

2019

Time to act BIM – Building Information Modelling

Time for longevity The BET Test Centre

Time for evolution UDHOME2 floor socket

Time for a new connection The world's longest sea bridge





Time for something to change!

Herbert Grönemeyer

Welcome to the new edition of OBO Blick

Here at OBO, everything is about outstanding products and satisfied customers. An OBO product does not make it onto the market unless it is sure to satisfy our customers fully. But this takes months of thought and work, which is what brings the product to life. That is exactly what we want to talk about in this edition of OBO Blick. It is all about time – something we're all short of, and something we all want to make the best possible use of.

At OBO Bettermann we always invest in time and energy, so that you save time and your work is easier. We do this from the initial development of a product all the way through to its market launch – it's always about fresh ideas, customer feedback, reports we receive from our Customer Centre, and an ongoing process of analysing our own work. We want our products to be easy to use so that they save you time when you install them. Our MKS-Magic[®] cable tray is a good example of time-saving, simple fitting. Just slot it together and you're done. It could hardly get quicker than that!

The quality of OBO products is consistent, precisely because they're always being developed, rethought and scrutinised. The international standards to which we are certified prove that, and they provide security, especially when it comes to quality management, environmental management, occupational safety and energy management. Our in-house testing centre, the Test Centre for lightning protection, electrical engineering and support systems (BET), ensures we live up to our own high quality aspirations.

Here at OBO, we think we can claim to have made the most out of the past 108 years, ever since the company was founded by my great-grandfather, Franz Bettermann.



It has always been our aim to make our customers' lives better, easier and safer using our products and solutions. And I'm proud to say that we've succeeded in doing just that.

We want our customers to know that we are always there for them and that our support doesn't end when they buy our products. We always go the extra mile with our comprehensive Support Plus Programme and through the ongoing support of OBO's experts.

Part of that is of course a wide range of digital assistants that simplify your everyday work, the planning of projects and the selection of the products you need. Take for example BIM, Building Information Modelling, which ensures that project data is centrally managed so that everyone involved has access to the same knowledge.

We've been providing our data in BIM format for some time and are steadily working on expanding that. OBO Construct is a configuration app which significantly speeds up planning and ordering processes and saves you a lot of time.

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I hope you enjoy reading the magazine - it will be time well spent!

At OBO Bettermann the needs of our customers come first. Our international team of over 4,000 people works hard every day to be there for our customers whenever they need us and our products.

Andreas Bettermann







Time to act

Interview with BIM expert Klaus Jung, managing director at ZVEI

BIM, or Building Information Modelling, is a system for planning, constructing and servicing buildings. This digital support system for building construction is becoming increasingly important in the construction industry and in associated technical planning sectors.

OBO Bettermann had an opportunity to speak with Klaus Jung, BIM expert at the German Electrical and Electronic Manufacturers' Association (ZVEI), and ask him a few important questions about the latest planning and administrative foundations.

OBO Bettermann: Mr Jung, can you begin by telling us briefly what BIM is and what the idea is behind it?

Klaus Jung: In a nutshell, BIM is a digital planning method. A digital building model allows general planners, technical planners, architects and all the technicians involved in the building to access all of the important information about it. The vision is that everyone can meet in a cloudbased project model or virtual room and discuss the project easily, access information and try out different plans right there using the model. It's a major step towards digitalising the entire building industry – a collaborative tool that brings together all the trades.

Cable ladder systems and vertical ladder systems

High load carrying capacity and good ventilation in the installation of power cables and wiring.

4

Safe cable insulation is essential for effective fire protection.

Central fire alarm system

All of the systems can be installed vertically and horizontally. The choice depends on the installation route and the cable volume.



"The future of building is digital." Klaus Jung, managing director of ZVEI's Electrical Installation Systems Division

OBO Bettermann: What exactly are the benefits of working with BIM?

Klaus Jung: At the moment, digital building twins can be used to produce things like potential collision enquiries and mass calculations, which enables better cost planning. Basically, all of the objects in a building are incorporated into the model, from bricks, to sockets, to windows – including essential information about the properties, performance and durability of all those things. Even recycling information is included. Depending on the density of the data, technical planners as well as general planners and customers can collaborate in deciding on the products to be used in the building. Different planning variants can also be considered, in terms of structural engineering calculations, fire protection and other technical considerations. All this makes it much quicker and more cost effective to plan and construct a building.

