

IBU-tec

Speciality chemicals

30 March 2017

Thermal processing experts

IBU-tec has a unique, proprietary reactor for manufacturing inorganic materials with precisely controlled properties. This has enabled it to generate double-digit revenue growth since FY13 and deliver an EBIT margin of over 20% since FY14. IBU-tec has raised €16.5m (gross) through an IPO to fund its plans for doubling revenues and profits medium-term.

Differentiated offer generates high margins

IBU-tec achieved a 17% CAGR in revenues between 2013 and 2016. This is attributable to strong growth in the production of catalysts and materials used in batteries deployed in electric transport and energy storage. Demand for both types of materials is expected to continue to grow strongly. EBIT margins have been at least 20% since 2014, supported by demand for catalysts. IBU-tec's unique, patented pulsation reactor technology enables catalysts to be produced with less waste of expensive active substances, thus commanding a higher margin compared with conventional thermal processing techniques.

Funds raised for next phase of expansion

IBU-tec intends to double revenues medium-term while maintaining margins at current levels. The acquisition of a site at which it can carry out highly regulated processes that are not permitted at its current sites is key to achieving this growth. Management intends to spend the majority of the funds raised from the IPO for this purpose. Management has already built up a sizable pipeline of projects suitable for processing at this site. In addition, management intends to develop international sales, working with the overseas operations of existing customers in Germany and establishing its own sales presence in selected countries.

Valuation: EBIT margins justify high multiples

IBU-tec's implied historical EV/EBITDA and P/E multiples, including the funds from the IPO, are close to the mean for our sample of European speciality chemical companies. Given IBU-tec's consistently higher than average EBIT margin, we believe that IBU-tec deserves a premium to the mean. We see potential for share price appreciation going forward as IBU-tec demonstrates that it is able to continue to deliver revenue growth without compromising margin, particularly once the third site is acquired and starts contributing to the bottom line.

Historical financials

Year end	Revenue (€m)	PBT (€m)	EPS (€)	DPS (€)	P/E (x)	Yield (%)
12/14	12.5	2.5	0.45*	0.0	N/A	N/A
12/15	16.7	4.5	0.79*	0.0	N/A	N/A
12/16	17.7	4.1	0.71*	0.0	N/A	N/A
12/17e	N/A	N/A	N/A	N/A	N/A	N/A

Source: IBU-tec accounts. Note: *On number of shares at listing date.

Price	€16.5
Market cap	€66m

Share details

Code	IBU
Listing	Deutsche Börse Scale
Shares in issue	4.0m
Last reported net debt as at 31 December 2016 (excludes any proceeds from proposed subscription and open offer)	€2.0m

Business description

IBU-tec is an international full service provider in the field of thermal process engineering, predominantly treating inorganic materials. Its services help clients create enhanced performance materials, reduce energy consumption and use input materials more efficiently.

Bull

- Patented IP for processing chemicals with pulsation reactor.
- Serving high-growth segments such as exhaust catalysts, e-mobility and energy storage.
- Blue-chip customer base.

Bear

- High customer concentration.
- Expansion into new applications dependent on acquiring site with appropriate approvals.
- Low free-float.

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Company description: One-stop thermal processing

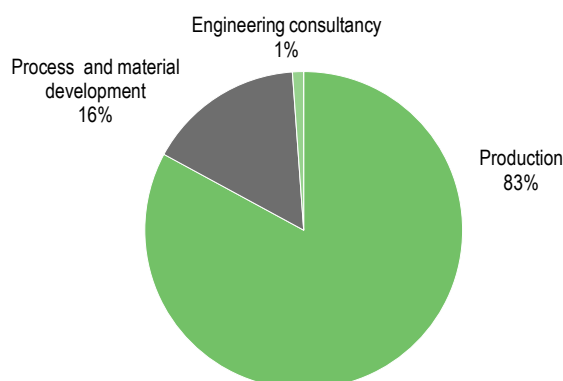
IBU-tec offers an extensive range of highly specialised thermal engineering services, predominantly for deployment in the manufacture of inorganic chemicals. These services cover the entire life cycle of a product, from initial trials, through scale-up to volume production and ultimately product obsolescence. The service offer is backed by in-depth engineering and chemical expertise combined with flexible research and production capability. Importantly IBU-tec is focused on high-growth segments in the chemical and automotive industry, primarily catalysts for cleaning exhaust gases, serving blue-chip clients in each segment. IBU-tec delivered a 17% CAGR in revenues between 2013 and 2016 and has generated an EBIT margin of over 20% since 2014.

