>23.94</b>	<b>26.41</b>	<b>28.68</b>
<i>Gross profit margin</i>	<i>92.2 %</i>	<i>92.9 %</i>	<i>92.5 %</i>	<i>90.9 %</i>	<i>50.9 %</i>	<i>49.3 %</i>	<i>49.1 %</i>
Personnel expenses	5.74	6.81	7.63	8.31	12.21	12.68	13.52
Other operating income	0.47	0.53	0.85	0.62	0.70	0.70	0.76
Other operating expenses	2.34	2.79	3.19	3.30	6.03	5.76	5.77
Unfrequent items	0.00	0.00	-0.24	-1.64	0.00	0.00	0.00
<b>EBITDA</b>	<b>3.96</b>	<b>6.40</b>	<b>6.20</b>	<b>2.66</b>	<b>6.40</b>	<b>8.67</b>	<b>10.15</b>
<i>Margin</i>	<i>31.6 %</i>	<i>38.4 %</i>	<i>35.0 %</i>	<i>15.9 %</i>	<i>13.6 %</i>	<i>16.2 %</i>	<i>17.4 %</i>
Depreciation of fixed assets	1.35	1.76	2.07	2.31	4.37	5.18	5.30
<b>EBITA</b>	<b>2.61</b>	<b>4.64</b>	<b>4.14</b>	<b>0.36</b>	<b>2.03</b>	<b>3.49</b>	<b>4.85</b>
Amortisation of intangible assets	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Goodwill amortisation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>EBIT</b>	<b>2.61</b>	<b>4.64</b>	<b>4.14</b>	<b>0.36</b>	<b>2.03</b>	<b>3.49</b>	<b>4.85</b>
<i>Margin</i>	<i>20.8 %</i>	<i>27.9 %</i>	<i>23.3 %</i>	<i>2.1 %</i>	<i>4.3 %</i>	<i>6.5 %</i>	<i>8.3 %</i>
<b>EBIT adj.</b>	<b>2.61</b>	<b>4.64</b>	<b>4.38</b>	<b>1.99</b>	<b>2.03</b>	<b>3.49</b>	<b>4.85</b>
Interest income	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest expenses	0.09	0.12	0.07	0.06	0.27	0.47	0.40
Other financial income (loss)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>EBT</b>	<b>2.52</b>	<b>4.52</b>	<b>4.06</b>	<b>0.30</b>	<b>1.76</b>	<b>3.03</b>	<b>4.45</b>
<i>Margin</i>	<i>20.1 %</i>	<i>27.1 %</i>	<i>22.9 %</i>	<i>1.8 %</i>	<i>3.7 %</i>	<i>5.7 %</i>	<i>7.6 %</i>
Total taxes	0.72	1.38	1.23	0.13	0.53	0.76	1.11
<b>Net income from continuing operations</b>	<b>1.81</b>	<b>3.14</b>	<b>2.83</b>	<b>0.17</b>	<b>1.23</b>	<b>2.27</b>	<b>3.34</b>
Income from discontinued operations (net of tax)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Net income before minorities</b>	<b>1.81</b>	<b>3.14</b>	<b>2.83</b>	<b>0.17</b>	<b>1.23</b>	<b>2.27</b>	<b>3.34</b>
Minority interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Net income</b>	<b>1.81</b>	<b>3.14</b>	<b>2.83</b>	<b>0.17</b>	<b>1.23</b>	<b>2.27</b>	<b>3.34</b>
<i>Margin</i>	<i>14.4 %</i>	<i>18.9 %</i>	<i>16.0 %</i>	<i>1.0 %</i>	<i>2.6 %</i>	<i>4.2 %</i>	<i>5.7 %</i>
Number of shares, average	3.00	3.00	3.00	4.00	4.00	4.00	4.00
<b>EPS</b>	<b>0.60</b>	<b>1.05</b>	<b>0.94</b>	<b>0.04</b>	<b>0.31</b>	<b>0.57</b>	<b>0.83</b>
EPS adj.	0.60	1.05	1.02	0.45	0.31	0.57	0.83

\*Adjustments made for: Restructuring costs, value adjustments, one-off earnings/losses

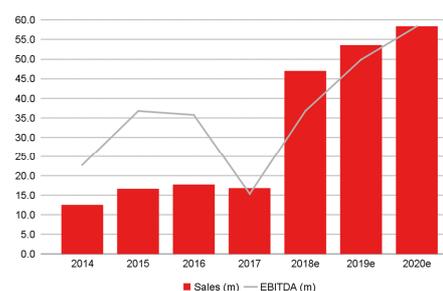
**Guidance: FY 2018: EBITDA EUR 5.5-7.0m, sales: EUR 45-50m**