OBO Bettermann: So how far advanced is the incorporation of BIM into building projects today?

Klaus Jung: At the moment, digital depictions already exist but are still very rudimentary. That's simply because of the enormous amount of work which digitalising products and materials involves. Manufactures know their products best, but recording all of their essential properties and translating them into BIM-compatible data is a lot of work.

But the digital depictions are basically designed to allow for constant extension. Dynamic data is incorporated to deal with this growth of information, and this will assist in things like building management, which will become more transparent. This also allows electrical processes to be examined, such as energy consumption when the building is equipped in a certain way, but that will only be possible in a later, more advanced phase of BIM.

It is basically like the car industry in which new models can be planned and designed completely digitally. But in the construction of buildings, this planning involves not only

BIM – Building Information Modelling

Building Information Modelling is a digital planning method that makes the planning of construction projects more efficient and cost effective. A digital twin of a building is created in a virtual project room, allowing planning and processing procedures to be accurately predicted as soon as a construction project begins. In the 3D model, things like potential collisions can be predicted and masses can be determined from the outset. This minimises cost risks and reveals planning errors, because all of the data describing product characteristics and processes is captured. This means that everyone involved can access the same knowledge. Architects, engineers, general planners and developers can all access the same data inventory at a single click. This makes processes transparent and easy for everyone to understand.

This digital twin can only be created if all of the trades involved maintain their data well. Only then can everyone involved exchange information in a collaborative space. Many manufacturers are already making data describing all of their products available for digital planning. The statutory introduction of BIM will take place in three stages: following a preparatory phase in 2017 and a pilot phase in 2020, BIM will become mandatory for all new projects planned by the German Federal Ministry of Transport and Digital Infrastructure.

OBO Bettermann: Then there is the question of whether Open BIM or Closed BIM will dominate...

Klaus Jung: Exactly. The question is whether BIM Object Standards will be determined by software suppliers or not. In Open BIM, all of the disciplines work in their technical programs and models and contribute their BIM Object and technical planning data into the overall BIM project using one communication standard – "Open" means collaborative. In Closed BIM, only the software of one particular supplier is used. This is a challenge for manufacturers because it means collecting and making available all of their product data in the stipulated software format. We then talk of proprietary standards, which can lead to huge process costs in meeting software-based stipulations.

OBO Bettermann: Yet the German Federal Ministry of Transport and Digital Infrastructure (BMVI) has said that BIM should be used more in the future, in order to make the costing of building projects more effective.

Klaus Jung: That's right, but the BMVI's vaguely formulated requirements don't really help, they simply say that "BIM planning" has to exist for public sector buildings from 2020 onwards. In the end, the pressure of the market will probably be what decides which software and which standards end up asserting themselves. The fact is, uniform standardisation is essential if we are to benefit from the efficiency of BIM.

But the introduction of BIM is quite simply very complex, somewhere on a level with Industry 4.0. There are many technical areas and trades that will have to work together on standardisation.

one manufacturer; a whole range of different technical planning industries have to collaborate.

OBO Bettermann: You already mentioned the work involved in BIM. What are the **Klaus Jung:** more general challenges that the introduction of BIM involves?

Klaus Jung: There are many aspects to this. First of all, the data standards are a considerable challenge. All of the 22 technical planning trades in construction need a uniform BIM Object Standard in order to collect product properties and material data, this being the only way that they can be gathered together in a relevant and comparable way in BIM. ETIM Deutschland e. V. has been logging product data for a long time. Their product catalogue already encompasses a million products, which are classified in a uniform way. OBO is actively involved in that project. The data can be used in BIM. Thousands of pieces of information are gathered together, and when manufacturers digitalise their entire product range, it naturally takes a lot of work. No other technical trades have anything like this at the moment. OBO Bettermann: To finish off with, can you describe BIM in three sentences?

BIM is a digital collaborative planning method. BIM catalogues and describes products uniformly. BIM influences distribution and marketing processes.

