The HELUKABEL Group customer magazine

# Live on air

ZDF relies on the new HELUEVENT<sup>®</sup> media cable PAGE 10

PAGE 14 Building the BMW X1 with Robotec Systems PAGE 16 Automatic cable cutting for the digital business of TIM PAGE 24 Three million mustaches and ours are among them

EDITION 2014-01

### WHERE DOES CABLING GO?



### IF IT SAYS POWER ON IT, THERE MUST BE POWER IN IT

any people only become aware of the sheer variety and volume of cables and wires on a second or third glance. For such vital items in our everyday lives, they often play their role quietly in the background. All that is expected of them is that they continue to do their job for as long as possible, much like the reliability of a Swiss clock. If you think comparing a length of wire to a Swiss timepiece is a bit of an exaggeration, then you haven't seen how much engineering and passion goes into the design of more than a few of our cables.

In this and future editions of the magazine, we will be shining a light on the people who specialise in the characteristics and idiosyncrasies of cables, and dedicate their working lives to turning simple conductors into hightech products. Also, as you are sure to have realised, quite a few things have changed since the last issue of HELUnews was published.

Not only does the magazine have a new cover, but it also has a new name – Power. This expresses the force and energy that our products transmit, as well as symbolising the strength and performance of our employees, and the many unique applications of our customers. We want to report more about these and other topics in the future.

And finally, our subsidiary companies Kabelmat Wickeltechnik and Robotec Systems are also now on board.



Best wishes,

Helmut Luksch

### POWER

**EDITION 1/2014** 











<b>IN AND OUT</b> Customers should not be delayed. Inbound logistics at HELUKABEL is designed for rapid handling. <b>ONE DAY IN SHANGHAI</b>	18 22	10
Since the beginning of the year, Moritz Barlage has been working for HELUKABEL in Shanghai. We accompanied him for a day.		
		Cover
<b>LET IT GROW, BROTHER!</b> In "Movember", hairy top lips promote a hairy issue worldwide: men's health.	24	AB
		VIE
		CH
Service/Imprint	20	Caught betv
Location: Welcome to South Africa	26	requirement tions ZDE is
Where does cabling go?	27	The newly c
Faces behind the scenes	28	cable meets

6

8

10

14

16

UPDATE

Project and product news.

**ALL IN ONE LINE** 

wants from a media cable.

LIFELINE FOR ROBOTS

They are well-equipped for this.

**CABLE LENGTHS AT THE TOUCH OF A BUTTON** 

19197

Automation – the magic word in online shipping for electronics dealer TIM.

supply and lifeline.

The all-in-one cable for GE Hitachi's inspection robot used in pipes combines data line, media

**A BETTER VIEW FOR CHANNEL 2** 

Around the clock, robots will soon be welding and gluing doors for the BMW X1 in Regensburg.

Flame resistant, halogen free and robust. HELUEVENT<sup>®</sup> comes with all the benefits ZDF



### Story

### **ETTER WFOR** ANNEL 2

ween the mechanical and legal ts of load cables for TV produclooking for a new solution. leveloped HELUEVENT<sup>®</sup> media their needs.



### SWING LIKE SPIDERMAN

CABLE ROBOTS THAT FLOAT IN THE AIR They use little energy, are fast and inexpensive to operate, and can span large work areas. These so-called rope robots were conceived by Fraunhofer IPA for such purposes as inspecting high-rack storage facilities, painting ships and assembling solar power plants. They consist of a platform suspended from rope cables, which can be moved throughout a room by changing the rope lengths in the X, Y and Z axes. It is also able to rotate in three directions. The main challenge behind the cable robot was how to supply power to the system. Previously, the Fraunhofer Institute conducted experiments using drag chains and a battery before collaborating with HELUKABEL. As a result, the rope cables were replaced with electric cables - that were developed specifically for this project - to supply the robots with power. The substitution of additional electric cables allowed the robots to transmit and receive signals. The type of cable employed for this project is highly flexible and coils up easily using compact winches making it ideal for use in cable robots.



### BUILDING ON A BUILDING

**SUPPORT FOR STUDENT TEAM** Twenty teams of students at the Solar Decathlon in Versailles took up the challenge of designing residential buildings that are capable of meeting their entire energy requirements using solar power. One of the teams to pass the selection process and qualify for the architectural competition was the 'On Top Team' from the Frankfurt University of Applied Sciences (FUAS), who were sponsored by HELUKABEL. The team designed a residential unit that can be placed on top of an existing building. By creating additional living space, the team addressed the structural and social demands prevalent in the city of Frankfurt. Moreover, any surplus energy from the residential unit is fed to the building beneath. The technical and functional design of the 'On Top Team' finished in seventh place. In addition to its energy efficiency, the international judges gave the FUAS entry recognition in 10 other categories, including innovation, construction and marketability.