**Financial Ratios**

	2014	2015	2016	2017	2018e	2019e	2020e
Total Operating Costs / Sales	26.5 %	24.8 %	26.2 %	30.2 %	62.5 %	61.7 %	61.0 %
Operating Leverage	n.a.	2.4 x	-1.6 x	17.3 x	2.6 x	5.2 x	4.3 x
EBITDA / Interest expenses	43.0 x	52.9 x	84.0 x	47.3 x	23.5 x	18.6 x	25.5 x
Tax rate (EBT)	28.4 %	30.4 %	30.4 %	43.3 %	30.0 %	25.0 %	25.0 %
Dividend Payout Ratio	0.0 %	0.0 %	0.0 %	305.5 %	48.8 %	31.7 %	24.0 %
Sales per Employee	n.a.	n.a.	113,744	n.a.	23,500,000	n.a.	n.a.

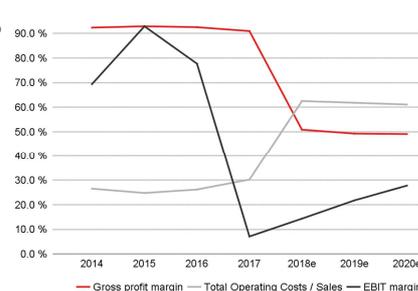
**Sales, EBITDA**

in EUR m

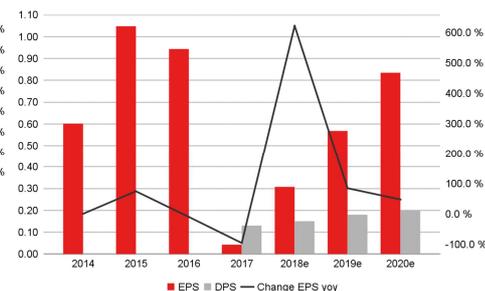


**Operating Performance**

in %



**Performance per Share**



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

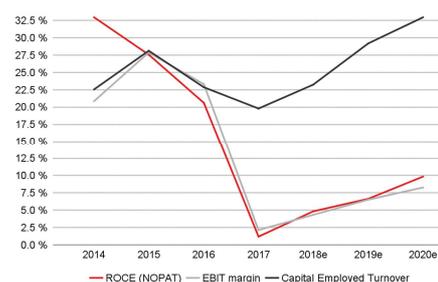
**Consolidated balance sheet**

In EUR m	2014	2015	2016	2017	2018e	2019e	2020e
<b>Assets</b>							
Goodwill and other intangible assets	0.23	0.34	0.39	0.38	3.31	2.81	4.23
thereof other intangible assets	0.23	0.34	0.39	0.38	0.24	0.05	1.74
thereof Goodwill	0.00	0.00	0.00	0.00	3.07	2.76	2.49
Property, plant and equipment	13.29	13.83	16.41	16.23	30.95	28.80	25.50
Financial assets	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other long-term assets	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Fixed assets</b>	<b>13.52</b>	<b>14.17</b>	<b>16.81</b>	<b>16.61</b>	<b>34.26</b>	<b>31.61</b>	<b>29.73</b>
Inventories	0.01	0.00	0.00	0.32	8.79	9.02	9.56
Accounts receivable	1.21	1.96	2.14	2.61	4.39	4.50	4.91
Liquid assets	1.09	2.98	2.10	15.72	4.15	6.49	8.64
Other short-term assets	0.10	0.27	0.37	0.66	0.86	0.94	0.99
<b>Current assets</b>	<b>2.41</b>	<b>5.21</b>	<b>4.61</b>	<b>19.31</b>	<b>18.18</b>	<b>20.95</b>	<b>24.09</b>
<b>Total Assets</b>	<b>15.93</b>	<b>19.38</b>	<b>21.42</b>	<b>35.92</b>	<b>52.45</b>	<b>52.56</b>	<b>53.82</b>
<b>Liabilities and shareholders' equity</b>							
Subscribed capital	3.00	3.00	3.00	4.00	4.00	4.00	4.00
Capital reserve	0.74	1.05	1.31	3.13	3.21	3.29	3.61
Retained earnings	4.51	6.36	7.96	19.02	19.54	20.03	21.94
Other equity components	0.93	1.31	1.63	3.91	4.02	4.12	4.51
Shareholders' equity	9.18	11.72	13.90	30.06	30.77	31.44	34.06
Minority interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total equity</b>	<b>9.18</b>	<b>11.72</b>	<b>13.90</b>	<b>30.06</b>	<b>30.77</b>	<b>31.44</b>	<b>34.06</b>
Provisions	2.68	2.60	2.66	2.10	2.33	3.34	3.34
thereof provisions for pensions and similar obligations	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Financial liabilities (total)	3.26	3.35	4.06	3.03	14.66	12.53	10.78
thereof short-term financial liabilities	0.75	0.74	0.95	0.78	1.71	1.87	1.98
Accounts payable	0.59	1.05	0.40	0.51	2.43	2.77	3.02
Other liabilities	0.23	0.62	0.38	0.21	2.26	2.47	2.62
<b>Liabilities</b>	<b>6.75</b>	<b>7.62</b>	<b>7.49</b>	<b>5.86</b>	<b>21.68</b>	<b>21.11</b>	<b>19.76</b>
<b>Total liabilities and shareholders' equity</b>	<b>15.93</b>	<b>19.34</b>	<b>21.39</b>	<b>35.92</b>	<b>52.45</b>	<b>52.56</b>	<b>53.82</b>