Time for longevity

The BET Test Centre

Let's take a journey back in time and turn the clocks back 40 years: OBO is being led in its third generation, its own testing centre has just opened and the OBO workforce is about half of what it is today. It is around this time that OBO begins to extend its global structures and of expand. But for all the growth, one thing is clear: the products are always durable and of high quality. That's non-negotiable. And our own BET testing centre, the Test Centre for lightning protection, electrical engineering and support systems, played an important role in that then just as it does now.

It is where lightning and surge protection components, lightning protection structures and surge voltage protection are tested by highly qualified specialists in compliance with standards. The BET now has a testing generator for conducting lightning current tests at up to 200 kA, and a hybrid generator for surge tests at up to 20 kV.

In other words, the lightning current generator can release 250 kJ of electric energy. That is the energy you would need to fire a 10 kg ball 2.55 km vertically into the sky.

The same energy would also raise the temperature of a litre of water by almost 60 °C in just one millisecond – much faster than you can read this sentence.

We would like to show you some of the tests that the BET subjects our products to.







Testing lightning protection components

This is where lightning protection components are tested in compliance with standards. Metallic connection components such as connectors, linking and bridging components, extension pieces and equipotential bonding rails in lightning protection systems are tested and have to comply with the appropriate product standards.

Lightning protection components are tested in used condition, since that is the only way to simulate how the product will behave after years of use. Once the test is done, the results are documented and drawn up in a test report.

Testing surge protection devices

Imagine lightning strikes your house. Not a nice thought, but if you've chosen the right surge voltage protection devices, you can rest assured. High demands are placed on OBO surge protection devices, which are tested using lightning impulses on a new device. That allows experts to ensure that they will perform properly and behave safely in the event of an overload.



The casing of a product has to be safe and must not conduct. Insulation measurement is used on components made of plastic. The product is filled with conductive material and placed in a vessel which is also lined with conductive material. If a high voltage doesn't penetrate the component, then the insulation is satisfactory and the test is passed.



Environmental and material testing

This is all about cable support systems and casings such as the X-Series. Our products are tested under extreme conditions in dust chambers and using water and impact tests.

This ensures that extreme weather and unusual installation sites cannot affect our products.





Mechanical testing

To ensure that cable support systems can carry sufficient loads, the DIN EN 61537 standard includes testing for safe working loads (SWL) and defines the conditions for that testing.

Cable support systems are fitted in compliance with DIN EN 61537 and the appropriate load is applied using a hydraulic cylinder. The deformation this causes is measured by an automatic transducer and documented together with the load involved. If the cable tray withstands the load, then this load is increased by a factor of 1.7 to ensure it does not fail. The deformation under that load is also documented.



Time for evolution

Developing the UDHOME2 floor socket

The UDHOME2 is the evolution of a bestseller. Like many products, this popular floor socket is subject to constant testing.

Despite all the positive feedback from our customers, OBO Bettermann has not remained content with its successes, but has instead continued to work on improving the product. The UDHOME2 is our smallest floor socket and now we've made it much more spacious while retaining almost the same outer dimensions. The interior is angled at 54°, making space for larger plugs which disappear beneath the closed cover. In other words, it has the biggest interior of its class, making it a good example of our ongoing product development.





Step by step to the ideal product

To ensure that highly complex product development processes are always productive and expedient, they are made to follow an internally established sequence which defines the most important steps and milestones for new developments. Many of the details and surrounding conditions are only revealed with time, which makes development a highly dynamic process.

A number of systematic methods such as failure mode and effects analysis (FMEA) and creativity techniques (morphological matrix) are used as part of project management to ensure that they don't lose sight of the aim of developing an optimised, economical product.





>> At OBO Bettermann we believe it's worth taking time to achieve that. <<





Our smallest socket is a big deal 🕀

The aim for the UDHOME2 was to achieve a clear improvement for end customers and fitters. Changing the installation and utility space makes the product easier and more efficient for everyone to handle. Important aspects of this were reducing the number of individual components needed and revising the range of materials used. All in all, we managed to significantly improve a popular product, something for which we like to take time at OBO.



Time for flexibility

This building is all about the future. The Futurium in Berlin's government quarter is a very special structure indeed. As an event centre and an almost autonomous super-low-energy building, it is a visionary project, as its name suggests.