IBU-tec listed on the Frankfurt Stock Exchange on 30 March 2017, raising €16.5m (gross) through a placing at €16.5/share. The funds raised will primarily be used to acquire a site that has the requisite approval for carrying out chemical processes that are subject to more onerous regulatory requirements and cannot be performed at either of the existing sites.

IBU-tec is located in Weimar, Germany, where it has two sites: the main one where the headquarters, R&D and main production facilities are located and a smaller one currently used for logistics where a limited scale production facility will be established during FY17. It also has an office in Berlin. It currently employs around 150 people, 40% of whom have degree-level qualifications. It benefits from the relatively low cost-base in the former East Germany.

Services throughout the product life cycle

Exhibit 1: FY16 revenue split



Source: IBU-tec

Developing ideas into marketable products

When a client has an idea for a new material, IBU-tec is able to help develop this into a commercial product. Sample quantities are produced in a laboratory environment, analysed to confirm that the composition meets with the specification and tested under specific conditions to check that the performance also meets specification. Promising materials pass to the scale-up stage, in which IBU-tec uses product scale equipment to refine and check the sequence of processes required. Should the client wish to manufacture volume quantities itself, IBU-tec will then carry out a comprehensive knowledge transfer, supplementing this with additional implementation support as requested. Outsourcing these steps reduces the investment risk for clients, speeding up time to market and reducing the need to staff and equip an in-house laboratory and pilot production facilities.

Flexible production capability

IBU-tec has invested in capacity to carry out volume manufacture of specialist inorganic materials requiring careful control of the thermal process. This capacity is used to manufacture product for clients that do not have the capability in-house or want to supplement their own capacity. IBU-tec has 12 rotary kilns at its main Weimar site, the largest of which is able to process up to 1.5 tonnes an hour. Collectively, the kilns offer clients a wide variety of options for manufacturing materials such as catalysts, battery materials, ceramic materials, abrasives and polishing agents, pigments and adsorbents. Importantly, the facility is designed to contain problematic off-gases safely. Some clients outsource manufacturing to IBU-tec because they do not want to take the risk associated with handling these gases themselves.

Pulsation reactors for the creation and production of advanced materials

IBU-tec is a world-leader in the use of pulsation reactors for manufacturing inorganic chemicals. Small amounts of input materials react in a brief pulse of hot gas. The material is heated up and cooled extremely quickly and as all the particles are flung about in the fast moving gas stream, they experience identical reaction conditions. The process is highly suitable for distributing dopants evenly, for tailoring nano-scale crystalline structures, for controlling the surface properties of materials and for synthesising extremely homogeneous materials and nano-sized particles. While pulsation reactors themselves are not new, IBU-tec has 16 patents (including three pending) regarding the control of materials within the reactor, close regulation of which gives precise control over the performance of the output material. IBU-tec's current facility has seven different pulsation reactors, most of which are able to process up to 160kg/hour. The pulsation reactors are primarily used to manufacture catalysts.

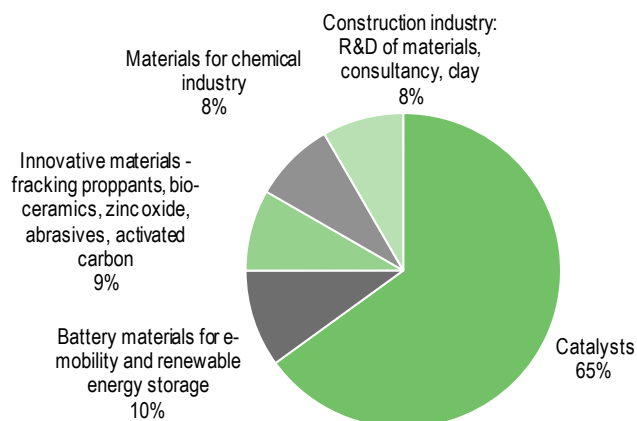
In-depth engineering and chemical expertise

IBU-tec complements this offer with consultancy on thermal process technology. Its experts make on-site visits where they analyse and assess existing plant and advise on improvements, typically involving substantial energy and costs savings. They also advise on new builds. This is IBU-tec's original business. It is maintained because it helps identify clients for the other services.