### Hello Austria!

**NEW SALES OFFICE IN AUSTRIA** The demand for HELUKABEL products on the Austrian market is continuously increasing. To enable us to serve the needs of our Austrian customers more effectively, a sales office was opened in St. Florian, near Linz, in July 2014. Austrian companies now have direct access to local sales contacts – General Manager Manfred Breurather and his staff. A warehouse and expanding the office team are planned in the near future. The new sales office will initially focus on selling products for industrial applications, data networks and infrastructures.

The sales office in St. Florian can be contacted by telephone at +43 7224 90555 0 or by e-mail at office@helukabel.at St. Florian

### The perfect fit

**FLEXIBLE MOBILE CRANES** Mobile cranes made by the Danish company HMF are used in a wide range of applications, such as for towing away vehicles, transporting goods, or at construction sites. The rotational movements of the crane and the low operating temperatures that they are frequently required to withstand also place great demands on the cables used. In its search for the best cables to install in their cranes, HMF contacted HELUKABEL for assistance. The special cable department subsequently developed the BIOFLEX ® 500-HF-TWIST cable in close cooperation with the mobile crane manufactrurer. This product is based on a standard construction which is able to operate flawlessly at low temperatures and also resists hydraulic oil leaks. The engineers also designed the cable to easily withstand rotating movements and to allow the integration of BUS components.



The BIOFLEX<sup>®</sup> 500-HF-TWIST cable can easily withstand a crane's rotational and bending motions



8 Fraunhofer IPA, Team OnTop / Frankfurt University of Applied Sciences / Ohlenschläge: HELUKABEL, Michael Dam, HMF Group A/S, Pixabay / Andi Graf, HELUKABEL / fotolia vnlit



### WHERE THE MUSIC IS HEARD

ELBE PHILHARMONIC HALL Hammering, banging and sawing might not sound so melodious, but then the Elbe Philharmonic Hall is still under construction. However, the preliminary internal infrastructure of the hall has now been completed. Among the firms engaged in creating the interior of the hall are electrical contractors Schubert GmbH. The items to be installed in the concert hall include HELUKABEL's JZ-600 HMH-C flexible cables for controlling the lighting, sound and stage direction. Additionally, HELUSOUND<sup>®</sup> 600 loudspeaker cables are being used to distribute the audio signals to the many speaker units throughout the hall reliably and free of interference. All cables are halogen free, because "this is the only type of cable allowed in public buildings," explains Uwe Reitz, a regional branch manager of HELUKABEL. "PVC cables are like matches, and can transmit fire through the cable ducts from one room to the next. In contrast, halogen-free cables are flame resistant and mean one less worry for the fire brigade."

Cable flexibility is also an important factor. Control cables and loudspeaker cables must be resistant to kinking over long periods of use in narrow ducts with many corners. After all, the new Philharmonic Hall is intended to guarantee concert attendees perfect audial entertainment for many years to come.

### PRODUCT TICKER

### TORSION CABLES FOR WIND TURBINES

The HELUWIND<sup>®</sup> WK MS Single Torsion 605 cable series from HELUKABEL was specially developed as a torsion cable for use in wind turbines. The cable has an abrasion-proof sheath, is extremely resistant to oil and fuels, highly flexible, and flame resistant.

### UNINTERRUPTED COMMUNICATION IN THE EVENT OF FIRE

The HELUCOM<sup>®</sup> FS90 series is able to ensure data communication even in the event of fire for up to 90 minutes. The fibreoptic cables were developed to provide uninterrupted signal transmission in tunnels, underground railways and computing centres.



Even in a fire, the HELUCOM® FS 90 fibre-optic cable is able to maintain data communication in tunnels

# ALL IN ONE LINE

Highly specialised ultrasonic inspection robots comb pipelines in search of leaks and corrosion. A new custom cable from HELUKABEL is their only link with the outside world.

he ultrasonic inspection robot advances at very slow speeds. It is deployed in the USA on behalf of GE Hitachi to search underground pipes centimetre by centimetre for leaks. Its finely tuned ultrasonic sensors measure the thickness of the pipe walls, and it also sends images to its human colleagues at the surface via a camera attached to its tip. It goes where humans can't, pushing its way through the darkness, snaking around bends, making its way wherever the pipeline guides it to. An electric motor powers its wheels by way of several drive elements. Compressed air is used to push the wheels onto the inner wall of the pipeline, giving the robot sufficient grip to be able to follow the pipeline's bends but also its vertical sections. Despite all this complexity, a single cable is its lifeline to the outside world.