Multifunctional event areas, offices and exhibition spaces are all accommodated over almost 14,000 m². Berlin architects Richter Musikowski placed emphasis on sustain-



able energy management while stipulating modern, sculptural, clear forms in the design of the Futurium. This building of the future is of course barrier-free.

An essential part of this new kind of building is supplying its areas and rooms internally with power and data, which anticipates the wide range of ways in which it will be used for all kinds of events. OBO Bettermann is supplying floor sockets and underfloor systems designed specially for the Futurium.



Christoph Richter Richter Musikowski architects, Berlin

The Futurium

In an interview with Christoph Richter we found out which OBO Bettermann underfloor systems have been built into the house of the future, and why the young architects at Richter Musikowski chose our products.

OBO Bettermann: Mr Richter, what criteria were important when you selected the products?

Christoph Richter: We're talking about a multipurpose exhibition building. What is of course important is the flexibility it can offer. We thought in terms of different scenarios, especially on the ground floor, the events level. Mobile technology will be needed for almost every event there. The same applies to the exhibition area on the top floor. Changing exhibitions need flexible power supplies, in this case via the floor. Together with the developer and the general contractor, we opted for OBO Bettermann products. Firstly, they comply with our functional requirements such as spot and area loads, and secondly they offer a very aesthetic and inconspicuous solution.

OBO Bettermann: Where are our underfloor systems installed in the building?

Christoph Richter: We opted for a finely textured terrazzo flooring in order to emphasise the extent and spaciousness of the exhibition and event areas in the Futurium. We used poured asphalt terrazzo flooring on the top floor and in the basement, and on the ground floor we used cement terrazzo. OBO's special solutions were used in every area. Polishing the floor produced a slight sheen. Thanks to a custom solution, the covers of the rugged floor sockets blended into the floor nicely. It made the whole thing look very elegant and classy. A floor equipped for anything.







Futurium Alexanderufer 2

10117 Berlin www.futurium.de

Grand opening in September 2019

Developer

BAM Deutschland AG is a private partner to the Institute for Federal Real Estate, which, as the property owner and developer, undertook the project on behalf of the German Federal Ministry of Education and Research.

Planning

The Futurium was designed by Berlin architects Christoph Richter and Jan Musikowski in collaboration with landscape architects JUCA.

11

OBO systems

Underfloor and cable routing systems

tor a new

In brief

8 years to build 55 kilometres long 40,000 vehicles per day 420,000 tons of steel 14 billion euros

Eight years to build, 55 kilometres long, 40,000 vehicles daily, 420,000 tons of steel, a cost of around 14 billion euros - the Chinese megaproject is open and will soon be connecting Hong Kong to Macau and Zhuhai.

It only takes around 30 minutes to cross the main bridge, which is almost 23 km long. This is connected to other bridge sections, tunnels and artificial islands on the Pearl River Delta, thus linking the Chinese mainland with the megacities of Hong Kong and Macau.

The Hong Kong-Zhuhai-Macau Bridge reduces the travel time between Hong Kong and the mainland by around four hours. It is considered a symbol of China's unity and is due to carry 60,000 cars and up to 250,000 passengers daily between Zhuhai, Macau and Hong Kong by 2035.

A record project that connects

The vast structure adds yet another sight worth seeing to the megacities of Hong Kong and Macau. An underwater tunnel that belongs to the bridge is 6.7 km long and almost 50 m beneath the surface of the water. It forms, alongside the three cable-stayed bridge sections, the main shipping lane into the Pearl River Delta. A 15 km long section of the main bridge is currently the longest steel bridge in the world.

The engineers created an artificial island at the western end, situated between Macau and Zhuhai. A toll station and border crossing facilities for entering the special administrative region have been situated on that island since the bridge was opened.

OBO supplied countless system solutions for this largescale project and these will be guaranteeing the bridge's operation for decades to come.



OBO's diversity clinches the deal

OBO Bettermann system solutions are part of this new spectacular new project. The people responsible for planning it travelled half way around the globe to tranquil Sauerland to gain an idea of the quality of our surge voltage protection products. OBO took the opportunity to present its entire product range and convinced the planners about their cable support systems and connection and fastening systems.

>> The world's longest sea bridge connects three metropolitan areas." <<



Our products

OBO Bettermann system solutions were incorporated into the megaproject: products from our connection and fastening systems, transient and lightning protection systems and cable support systems are built into the unusual structure.