Market overview

Markets served

Exhibit 2: Analysis of revenues by application segment, FY16



Source: IBU-tec

The supply of catalytic materials for use in systems to remove pollutants from exhaust gases in cars and industrial premises is a key application for IBU-tec. Demand is driven by regulations such as the introduction of the Euro 6b emissions standard. In March 2016, research from Markets and Markets forecast that the global emission control catalyst market would reach US\$16.1bn by 2021, registering a CAGR of 10.4% between 2016 and 2021. The report notes that the market will be driven by high growth in the automotive and industrial sectors (which is where IBU-tec is focused), resulting from the adoption of strict emissions regulations standards in the EU, adoption of EU equivalent standards in China and other Asia-Pacific countries and an increase in demand for diesel oxidation catalysts.

The next most important market for IBU-tec is the supply of materials for batteries, where the company has a multi-year programme to develop materials for several global players within the battery industry. Growth in demand is being driven by the deployment of batteries in the power train of electric vehicles and as energy storage in renewable energy grids. The development of novel materials that can store charge more efficiently and cost-effectively is important in both applications, but particularly for electric vehicles. Here extra capacity equates to greater range, currently a factor limiting adoption. Both sectors are expected to show strong growth. The Paris Declaration on Electro-Mobility and Climate Change and Call to Action by the United Nations in 2015 set a global deployment target of 100m electric cars and 400m (40% of the total) two- and three-wheel vehicles by 2030, up from 1m cars and c 230m two- and three-wheelers today. While the shift to renewables may be held back by the new US administration, China is forging ahead. Currently 40% of the Chinese two-wheeler stock is electric, compared with 1% in 2000. In a report published on June 2016, Bloomberg New Energy Finance noted that widespread adoption of battery-powered vehicles will help bring down the cost of batteries, encouraging deployment of batteries for energy storage. Currently an estimated 95% of on-grid energy storage is pumped hydro, which only works in areas with suitable topology. The Bloomberg report estimates that battery energy storage will rise from around 1GW today to around 25GW by 2028, making it the same size as the small-scale photovoltaic industry today.

Customer base

IBU-tec's client base is highly concentrated. The five top clients collectively account for around 83% of total revenues, the top client around 49%, although the customer base totals around 150. The names of clients cannot be disclosed for confidentiality reasons but the list includes numerous blue-chip multi-nationals in the chemical industry.

Competitive environment

Originally, IBU-tec only offered thermal processing consultancy, placing it in the same category as research institutions such as Otto von Guericke University in Magdeburg or equipment manufacturers such as FLSmidth. It has grown its available market by expanding first into material and process development and then into toll processing. It is one of a relatively small number of companies that offer development services and toll processing of materials but does not also offer its own catalysts for sale. This is strategically important, because customers do not regard IBU-tec as a potential competitor, as they would if it offered its own catalysts for sale. IBU-tec's key differentiator with respect to other toll processors is the pulsation reactors, which account for half of all toll-processing revenues. IBU-tec appears to be the only company offering toll processing using this type of equipment. It has also supplied a limited number of pulsation reactors to specific customers. As IBU-tec expands globally, which is part of its strategy, it will come into contact with a greater number of local competitors in the toll-processing segment, such as Magma.