#### Charting new territory

The highly specialised ultrasonic inspection robot that GE Hitachi uses to inspect underground pipelines was made by Inspector Systems. For more than 30 years, this company from Hesse, near Frankfurt, has been designing pipeline robots to customer specifications for inspecting, testing and processing the inside of pipeline systems. For this particular contract, the engineers from Inspector Systems wanted a single-cable solution, as Mirko Böker, product manager for custom cables, e-mobility and pipe robots at HELUKABEL, remembers, "The cable was responsible for providing power, data and compressed

air. Initially as a pilot project for the inspection robot, the scope changed to include configurations for working robots, which can seal leaks and correct bottlenecks using powerful tools." Integrating all the required functions within a single cable was new territory for the developers. But only 10 weeks after receiving the enquiry, the cable specialists were able to deliver the kilometre-long, custom cable for the ultrasonic inspection robot.

#### Customer-configured cable

Power is supplied to the robot via copper conductors. A pair of twisted signal cables supplies power to the high-resolution camera. Data is transmitted via a BUS cable and optical fibre. "The optical fibre cable was a particular challenge, because even though it is very stiff, it had to be able to wind onto drums," says Böker, outlining the requirements of the cable. The engineers chose PU tubes for the compressed air supply. Like an umbilical cord, the cable is also its lifeline. If the robot breaks down, it can be pulled out of the pipeline by the cable. This is possible because the cable is reinforced by a filler material made of Kevlar® which makes it tear proof. The whole thing is protected by an outer sheath made from a special polyurethane (PUR), a durable plastic. This is important because the robot must be able to operate in rough conditions. Any other material would not be able to withstand all of the edges and corners. "In only a short time, we succeeded in developing a tailor-made cable that was able to meet all of the tough requirements and control their robots perfectly," says Böker, obviously very satisfied with the cooperation.

#### ROBOT

The ultrasonic inspection robot measures the wall thickness of extensive underground pipeline sections and is able to detect leaks and corrosion. It is able to advance through the pipe automatically and is designed for a total working length of 300 m (984 ft). In addition to test measurements, it transmits images from one or more cameras to the surface.

#### MANUFACTURER

Inspector Systems, based near Frankfurt, produces pipeline robots designed for inspecting, testing and processing the inside of pipeline systems. The company markets its customer-specific solutions all over the world. Its areas of application include power stations, oil refineries, gas pipelines and district heating pipes.

### CLIENT

GE Hitachi is a joint project between U.S.-based General Electric (GE) and Japan-based Hitachi. The alliance was formed in 2007 in order to pool the nuclear power activities of the two conglomerates.

#### Four follow-up projects

There are a total of eight engineers at HELUKABEL working on projects such as this one in the custom cables department. "They are responsible for applications that cannot be accommodated by cables from the standard catalogue," explains Böker. Four additional cable models have also been designed for Inspector Systems for use with four different robotic systems.

> Mirko Böker, product manager for custom cables, e-mobility and pipe robots at HELUKABEL, presents the pipeline robot

Only halogen-free cables may be used in public buildings. So what can you do when TV reporters turn up carrying hundreds of metres of load cables containing PVC? 4

7 COL

11

4

2

The

MEDIA CABL

<del>,</del>

14

# A BETTER VIEW FOR CHANNEL 2

Flame retardant, halogen free, non-toxic, durable, drum-windable and abrasion resistant. Load cables used in lighting rigs must display all of these features. Customer ZDF was the first to use the special HELUEVENT<sup>®</sup> cable in a TV production. cissor and mast platforms stretch up to the ceiling like enormous wobbly insects. Lighting technicians are adjusting an army of spotlights attached to the rigging system. These lamps will soon be immersing the stage in all manner of light, shapes and colours, to the strict instructions of the lighting engineer, lending a unique magic to the impending live TV show on the TV station ZDF.

Only when you take a look above your head do you see what keeps all the spotlights and moving lamps operational, helping them to transform up to several thousand watts into lumen and lux. Heavy power cables running along the crossbeams supply each and every light source, merging at the nodes into a veritable highway of cables, which form bundles as thick as a tree trunk, then drop down 20 m (65 ft.) to connect to the power supply units.