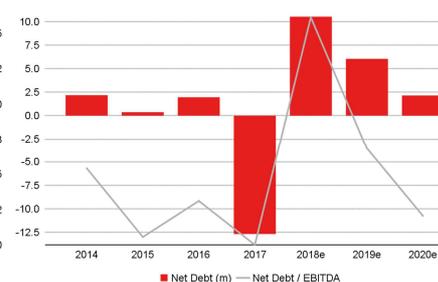
**Financial Ratios**

	2014	2015	2016	2017	2018e	2019e	2020e
<b>Efficiency of Capital Employment</b>							
Operating Assets Turnover	0.9 x	1.1 x	1.0 x	0.9 x	1.1 x	1.4 x	1.6 x
Capital Employed Turnover	1.1 x	1.4 x	1.1 x	1.0 x	1.1 x	1.4 x	1.6 x
ROA	13.4 %	22.2 %	16.8 %	1.0 %	3.6 %	7.2 %	11.2 %
<b>Return on Capital</b>							
ROCE (NOPAT)	32.9 %	27.5 %	20.6 %	1.2 %	4.8 %	6.7 %	9.9 %
ROE	39.3 %	30.1 %	22.1 %	0.8 %	4.0 %	7.3 %	10.2 %
Adj. ROE	39.3 %	30.1 %	24.0 %	8.2 %	4.0 %	7.3 %	10.2 %
<b>Balance sheet quality</b>							
Net Debt	2.18	0.37	1.95	-12.69	10.52	6.04	2.15
Net Financial Debt	2.18	0.37	1.95	-12.69	10.52	6.04	2.15
Net Gearing	23.7 %	3.2 %	14.1 %	-42.2 %	34.2 %	19.2 %	6.3 %
Net Fin. Debt / EBITDA	55.0 %	5.8 %	31.5 %	n.a.	164.5 %	69.7 %	21.2 %
Book Value / Share	3.1	3.9	4.6	7.5	7.7	7.9	8.5
Book value per share ex intangibles	3.0	3.8	4.5	7.4	6.9	7.2	7.5