Exhibit 3: Competitive analysis

	Toll manufacturing	Own brand catalysts	Equipment supplier	Thermal process consultancy	Location
AURA			✓	✓	Germany
CUTEC Institut				✓	Germany
Eurosupport	✓	✓			Czech Republic, HQ Netherlands
Evonik	✓	✓			Global
FLSchmidt			✓	✓	Global
Harper International			✓	✓	US
Hazen Research				✓	US
Hosokawa Micron	(✓)		✓		Netherlands
Howard Industries	✓				US
Nikki-Universal Co.	(✓)	✓			Japan
Magma Ceramics	✓	✓			UK
OvGU Magdeburg				✓	Germany
Porocel	✓	✓			US, EU, India
PPT Powder	✓				US
Ranido	✓	✓			Czech Republic
Riedhammer			✓	(✓)	Germany
Procedyne	(✓)		✓	✓	US
Thermograde	✓	✓			UK
ThyssenKrupp Industrial Solutions			✓	✓	Global
Turbulent Diffusion Technology Inc.			✓	✓	Canada
YS-Inc	✓				US

Source: Edison Investment Research

In reality, the primary competition for IBU-tec is chemical companies deciding to process materials themselves rather than outsourcing production to IBU-tec or its peers. The advantages of toll processing are that customers do not need to invest in capital equipment, additional personnel or floor space, can ramp up production quickly and without having to obtain permits and have predictable costs. Additionally, customers wanting the additional control over material properties that is offered by a pulsation reactor have to engage IBU-tec. IBU-tec's acquisition of a site where more challenging materials may be processed will strengthen the differentiators between IBU-tec and other toll processors and encourage more companies to outsource production to it.

Next phase of development

In the medium term, management intends to double revenues while maintaining margins at current levels. There are three parallel programmes for achieving this growth: introduction of complementary processes on a third site; international expansion; and the establishment of a single sales team dealing with the entire service offer.

Expansion on a third site

IBU-tec is seeking to establish a facility on a third site where it will process materials such as metal and metal oxide based catalysts that it cannot produce currently because of regulatory and permitting restrictions. These include nickel, nickel oxide, copper, chromium and vanadium. It will also be used to house more challenging processes involving reactions in reducing atmospheres including hydrogen gas, which have an attendant risk of fire or explosion. These chemicals and processes must be carried out in accordance with regulations intended to protect personnel, infrastructure and the environment. The rising regulatory burden means that large international companies are keen to outsource some of these manufacturing processes. IBU-tec has the expertise required but needs a site with the requisite approval to host these activities. For example, such a site must have specialised effluent treatment. IBU-tec intends to secure a suitable site either by purchasing an existing chemical company, which is the preferred option, or by establishing a new facility. Management has allocated the majority of the funds raised on listing to invest in this additional facility. IBU-tec has already built up a provisional pipeline of suitable projects for the proposed facility with existing and new customers.

National and international sales campaigns

Currently 88% of IBU-tec's sales are attributable to customers in Germany. IBU-tec intends to build on this strong domestic base by seeking new customers in markets it already serves and promoting the ability to manufacture more challenging materials on the proposed new site. It intends to expand internationally by developing contacts with overseas arms of existing customers, potentially forming JVs with them, as well as building up a direct salesforce in selected overseas markets such as France, the UK and the US. In parallel, management is switching from three sales teams, each focused on a different service, to a single team offering the complete portfolio.

Fund-raising

IBU-tec has raised €16.5m (gross) through a private placing and open offer. The number of shares increased from 3.0m to 4.0m. As discussed, the majority of the funds raised will be used to acquire a site where processes requiring stringent regulatory approval may be carried out.

Management structure designed for growth

CEO: Ulrich Weitz (DIPL.-ING.) has been CEO and majority shareholder of IBU-tec since 2000. In 1998 he became plant manager with responsibility for over 750 staff at Winkler + Dünnebier AG, focusing on the construction of specialist machinery for folding envelopes and paper handkerchiefs and processing personal care products. Prior to that, he held management positions in the fields of quality control, design and production at OTIS.

CFO: Jörg Leinenbach (DIPL.-KFM.) held various management positions in accounting, controlling and investment management prior to joining IBU-tec in January 2015. He was appointed to his current position in January 2017.

Operations and Technology Director: Dr Toralf Rensch is a specialist in plant and process engineering with a particular focus on rotary kilns. He has held various management positions since joining IBU-tec in 1997.