Magic mesh cable tray fitted to a ceiling with a suspended support and brackets on either side

GR-Magic[®] was installed in the underwater tunnels, where mesh cable trays are easy and quick to fit and their flexibility allows them to adapt perfectly to the situation.

Our high-load SKS-Magic[®] cable tray was used for laying power cables in the ventilator room. This cable tray can carry a high volume of cables. It is also extremely durable and flexible.

In order to protect a large number of electronic devices out of doors, the engineers built external lightning protection using isFang and isCon[®] as main components. These are distributed on the top of the bridge tower and on numerous outdoor information boards. Below are just a few examples of the diverse OBO Bettermann products that were used in this construction project – one that is all about connecting.



Like a perfect town, with everything the heart desires and a bit more besides: with a range of entertainment, culture, sport and fun, the cruise liner *Norwegian Bliss*, which belongs to the shipping company Norwegian Cruise Lines, has an enormous amount to offer. The floating giant will sail from Seattle to Alaska during the summer months and is specially equipped for those unusual voyages. And OBO Bettermann is always on board.

High demands on the high sea

14

This brand new cruise liner meets the highest demands of technology and environmental protection. It is the first ship of its size to sail along the coast of Alaska, which means it has to fulfil the very highest standards of environmental protection that a cruise liner could face. To comply with the regulations – which, incidentally, will also apply to the North and Baltic Seas from 2021 – the *Norwegian Bliss* has been given some very special technical fittings. Systems for recycling and burning rubbish, heat recovery and even a bioreactor for processing water are just some of the sustainable technologies that make this vessel one of the greenest in its class.

OBO on board

But these technologies, which are distributed throughout the ship, have to be connected and networked. As official partner to the builders of the ship, Meyer Werft in Papenburg, OBO Bettermann provided countless parts from its range. Products from our connection and fastening systems, cable support systems and lightning and surge voltage protection were combined with the very latest shipbuilding technology, which involved an innovative block construction method.

One of the special characteristics of the OBO products is that they had to be fitted to meet the high demands of shipbuilding. As well as featuring a high level of corrosion protection, the parts had to save weight while providing the same stability. That is how OBO played its part in ensuring that everything on the new liner functions smoothly and

All OBO products used in shipbuilding satisfy

All OBO products used in shipbuilding satisfy the highest demands:

✓ Product range tested to ISO 9001

will continue to do so for the coming decades.

- ✓ Cable routing complies with DIN EN 61537 and is certified by the international classification institutions DNV GL, IEC and RINA.
- ✓ Insulation with fire resistance rating A60
- ✓ High-quality materials for the highest level of corrosion resistance: electrogalvanised and hot galvanised
- Certified SIGMAWELD 199 welding primer for the highest level of corrosion protection
- ✓ Coherent system accessories that are designed to work perfectly together

Saving time in real terms

WITH THESE OBO PRODUCTS

Installing different components on a site is often a major time factor. Our products aim not only to deliver quality but also to make installation as quick and easy as possible. The following products are among the quickest on the market:

Cable support systems

Cable trays and mesh cable trays with Magic connectors: RKSM, MKSM and GRM

- \cdot Cable trays and mesh cable trays with simple, rugged, snap-in connectors
- · Snap-in system accessories
- · All fittings are easy to connect
- · Less screwing
- · Equipotential bonding without additional accessories





Fire protection systems

Insulation system for injecting and in block form: PYROSIT[®] and PYROPLUG[®] Block

- · Pre-cut blocks
- · No cutting required
- · No filling of residual openings needed

Connection and fastening systems

Divisible pipe end sleeve for slotting onto metric installation conduits

- · Snap-in closure
- · Can be retrofitted
- \cdot Cables do not need to be removed when repairing





Device systems

Snap-in Modul 45 devices

- · Switches, sockets and data/multimedia elements available
- · Simple mechanism for snapping into system environment
- · No screwing, no extra accessories



- · Rapid 45-2 device installation trunking
- · Underfloor device inserts and cassettes in conjunction with the universal support
- · UDHOME and GES R2 floor sockets and floor boxes
- Type 45 service poles



Plug-in installation solutions Modul 45connect®

- · Faster, safer, fault-free electrical installation with slot-in connection technology
- Plug-in connection all the way to the socket
- · Enables pre-terminated solutions as well as customised plug & play approaches
- Modul 45connect[®] with Wieland gst18[®] plug-in system

Time to reflect 25 years of OBO Bettermann Hungary Kft.