Frank Hornung holds one of the very new-looking

black cables in his hand and says, "Our light cables need to withstand a lot of stress with all the assembly and dismantling they have to go through, and they also have to comply with a whole range of safety standards." The salesman from HELUKABEL knows that PVC cables are employed almost exclusively in stage lighting rigs. "They may be easier to wind onto a drum and to lay out, but they are not halogen free and are therefore toxic in the event of a fire. Since other cable types are required in public buildings and for TV productions, many lighting providers are now starting to replace their cables."

"To allow us to tap into this market, we developed a modern load cable for mobile use in event technology applications that fulfils the applicable standards and is also CE-compliant," says Hornung as he turns the cable to show the printed wording: "HELUEVENT® Multicore Load Cable".

#### Custom cable experts from Windsbach

For such applications, as well as any others that cannot be accommodated by cables from the standard program, HELUKABEL has a custom design depart-

*"With our certified cables, event organisers and lighting providers are on the safe side."* 

ment, where eight engineers – including Robert Müller – develop custom cables at the company's manufacturing facility in Windsbach. "The specifications with which we were confronted were extremely demanding." Apart from being flame proof and halogen free, the cable had to be abrasion proof and have the





ability to be wound around a drum repeatedly, as well as having a long service life. "Normally, halogen free cables have their own integral flame blocker. However, this tends to make the cable very stiff and brittle, which limits its practical use to fixed applications. A halogen-free cable therefore does not tend to be very flexible. There are only very few plastics on the market that have the right characteristics. At the same time, long service life and good flexibility also contradict each other from an engineering point of view," explains the design engineer. The search for the right material compositions and structure for the core stranding was like walking a tightrope between normative requirements and the need for flexibility and long service life.

#### (5 in) for the cable's day to day use on the crossbeams. They selected a thermoplastic urethane for the strand insulation, which is almost as soft as silicon. The support braid also gives the cable a lot of torsional rigidity to make sure the core strands don't break."

#### Robust yet flexible

In Hornung's opinion, a cable's service life is also important. "When you look around here, you see the conditions in which the cables are required to perform," he says, pointing to two technicians who are stretching the cable over the edge of a beam for almost its entire length. "The sheath must not wear out easily. Our high-performance material is able to withstand at least as much as standard polyurethane - as evidenced by our abrasion tests." Based on the approvals and cable performance ZDF recently started using the HELUEVENT® Multicore Load Cable to wire their stages. While Hornung winds the brand-new cable back up into equal loops, he says: "Even though we don't quite reach the flexibility and low-weight of PVC cables, our product features a considerably longer service life and satisfies all the required safety standards. With our certificates, event organisers and lighting providers are on the safe side if the liability insurance people or fire service come around to check up." 

#### Support braid for durability

Step by step, the cable professionals neared their goal. First, the engineers identified a high-performance TPU that is certified for all safety standards and allowed them to achieve the desired mechanical characteristics. To optimise the cable's durability, they integrated a support braid into the cable as a means of strain relief. This means that the sheath is divided into two sections by a polyester thread. "This construction is durable, because the tensile forces no longer transfer as much to the plug retainers, because the sheath no longer stretches. Additionally, it can no longer pull out, even if the heavy cable is hanging loosely from the ceiling," explains Müller. Sales expert Frank Hornung has meanwhile unwound a few metres of the new Multicore Load Cable and looped it around one of the thin steel posts and states, "Our cable designers had to dig deep into their box of tools to find a way of achieving the necessary minimum bending radius of around 13 cm





### LIFELINE FOR ROBOTS

The robots take 57 seconds to build a door for the new BMW X1. They should do this fault free for up to seven years. This is hard work even for the robotic tool's energy supply systems from HELUKABEL subsidiary Robotec Systems.

ear Regensburg, in the Bavarian town of Elsendorf, a state-of-the-art plant is being created to produce the doors for the new BMW X1. "We at BMW are taking charge initially. As a service provider, we design the plant, select the supplier, and completely construct the plant. If everything works, we hand it over to the owner, in this case it's our supplier Magna," reports Manfred Scheuerer, who is responsible for production planning at BMW. "Through this so-called third-party business, we set production and quality standards worldwide," he adds. As is the norm in automotive construction, most of the work is performed by robots, even door production. There are 76 high-volume robots in the massive facility, distributed across four plants for the production of the two front and rear doors. In a three-shift operation, they put together around 700,000 doors per year from sheet metal parts

![](_page_14_Picture_1.jpeg)

### BRINGING ROBOTS TO LIFE

Automotive and highvolume robots from all manufacturers need a supply system for the respective tools. Besides power, cooling water, compressed air or transport tubes for rivets, screws and adhesive, there are also high-performance data cables for the tool heads. Robotec Systems specialises in the development and production of such energy supply systems.

produced by Magna in Graz using a spot welding gun and a glue gun.