Sales and Business Development Director: Robert Süße (DIPL.-WIRTSCH.-ING., MBA) previously served as a VP corporate development Asia to the SMS Group. As a project manager for Roland Berger Strategy Consultants and as an independent consultant, he has worked on a wide range of assignments with many clients throughout the world. He joined IBU-tec in his current role in April 2015.

Shareholders

Following the IPO, the shareholder list is still dominated by members of the Weitz family.

Exhibit 4: Shareholdings post-IPO

Shareholder	Holding
Ulrich Weitz	29.3%
Viola Kirby-Weitz	20.2%
Isabelle Weitz	19.5%
Source: IBU-tec	

Financials

IBU-tec has delivered a 17% CAGR in revenues between FY13 and FY16, while its EBIT margin has been at least 20% since 2014.

Exhibit 5: Financial summary

Year end 31 December, €000s	2014	2015**	2016
		BilRuG	BilRuG
Income statement			
Revenue	12,537	16,652	17,744
EBIT (as reported)	2,610	4,629	4,128
Profit before tax (as reported)	2,521	4,519	4,065
Net income (as reported)	1,815	3,153	2,853
EPS (as reported) – €	0.45*	0.79*	0.71*
Dividend per share – €	0.0	0.0	0.0
Balance sheet			
Total non-current assets	13,520	14,168	16,807
Total current assets	2,412	5,208	4,611
Total assets	15,932	19,376	21,418
Total non-current liabilities	-**	4,439	4,668
Total current liabilities	6,757	3,219	2,850
Total liabilities	6,757	7,658	7,518
Net assets	9,175	11,719	13,899
Shareholders' equity	9,175	11,719	13,899
Cash flow			
Net cash from operating activities	3,618	4,340	3,773
Net cash from investing activities	(3,904)	(2,251)	(4,707)
Net cash from financing activities	104	(198)	56
Net cash flow	(182)	1,891	(878)
Cash & cash equivalent end of year	1,089	2,980	2,102

Source: IBU-tec accounts. Note: *On number of shares at listing date. **No split into non-current and current liabilities available.

Income statement

There are two factors behind the substantial increase in revenues during FY15. The first was the introduction of the Euro 6 regulations, the benefit of which has continued into FY16 and beyond. The other was the delivery of a major order for a customer who IBU-tec decided to discontinue working with in early 2016. Despite the absence of further business from this customer IBU-tec managed to achieve sales growth of €1.1m year-on-year (7%) to €17.7m during FY16. This was driven primarily by growth in revenues from process development, which should translate to production revenue growth in FY17. There was also a small increase in production revenues.

Costs grew more quickly than sales during FY16. Personnel costs increased by 12% (€0.8m) as management invested in R&D and sales staff. Headcount is now sufficient to support growth on the existing sites. The cost of materials is relatively insignificant (7% revenues in 2016) because customers purchase most of the raw materials themselves. Depreciation rose by €0.3m (18%), reflecting investment in a new rotary kiln. Total operating costs rose by €1.9m (18%), resulting in a €0.5m (11%) reduction in operating profit to €4.1m. The EBIT margin reduced by 4.5bp to 23.3%.

Balance sheet and cash flow

Cash flow from operations (which includes deductions for finance payments and tax) reduced by €0.6m to €3.8m in FY16, reflecting lower EBIT and a €0.9m reduction in creditors as the final payment for the new rotary kiln was settled. Capital expenditure (net) more than doubled to €4.5m following investment in new equipment, including €2.1m for a rotary kiln and its housing (an additional €0.3m on this project fell into FY15) and €1.0m the acquisition of a new logistics and production site 10km from the main Weimar facility. This was needed because there is no further room for expansion at the main Weimar site. A €0.7m dividend was paid to the owners. Stripping out the impact of other financing activities, this high level of investment resulted in a cash outflow

for FY16 totalling €1.6m, compared with a €1.5m inflow in FY15. Net debt increased by €1.6m to €2.0m. The balance sheet is strong, with €2.1m cash and 14% gearing. Management has good visibility of customer demand. While formal contracts may extend for one week to a year, customers typically order under an informal agreement, sharing details of expected demand with IBU-tec. This means IBU-tec is able to invest in capacity ahead of demand with confidence. For example, the newest rotary kiln, which was commissioned in September 2016, is already 65% utilised.

