

DIZ Doepke-Info-Zeitung

The free customer newsletter by Doepke Schaltgeräte GmbH



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#doepke4life: the new Doepke recruitment portal

The last two years have certainly been eventful here at Doepke. The many new faces on site in Norden are the most noticeable evidence of this, with over 170 new colleagues starting at the company in just a short space of time. With all these changes taking place, it was important Doepke to maintain a family atmosphere, while remaining open to the ideas and suggestions of new colleagues. This required tolerance, courage, patience and openness from both new and established colleagues, and the resulting boost in momentum has been a pleasant surprise for everyone. Many long-established practices have been scrutinised and new and creative approaches developed.

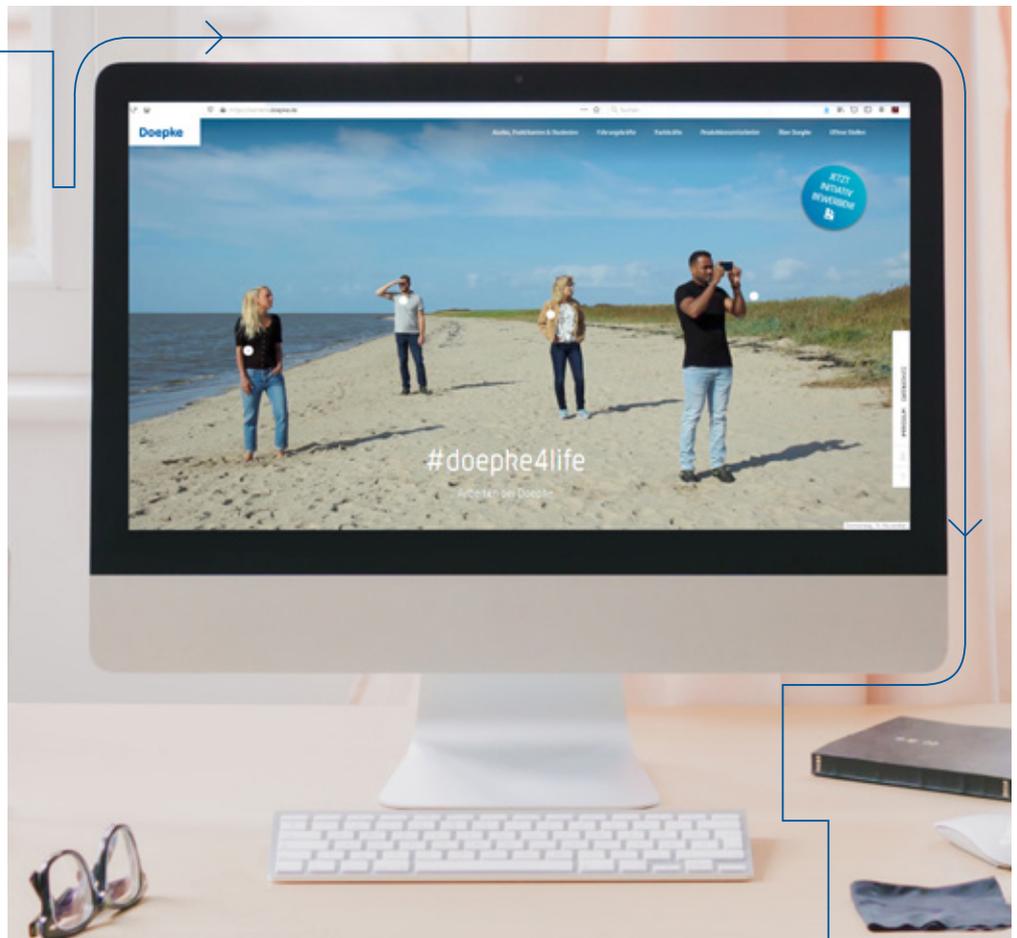
Last but not least, this creativity has ensured that Doepke has weathered the corona crisis very well so far.

However, we still need to find new colleagues in the first place – no mean feat in light of the current skills shortage. So, why not use this dynamic ourselves, in order to attract further motivated employees?

If we want to be the best employer in East Frisia, it's not enough just to offer fair pay. Continuing professional development, a pleasant working environment, advancement opportunities and, of course, location all play a deciding role for many potential employees.