Ulrich Bettermann underlines the success of the Hungarian site

A success story that is hard to beat – 25 years in Hungary. All that time has been about growth at our Bugyi site near Budapest – and it still is. Around 300 invitees from culture, business and politics gathered together for this year's big anniversary. They included Hungary's finance minister Mihály Varga, minister of foreign trade Levente Magyar and Béla Somogyi, mayor of the town of Bugyi.

The guests were welcomed by Lajos Hernádi, managing director of OBO Bettermann Hungary and Christoph Bettermann, who then made way for Ulrich Bettermann, the head of the OBO Bettermann Group. In his welcome speech he pointed out that Hungary offers outstanding opportunities for effective business. With its workforce of 1,200, the Hungarian site has become a major pillar of the OBO Group. Further investment in the site is planned.

In his speech, finance minister Mihály Varga praised OBO as one of the companies who had helped successfully restructure the Hungarian economy after the fall of the Iron Curtain. After the opening speeches he joined Levente Magyar and Béla Somogyi together with Ulrich Bettermann to view the manufacturing facilities belonging to the Group's biggest foreign subsidiary.



R80 Bettermann



OBO



Left to right: Béla Somogyi (mayor of Bugyi), Lajos Hernádi (managing director of OBO Hungary), Zoltán Koszegi (mayor of Dabas), Christoph Bettermann (junior president, OBO Bettermann Group), Ulrich Bettermann (managing director of OBO Bettermann Group), Mihály Varga (finance minister of Hungary), Zoltán Marczinkó (deputy minister for the labour market and corporate relations, Hungary)

HUNGARY Kft.

1993

Subsidiary founded in Hungary (Budapest)



New production hall for metal production



2006

Full independence within the group of companies

Construction of hot galvanising plant



New production hall for plastic processing

2019

New production hall for electronics manufacturing

Relocated to Bugyi



New logistics centre covering over 10,000 m²



2016

OBO Forum, international training and office centre

25th anniversary – now one of OBO Bettermann's most advanced production and logistics locations



Latest News





Safe from voltage surges

Promotional packages for surge protection

Surge voltage protection has been mandatory since October 2016 in all new and extended buildings and in all new electrical installations, under VDE 0100-443. Modern buildings and industrial facilities are being equipped with an increasing amount of sensitive electronic technology and this demands, more than ever before, professional, reliable surge protection to securely shield equipment and data.

OBO Bettermann now offers two special promotional packages for surge protection which gives electrical fitters a price benefit as well as providing basic protection in private houses and industrial facilities. The promotional packages can be purchased in all participating electrical wholesalers; they include a V20 arrestor, TD-2D-V Tele-Defender and DS-F M/W data cable protection device.



Request a free information flyer for your customers now: www.obo.de/uess-aktion

Limited special promotion

20 years of OBO Bettermann in Serbia

We're celebrating in the Balkans

Serbia



OBO Bettermann has been represented in the Balkan Peninsula in the south-east of Europe for 20 years. This year saw a big anniversary celebration together with customers, wholesalers and friends. The Serbian market was opened up in 1998, providing immediate access to markets in Montenegro, Bosnia and Herzegovina, Macedonia, Greece, Cyprus, Kosovo and Albania.

With its team of 16 colleagues, OBO Bettermann DOO Stara Pazova is now a strong operation. "None of this would have been possible without our loyal customers, partners and friends. We would like to thank everybody who has remained loyal to OBO products over the years. It is certainly the products that convince people, but close, trusting collaboration is equally important to us," said Saša Klašic, managing director of OBO Serbia, in his opening speech at the anniversary celebrations.

Young managers at VEG

Visiting OBO Bettermann in Menden

Young executives from Bundesverband Elektro-Großhandel (VEG, German Electrical Wholesaler Association) visited the OBO Bettermann headquarters in Menden. They enjoyed two exciting days covering interesting themes around personnel development with and for young managers. A central topic was the digital future of electrical wholesaling and the professional development of its personnel. Active dialogue was also promoted in workshops, proving an opportunity for old friends and new faces to engage in fruitful discussions.