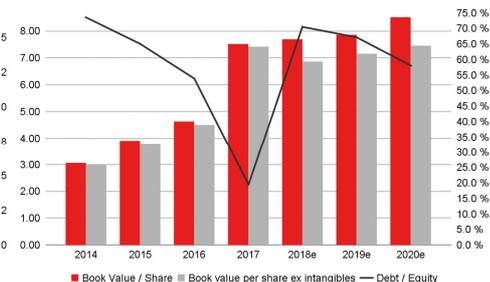
**ROCE Development**



**Net debt in EUR m**



**Book Value per Share in EUR**



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

## Consolidated cash flow statement

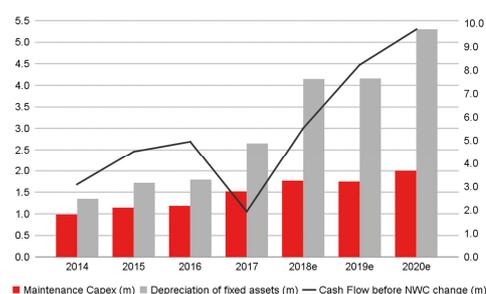
In EUR m	2014	2015	2016	2017	2018e	2019e	2020e
Net income	1.81	3.14	2.83	0.17	1.23	2.27	3.34
Depreciation of fixed assets	1.35	1.72	1.79	2.65	4.15	4.16	5.30
Amortisation of goodwill	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amortisation of intangible assets	0.00	0.04	0.27	-0.34	0.22	1.02	0.00
Increase/decrease in long-term provisions	0.15	0.04	0.27	-0.34	0.22	1.02	0.00
Other non-cash income and expenses	-0.21	-0.42	-0.22	-0.20	-0.30	-0.25	1.10
<b>Cash Flow before NWC change</b>	<b>3.09</b>	<b>4.51</b>	<b>4.95</b>	<b>1.94</b>	<b>5.52</b>	<b>8.21</b>	<b>9.74</b>
Increase / decrease in inventory	0.00	0.00	0.00	0.00	-8.48	-0.22	-0.54
Increase / decrease in accounts receivable	0.51	-0.91	-0.28	-1.08	-1.97	-0.19	-0.46
Increase / decrease in accounts payable	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase / decrease in other working capital positions	0.02	0.73	-0.90	-0.09	9.97	0.55	0.40
Increase / decrease in working capital (total)	0.53	-0.17	-1.18	-1.16	-0.48	0.14	-0.60
<b>Net cash provided by operating activities [1]</b>	<b>3.62</b>	<b>4.34</b>	<b>3.77</b>	<b>0.78</b>	<b>5.03</b>	<b>8.35</b>	<b>9.13</b>
Investments in intangible assets	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Investments in property, plant and equipment	-3.94	-2.29	-4.74	-2.17	-8.85	-3.50	-4.00
Payments for acquisitions	0.00	0.00	0.00	0.00	-6.27	0.00	0.00
Financial investments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Income from asset disposals	0.03	0.04	0.03	0.05	0.00	0.00	0.00
<b>Net cash provided by investing activities [2]</b>	<b>-3.90</b>	<b>-2.25</b>	<b>-4.71</b>	<b>-2.13</b>	<b>-15.12</b>	<b>-3.50</b>	<b>-4.00</b>
Change in financial liabilities	-0.37	0.24	0.71	-1.02	-0.94	-2.13	-1.75
Dividends paid	-0.10	-0.60	-0.65	-0.51	-0.52	-0.60	-0.72
Purchase of own shares	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capital measures	0.00	0.00	0.00	16.50	0.00	0.00	0.00
Other	0.58	0.16	0.00	0.00	0.00	0.00	0.00
<b>Net cash provided by financing activities [3]</b>	<b>0.10</b>	<b>-0.20</b>	<b>0.06</b>	<b>14.97</b>	<b>-1.46</b>	<b>-2.73</b>	<b>-2.47</b>
<b>Change in liquid funds [1]+[2]+[3]</b>	<b>-0.18</b>	<b>1.89</b>	<b>-0.88</b>	<b>13.62</b>	<b>-11.55</b>	<b>2.12</b>	<b>2.67</b>
Effects of exchange-rate changes on cash	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cash and cash equivalent at end of period	1.09	2.98	2.10	15.72	4.15	6.49	8.64

## Financial Ratios

	2014	2015	2016	2017	2018e	2019e	2020e
<b>Cash Flow</b>							
FCF	-0.29	2.09	-0.93	-1.35	-10.09	4.85	5.13
Free Cash Flow / Sales	-2.5 %	12.3 %	-5.4 %	-8.3 %	-8.1 %	9.1 %	8.8 %
Free Cash Flow Potential	2.26	3.88	3.79	1.01	4.10	6.16	7.03
Free Cash Flow / Net Profit	-17.6 %	65.3 %	-34.1 %	-819.2 %	-310.3 %	213.5 %	153.8 %
Interest Received / Avg. Cash	0.4 %	0.0 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
Interest Paid / Avg. Debt	5.6 %	3.7 %	2.0 %	1.6 %	3.1 %	3.4 %	3.4 %
<b>Management of Funds</b>							
Investment ratio	31.4 %	13.7 %	26.7 %	12.9 %	18.8 %	6.5 %	6.8 %
Maint. Capex / Sales	7.8 %	6.9 %	6.7 %	9.0 %	3.8 %	3.3 %	3.4 %
Capex / Dep	292.2 %	130.2 %	229.2 %	94.1 %	202.6 %	67.6 %	75.5 %
Avg. Working Capital / Sales	2.5 %	4.6 %	7.5 %	12.4 %	14.0 %	20.1 %	19.0 %
Trade Debtors / Trade Creditors	206.1 %	187.1 %	538.6 %	508.9 %	180.4 %	162.4 %	162.4 %
Inventory Turnover	89.5 x	1330.0 x	1490.0 x	5.6 x	2.7 x	3.0 x	3.1 x
Receivables collection period (days)	35	43	44	57	34	31	31
Payables payment period (days)	218	287	99	105	38	37	37
Cash conversion cycle (Days)	-178	-244	-54	16	134	114	111