### One million torsion cycles

The plant should run fault free for up to seven years. As the robots are essentially offered without tools, they need a supply system, i.e. the power, cooling water, data and adhesive must be fed to the tool head by cables and hoses. In addition to the standardised technical specifications of the cables and hoses for the respective tools, BMW also defines qualitative requirements. These are saved as formulae in the requirement specification and calculated from the maximum tolerated downtime of the plant. "The load on the cables and hose packages is dependent on the movement radii of the robotic arms. Additionally, with all the movements in the case of welding robots, the burn off cannot be prevented from getting between the cables and hoses and acting like sandpaper. This considerably increases the wear and may shorten the lifetime. However, in our internal quality control, all products must withstand one million torsion cycles. This is made possible because of the structure and material composition of the cables used from HELUKABEL. As such, we ensure that our systems withstand even the high demands of BMW," explains Volker Elbe, sales manager at Robotec Systems.

### Placing the strain on the robot

In production planning, overcapacity should be avoided. The plant size and design are therefore simulated in advance using production planning software. "Starting from annual output and cycle time, we calculate the performance data for each individual robot. To do this, we need simulation data for all of the parts that the robot has to move. This is the only way that we can design the robot performance exactly for the actual requirements," explains Scheuerer. "The load is the sum of all the parts that the robot has to move in the defined cycle time. Furthermore, the tools, handling, work piece itself, and the energy supply system for the tools must be taken into account," he adds. The simulation data includes not only weight data but also the exact location of the centre of gravity. "Our aim is to design all robots for 90 percent capacity use. That puts us on the safe side in respect to the seven-year lifetime of the plant," says the BMW planner.

### 40-kilogram (90 lbs) field pack

"Providing the load data for BMW was a challenge for us within the project," Elbe reports. Robotec Systems established itself as a supplier to BMW through a tendering process. "However, we had to settle the mathematical load data issue beforehand. After all, with the cables and hoses sitting like a rucksack on the robot arm, a field pack of over 40 kg (90 lbs) is amassed. Today, we are able to supply load data and 3D simulation data for all our systems. Through this project, we have been able to expand our experience so future customers also benefit from it," says Elbe, expressing his pleasure.

In autumn 2013, BMW ordered the first 30 systems for handling, gluing and spot welding robots. These were supplied and assembled by Robotec Systems in around six weeks. All the robots are now fitted and BMW planner Manfred Scheuerer is at the point of handing over the Magna plant. Production should then begin in February 2015.

![](_page_15_Picture_0.jpeg)

![](_page_15_Picture_1.jpeg)

"There are a number of manufacturers of cable cutting systems but our machines are the most reliable and that is a good thing." MANFRED WÖSSNER 10/14-1319

![](_page_15_Picture_3.jpeg)

### CABLE LENGTHS AT THE TOUCH OF A BUTTON

Purchasing goods online is recording rapid growth not only in the consumer sector but also in the industrial space. Distributors such as TIM in particular are benefiting from this. To be able to meet the increased demands in the area of cables and wires with a 24-hour delivery guarantee, a cable cutting system from Kabelmat is used.

Since 1987, TIM SA (Technology, Innovation, Mobility) from the Polish town of Siechnice has served the Polish market with products and services for measuring and control technology as well as the electrical and electronic fields.

#### Manual processes kept to a minimum

In their facility, there are 1800 spaces available for cable drums in high-level storage, which are served by automatic storage operating units. Taking the cable drums by pallet, these fully automated storage units supply three partially automated cable cutting stations currently in use. The new AUTOLOG coiling plant with automatic drum loading allows the processing of drums with a diameter up to 1600 mm (60 in). Since 2007, TIM has obtained cable cutting systems from Kabelmat Wickeltechnik GmbH in Glatten, a subsidiary of the HELUKABEL group. The market leader for coiling systems in the cable and wire industry supplies almost all devices and machines for storing, coiling and cutting cables, wires, steel cables, pipes, hoses and extruded profiles.

The AUTOLOG system supplied for TIM has a "drum to machine" design.

"We offer a very high level of automation, which cannot be compared to many systems, particularly with those from small suppliers," says Kabelmat Wickeltechnik GmbH Sales Manager Manfred Wößner proudly.

#### Technology made in Germany

The digital drive technology of the cable cutter consists of electric servomotors with controlled frequency inverters. Here, the drum is powered from the middle rather than from the flange, which is often the case. This provides better concentricity. "High speeds with optimum traction control are the second most important feature alongside safety," Wößner says. "We drive at speeds of up to 250 m (820 ft) per minute."