Andreas Bettermann, managing director of OBO Bettermann, spoke on the subject of "Changing times for the next generation of wholesale and industry". Dirk Baesel of Baesel Consulting also spoke at the event, delivering talks entitled "The ten success criteria for modern management" and "Professional personal development in electrical wholesale". The aim of the event was to disseminate industry knowledge and help the personal development of those present. As well as these fascinating talks, a tour of the OBO Metal Competence Centre provided the young executives with an insight into some of the breadth of OBO's product range.





Giving children a chance

Third Christoph Bettermann School completed

Social responsibility and entrepreneurship have always gone hand in hand in the Bettermann family. OBO has been supporting social and cultural projects around the world for many years. One comprehensive and outstanding project was launched as part of the company's 100th anniversary in 2011. Donations from the family business allowed the building of the Christoph Bettermann School in east African Uganda.

OBO boss Ulrich Bettermann enabled the building. His commitment to disabled children has a very personal background. Christoph Bettermann, the youngest of his four children, has been confined to a wheelchair since childhood because of complications during an operation. But 33-year-old Christoph is always cheerful and quick-witted. He and his father are as good as inseparable and do a lot together. They are always on the same wavelength. The school, which is designed for children with disabilities and provides them with an education, has been extended gradually over the years. The third Christoph Bettermann School has now been completed and is the biggest project which the partnering association "Kindern eine Chance" (A Chance For Children) has been able to complete with the generous support of OBO Bettermann. It will provide school education to 600 children, 100 of whom will have physical and mental disabilities.

OBO on tour

Exhibition calendar 2019

Trade fair	Date	City	Link
eltec	09.01.2019–11.01.2019	Nuremberg	www.eltec.info
Elektrotechnik	13.02.2019–15.02.2019	Dortmund	www.messe-elektrotechnik.de
FeuerTrutz	20.02.2019–21.02.2019	Nuremberg	www.feuertrutz.de
Fastener Fair	19.03.2019–21.03.2019	Stuttgart	www.fastenerfair.com
AMPER 2019	19.03.2019–22.03.2019	Brno, Czech Rep.	www.amper.cz
eltefa	20.03.2019–22.03.2019	Stuttgart	www.messe-stuttgart.de
Hannover Messe	01.04.2019–05.04.2019	Hannover	www.hannovermesse.de
Intersolar	15.05.2019–17.05.2019	Munich	www.intersolar.de
Ineltec 2019	10.09.2019-13.09.2019	Basel, Switzerland	www.ineltec.ch
efa	18.09.2019–20.09.2019	Leipzig	www.efa-messe.com
Blechexpo	05.11.2019-08.11.2019	Stuttgart	www.blechexpo-messe.de
Power GenPower	12.11.2019–14.11.2019	Paris, France	www.powergeneurope.com
SPS	26.11.2019–29.11.2019	Nuremberg	www.nuernbergmesse.de

Don't forget! We look forward



Support You can reach our Customer Services at:

+49 (0)2373 89-1700

Monday to Thursday 7.30 a.m. to 5 p.m.

Friday

export@obo.de

7.30 a.m. to 3 p.m. www.obo-bettermann.com









Support+



OBO Bettermann Holding GmbH & Co. KG P.O. Box 1120 · 58694 Menden GERMANY Tel.: +49 (0)2373 89-0 Fax: +49 (0)2373 89-1238

www.obo-bettermann.com

Imprint

Publishing and editorial: OBO Bettermann Holding GmbH & Co. KG P.O. Box 1120 · 58694 Menden · Germany Tel. +49 (0)2373 89-0 · Fax +49 (0)2373 89-1238 E-mail: blick@obo.de · www.obo.de

Concept and art direction: Field Interactive · www.field-interactive.com

Images

· OBO Bettermann Holding GmbH & Co. KG • gettyimages: 2, 3, 14, 20

English translation and adaptation: danby kommunikation ltd · www.danby-kommunikation.com

Please send any suggestions or queries to our editorial team: Helen Vollmer/Marketingservice International blick@obo.de