Valuation

Peer valuation

Exhibit 6: Historic multiples for listed peers

Company	Reporting currency	Market cap (local m)	Historic EV/sales	Historic EV/EBITDA	Historic P/E	Historic EBIT margin
Akzo Nobel NV	€	19,551	1.5x	9.8x	20.0x	11.5%
Bodycote PLC	£	1,527	2.5x	9.9x	22.7x	16.6%
Clariant AG	CHF	6,128	1.3x	11.0x	26.0x	7.1%
Croda International PLC	£	4,710	4.1x	15.3x	24.2x	24.0%
Elementis PLC	US\$	1,320	1.9x	11.0x	19.4x	16.3%
Encres Dubuit	€	13	0.5x	12.9x	26.7x	0.3%
Evonik Industries AG	€	13,978	1.0x	6.1x	16.6x	11.4%
FUCHS PETROLUB SE	€	2,671	1.1x	6.4x	20.7x	15.0%
Givaudan SA	CHF	16,537	3.7x	15.6x	25.6x	18.8%
Holland Colours NV	€	59	0.7x	6.9x	16.3x	8.8%
Johnson Matthey PLC	£	5,773	0.6x	9.6x	17.9x	2.8%
Kemira OYJ	€	1,776	0.9x	7.8x	19.1x	6.2%
Koninklijke DSM NV	€	11,462	1.7x	11.3x	17.9x	7.4%
Nabaltec AG	€	120	1.1x	6.5x	17.9x	8.8%
Nanogate AG	€	186	2.4x	21.1x	279.4x	3.7%
ORAPI	€	40	0.3x	10.1x	-	1.0%
Robertet SA	€	768	1.8x	12.3x	22.8x	12.1%
SA d'Explosifs et Produits Chimiques	€	133	0.6x	9.9x	23.1x	5.0%
Symrise AG	€	7,784	3.2x	15.2x	30.7x	13.8%
Umicore SA	€	5,740	0.6x	14.3x	42.7x	2.6%
Victrex PLC	£	1,649	6.3x	13.7x	19.9x	39.8%
Wacker Chemie AG	€	5,082	1.1x	5.4x	27.0x	7.3%
Mean			1.4x	9.4x	21.3x	
IBU-tec	€	66	3.0x	8.6x	23.1x	22.9%

Source: Bloomberg, Edison Investment Research. Note: Prices as at 28 March 2017.

As there are no listed peers involved in toll manufacturing of inorganic chemicals, we are using a sample of European companies involved in the manufacture of speciality chemicals or using specialist chemical processes to provide a service. The historic EV/EBITDA and P/E multiples including the funds from the IPO are close to the respective means for our sample. Given IBU-tec's consistently higher than average EBIT margin, we believe that IBU-tec deserves a premium to the mean. We see potential for share price appreciation going forward as IBU-tec demonstrates that it is able to continue to deliver revenue growth without compromising margin, particularly once the third site is acquired and starts contributing to the bottom line.

Sensitivities

- **Customer concentration:** Almost half IBU-tec's revenues are attributable to a single customer.
- **Ability to source site for expansion:** IBU-tec's expansion into processing of more highly regulated chemistries is predicated on acquiring a suitable site in a timely manner.
- **Demand for exhaust catalysts:** IBU-tec's recent growth is strongly linked to demand for exhaust catalysts. Theoretically, demand for these would be adversely affected by a switch to vehicles propelled either by batteries or fuel cells or to hybrid vehicles. In either of these scenarios, IBU-tec would benefit from the production of battery materials or fuel cell catalysts.
- **Rate of adoption of batteries in e-mobility and energy storage applications:** Currently adoption is limited by the cost of lithium-ion batteries. The materials that IBU-tec is developing for BASF may help reduce the cost of these batteries, helping accelerate adoption.
- **Low free-float:** As discussed, the Weitz family will remain major shareholders after the IPO.

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