Another advantage is traction control with built-in cable store. A special function of this storage technology governs the traction when winding sensitive cables. The store functions as a buffer by synchronising the unwinder and the winder in order to keep the traction forces low. Additionally, movement technology allows the store to be moved away for direct coiling, which is necessary for thicker or stiffer cables. "Our machines have a length measuring system calibrated in accordance with PTB (German federal physical technical institute) standards, which is recognised all over Europe," explains Wößner.

All the relevant data, such as production length or residual cut length are transmitted by data exchange between the machine and the warehouse logistics system. "The data transfer from the drum conveyor sections of other manufacturers to the machines is also important. We have created all the necessary interfaces for data exchange," Wößner says. "We really appreciate the option of being able to couple all data systems together so our EDP communicates with the warehouse systems of our customers," Maciej Posadzy, COO of TIM SA, emphasises. "Even better, these interfaces are all very easy to control."

#### A lot of cuts per day

"The more efficiently the machines work, the better and more quickly we are able and the fewer staff we need to look after our customers, who naturally look at price," says Posadzy, explaining the rationale. "The cuts must not become too expensive, with up to 800 cuts made per day. The productivity of the new systems is now six to seven times better than the old systems," adds Posadzy.

### IN AND OUT

View W

#### SHORT DISTANCES AND HIGH AVAILABILITY are

decisive factors when it comes to fulfilling customer demands. An important part of the process is the inbound logistics area, where up to 25 trucks are handled every day at eight unloading docks. Our employees sort and inspect the incoming goods every day and record each and every cable and accessory electronically so that they can detect any defects immediately before sending orders on their way as quickly as possible. An automatic conveyor belt transports ordered custom cables, connection sleeves and entire cable drums directly to the outbound logistics area. Products that are not intended for shipping are stored in the HELUKABEL warehouse ready for the next delivery.

5

INSIGHT

![](_page_18_Picture_0.jpeg)

### TRADE **SHOWS**

![](_page_19_Picture_2.jpeg)

### **HELIS: THE HELUKABEL ONLINE SHOP**

3 Steps to Ordering:

![](_page_19_Picture_5.jpeg)

💼 1. Submit Order

2. Enter Position

3. Send Order

www.helukabel.de/helis

### IMPRINT

**POWER •** Publishers: HELUKABEL® GmbH Dieselstraße 8–12 • 71282 Hemmingen Phone: +49 7150 9209-0 • Fax: +49 7150 81786 helukabel-group.com • info@helukabel.de

CEO: Helmut Luksch, Marc Luksch, Andreas Hoppe

Managing editors: Oliver Streich, Kerstin Maass

Edited and designed by: pr+co GmbH, Martin Reinhardt, Deivis Aronaitis

Disclaimer: all rights reserved. Publication, reprinting or reproduction, in whole or in part only with permission of HELUKABEL® GmbH

![](_page_19_Picture_16.jpeg)

25.11.2014 - 27.11.2014 SPS IPC DRIVES 2014 Hall 6, booth 160-161, Nuremberg, Germany

18.02.2015 - 20.02.2015 Elektrotechnik Hall 5, booth 5.A14, Dortmund, Germany

02.03.2015 - 04.03.2015 MEE, Middle East Electricity 2015 Hall 6, booth 6B44, Dubai, United Arab Emirates

18.03.2015 - 20.03.2015 Eltefa, Elektro- und Elektrotechnik-Fachmesse Hall 9, booth 9E12, Stuttgart, Germany

13.04.2015 - 17.04.2015 HMI, Hannover Messe Hanover, Germany

15.04.2015 - 18.04.2015 prolight + sound Frankfurt, Germany

06.05.2015 - 08.05.2015 **RO-KA-TECH** Kassel, Germany

28.10.2015 - 30.10.2015 efa, Elektro- und Gebäudetechnik Leipzig, Germany

![](_page_19_Picture_25.jpeg)

![](_page_20_Figure_1.jpeg)

There are some questions that you hear again and again. In each issue, one of our experts answers one of these frequently asked questions, or FAQs as they are often called on the Web.