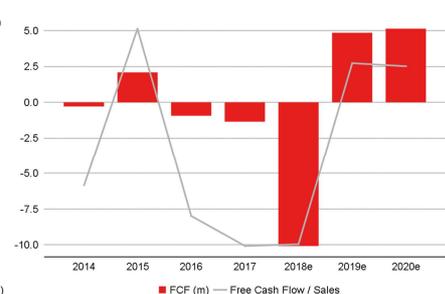
### CAPEX and Cash Flow

in EUR m



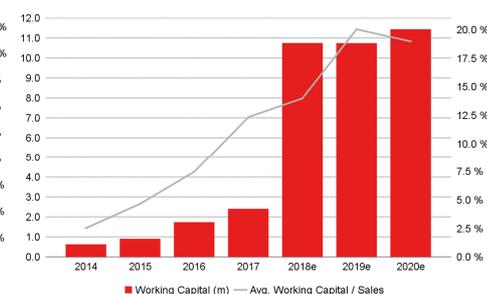
Source: Warburg Research

### Free Cash Flow Generation



Source: Warburg Research

### Working Capital



Source: Warburg Research

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- 6c- The issuer holds shares of more than 5% of the total issued capital of Warburg Research or an affiliated company.
- 7- The company preparing the analysis as well as its affiliated companies and employees have **other important interests** in relation to the analysed company, such as, for example, the exercising of mandates at analysed companies.

This report has been made accessible to the company analysed and was modified thereafter.

Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
IBU-tec	5	<a href="http://www.mmwarburg.com/disclaimer/disclaimer_en/DE000A0XYHT5.htm">http://www.mmwarburg.com/disclaimer/disclaimer_en/DE000A0XYHT5.htm</a>

**INVESTMENT RECOMMENDATION**

Investment recommendation: expected direction of the share price development of the financial instrument up to the given price target in the opinion of the analyst who covers this financial instrument.

-B-	<b>Buy:</b>	The price of the analysed financial instrument is expected to rise over the next 12 months.
-H-	<b>Hold:</b>	The price of the analysed financial instrument is expected to remain mostly flat over the next 12 months.
-S-	<b>Sell:</b>	The price of the analysed financial instrument is expected to fall over the next 12 months.
“-“	<b>Rating suspended:</b>	The available information currently does not permit an evaluation of the company.

**WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING**

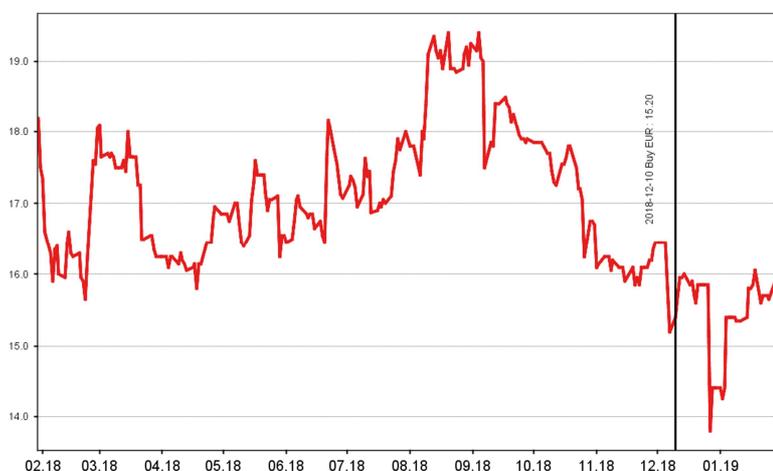
Rating	Number of stocks	% of Universe
Buy	134	66
Hold	58	28
Sell	5	2
Rating suspended	7	3
<b>Total</b>	<b>204</b>	<b>100</b>

**WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING ...**

... taking into account only those companies which were provided with major investment services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	31	74
Hold	9	21
Sell	0	0
Rating suspended	2	5
<b>Total</b>	<b>42</b>	<b>100</b>

**PRICE AND RATING HISTORY IBU-TEC AS OF 29.01.2019**



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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