### VDE REGISTRATION – IS IT JUST A FORMALITY?

**ELECTRIC CABLES,** whose quality and safety have been monitored by regular inspections from the Verband Elektrotechnik, Elektronik und Informationstechnik (Association of Electrical Engineering, Electronics and Information Technology), or VDE for short, enjoy great acceptance across all industries both in Germany and around the world. Among other things, the Association promotes safety standards, standardisation and product inspection. For this reason, the majority of control cable models in the HELUKABEL range have VDE registration. These include PVC cables with or without shielding or PVC drag chain cables with or

![](_page_20_Picture_5.jpeg)

without shielding. The registration is identifiable from the VDE-Reg. No. printed on the outer sheath. Registration enables us to construct control cables that are more compact and cheaper than harmonised cable types such as H05VV5-F in accordance with DIN EN 50525-2-51 (VDE 0285-525-2-51). It signifies that cables produced according to HELUKABEL standards fulfil the electrical and mechanical test specifications of the so-called DIN EN/DIN VDE standards. A requirement for registration is that regular inspections be made. VDE inspectors examine and check both production processes and the final product. Only when both factors fulfil all criteria may the cable continue to display the registration number. The VDE number is therefore much more than just a formality. It shows that an independent inspection institute has approved the high level of technical and quality standards placed on the control cables made by HELUKABEL.

### **ABOUT THE AUTHOR**

Florian von Handorff works in the Technology & Quality Department and is the point of contact for questions regarding technical matters.

![](_page_20_Picture_9.jpeg)

# 3.86

times around the equator is equivalent to the 155,000 km (34,000 mi) of wire made in Germany at our Windsbach plant each year.

# **33.6**

metres (118 MM ft.) of cable and wire have been delivered by the Hemmingen logistics centre from the beginning of 2014 until the mid-October press deadline. The optimized cutting and logistics equipment, configured for high-volume flow rates, have accomplished 280,000 cuts during this period.

![](_page_20_Picture_14.jpeg)

spread across 200,000 orders are fulfilled every year by our automated, state-of-the-art logistics department, often within 24 hours.

## A DAY WITH MORITZ BARLAGE

For many people, Shanghai is a faraway, exoticdream destination. For Moritz Barlage, the "dragon's head metropolis" has been a second home for seven months. We accompanied the 28-year-old Key Account Manager for the HELUKABEL China subsidiary through the vibrant city for a day.

![](_page_21_Picture_3.jpeg)

The morning drive through the city centre of a city with 23 million people is a challenge. A coffee-to-go – as anywhere in the world – kick

![](_page_21_Picture_5.jpeg)

![](_page_21_Picture_6.jpeg)

### 07:30

HELUKABEL International Trading (Shanghai) Co., Ltd. was founded in 2002. There are other sales offices in Beijing and Shenzhen. The central warehouse and production, pictured above, were recently moved to Taicang.

![](_page_21_Picture_9.jpeg)

### 08:30

Customer meetings are arranged on short notice in China. The mobile phone is therefore a constant companion. The language of business in Shanghai is English, which is good for Barlage, who is still polishing his Chinese.

![](_page_21_Picture_12.jpeg)

### 10:45

The central warehouse with over 3,000 different products is around 100 km (60 mi) from Shanghai – a long way if Barlage wants to show customers the production facility.

![](_page_22_Picture_0.jpeg)

The cultural differences also have a significant impact on interaction with other people. This is a challenge for Europeans who work in China. There is a lot to consider in order to gain the trust and long-term loyalty of customers. Barlage takes plenty of time for personal conversations.

![](_page_22_Picture_2.jpeg)

![](_page_22_Picture_3.jpeg)

![](_page_22_Picture_4.jpeg)

### 18:30 (6:30 P.M.)

Eating in China is actually an occasion for communication. Barlage also enjoys his evening meal alone in the cook shop around the corner. After this, he relaxes at the gym or explores the city by road bike, where business life happens around the clock. I'M A MO SISTA

### MOVEMBER

# LET IT GROW, BROTHER!

Every year in November there is a sudden rise in the number of men with moustaches. The reason is the "Movember" campaign. HELUKABEL is joining in and playing its role in promoting men's health.

en have a lower life expectancy than women, they go less often to the doctor, and do not like talking about their health. The idea of Movember is to change all that. The word is a combination of 'moustache' and 'November' and is the name of a campaign that originated in Australia. Since 2003, men there have been growing a moustache every November, and using their 'mos' to collect donations and promote the theme of men's health. Movember has now grown into an international movement with around three million people taking part in 21 countries, including Germany since 2012. It isn't just for

individuals, as businesses and universities can also take part. HELUKABEL is joining in for the first time this year.

### A bit hairy

In November 2013, our Canadian colleague David McMurchy took part in the campaign, and this is what got us interested. In Germany, Kerstin Maass from the marketing department started the ball rolling and took care of the subsequent steps. She registered HELUKABEL on the website of the Movember Foundation and sent invitations to employees and customers, asking them to join the online group. "It isn't just for men, or Mo Bros, but women, or Mo Sistas, can take part in the campaign too by publicising the good cause," explains

Maass. All those who registered and created their own profile were sent a gingerbread moustache as a thank you. Once the month of November got started, the campaign began in earnest – all male colleagues shaved themselves smooth in a joint activity. From then on, they nurtured the ensuing growth, placing photographs of their progress on their online profiles, while being cheered on by the Mo Sistas. Full or goatee beards were not allowed – only a hairy upper lip was permitted.

### All about money

It isn't just for the sake of it; the aim is to gather as many donations as possible and there is no limit to the creative possibilities. For exam-

![](_page_24_Picture_0.jpeg)

© HELUKABE

![](_page_25_Picture_0.jpeg)

### WELCOME TO SOUTH AFRICA

South Africa is the most important industrial nation on the African continent. HELUKABEL has been operating there since 2010.

![](_page_25_Picture_3.jpeg)

With the branch in Johannesburg HELUK ABEL supplies its African customers even faster and more reliably.

![](_page_25_Picture_5.jpeg)

The South African HELUKABEL employees are an established team.

he HELUKABEL subsidiary in South Africa, the most important industrial nation in Africa, is located nearly 13,000 km (8,000 mi) away from the German company's headquarters in Hemmingen. In August 2010, HELUKABEL opened its subsidiary in northeast Johannesburg, where it now employees 19 people.

### Location, location, location

The South African capital of Pretoria is not far away – with a population of more than two million, it is a true metropolis. This favourable position of Johannesburg allows the subsidiary to react quickly to the demands of the African market. To cope with the high demand from local customers, HELUKABEL set up an additional sales office in Cape Town in August 2011 followed by another one in Durban in February 2014. The South African team is able to demonstrate its competence on a number of unique projects, primarily in the field of renewable energy.

HELUKABEL South Africa (Pty) Ltd. info@helukabel.co.za www.helukabel.co.za

![](_page_25_Picture_11.jpeg)

### **AFTER WORK**

Germany."

Doug Gunnewegh, CEO of the South African subsidiaries told us, "Whenever we get visitors, we like to take them to the Carnivore Restaurant, where African wild animal specialities are served. These include kudu, zebra and crocodile, for example. The interior design is basically just African decor, but that is all part of the fun. Guests find it exciting and for us it is entertaining. It's a bit like Oktoberfest in

### FACTS

In South Africa almost **53** million people live in an area three and a half times the size of Germany. **87** The country supplies more than **percent** of the world's available platinum. Mineral resources bring in high revenues for the mining industry.

South Africa's share of the entire African continent's Gross Domestic Product averages on 1/5

## **ON THE HIGH SEAS**

*The halogen-free audio cable Multipair AES/EBU ensures safe entertainment.* 

### LOW SMOKE EMISSION

Escape routes remain visible in the event of fire

#### THE NEW HALOGEN-FREE AUDIO CABLE Multipair

AUDIO CABLE Multipair 110 Ohm for AES /EBU is not only a safe solution on cruise ships but it also assists in preventing fires on land, in public facilities, and buildings such as discos, stages and theatres.

Cable runs exceeding 130 m (425 ft) are possible with the Multipair or Modulation cable. The screen is made from an AL/PT foil and CU braid, and an AL/PT foil is used to screen each individual pair. This creates outstanding EMC performance. The Multipair audio cable is available from stock in the following dimensions: 2x2x0.25, 4x2x0.25, 8x2x0.25, and 12x2x0.25.

### HALTS FIRE PROPAGATION

Prevents fire from spreading to other sections

![](_page_26_Picture_9.jpeg)

Γ.

### **FLAME RETARDANT**

Fire tested according to IEC 60 332-3 test type C

### HALOGEN FREE

No vapours or toxic gases

![](_page_27_Picture_0.jpeg)

![](_page_27_Picture_1.jpeg)

### FACES BEHIND THE SCENES

### Erich Kohlbauer has been a machine operator at HELUKABEL for 25 years

Using various materials such as PVC, PE, PP and HFFR, the systems that extrude the outer sheath onto the core work in a highly automated way. However, their performance and productivity is only as good as the person running the machinery, operators such as Erich Kohlbauer. He checks the core before starting, selects the tools for the given sheath formula, and centres the cores so the cable runs concentrically over the entire length. Overall an operator's job is to keep an eye on the process. With various control systems, he can detect fluctuations in the application and react accordingly. Nonetheless, that is rarely necessary.