In order to show what an attractive employer Doepke is, the company recently launched a new recruitment portal under the hashtag #doepke4life. It's for anyone who has an interest in working at Doepke, whether as a specialist, a manager or a production employee.

And, of course, Doepke also aims to appeal to school-leavers with various interesting training roles and dual study programmes.



With close-knit teams and the opportunity to play an active role in shaping the company, modern facilities, an open company culture and a good work-life balance thanks to flexible working time models, not to mention a great location in a popular holiday destination – Doepke has something to offer for everyone, from school-leavers through to highly qualified candidates.

Drop by and have a look at

 karriere.doepke.de ■

What do we actually do in ...?

Find out more about the different Doepke sites

Doepke has two German sites and two subsidiaries, one in the United Kingdom and the other in the United Arab Emirates. In total, we have 350 employees around the world, all working to make electricity safer. But who does what and where?



Sharjah, United Arab Emirates

This is the location of our Doepke Middle East (ME) subsidiary. Currently a one-man operation, José Cleetez coordinates all of our business in the Middle East.

Doepke ME is solely a sales organisation with no in-house production department. We've been represented in the Middle East since 1999.



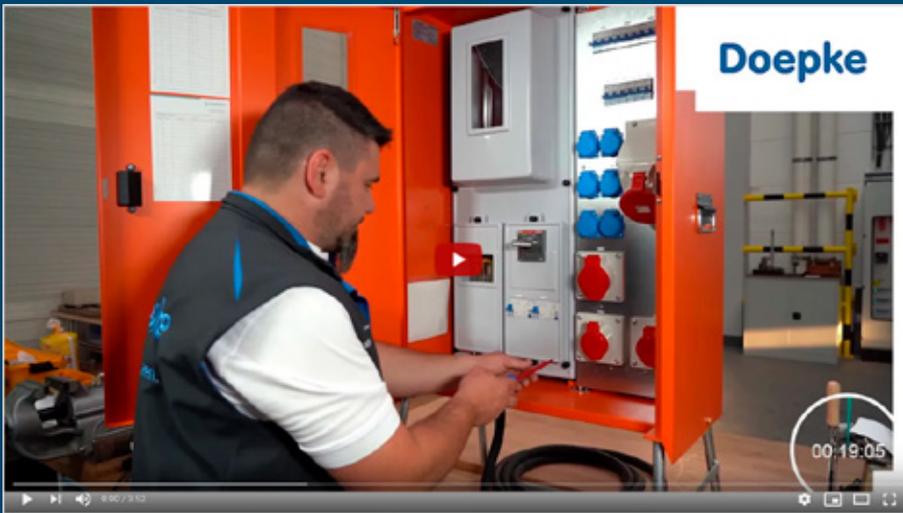
Daventry, United Kingdom

Doepke UK, our British subsidiary, is located in Daventry. Here, eight employees, led by Managing Director Simon Cranton, look after our UK business. Doepke UK is a sales organisation which also produces special switching devices and distribution boards upon customer request. Our British colleagues also offer vital round-the-clock consultation and technical support for Doepke products. We've been active in the United Kingdom since 1979 and it goes without saying that we'll be staying, even after Brexit. We have taken extensive precautions together with Doepke UK to mitigate the changes ahead.



Bickenriede, Thüringen, Germany

We currently have 31 employees at our production plant in Bickenriede where we manufacture DLS 6 miniature circuit-breakers, DHi auxiliary switches and transformer assemblies. The transformer assemblies/cores are used in our residual current circuit-breakers. The base poles for the DLS 6 miniature circuit-breakers are delivered and tested here. Afterwards, the one-, two-, three- or four-pole switches are assembled by hand, and printed and packaged by machine. The DLS 6s are then stored in the production plant's warehouse where they are commissioned and sent according to customer specifications. The production plant in Bickenriede opened in 1993.



Time-saving insulation measurement

The new ISQ HD

With the ISQ HD design, there are now AC-DC sensitive residual current circuit-breakers that are audit-proof. Insulation testing can therefore be carried out without prior disconnection. This not only prevents wear caused by mechanical stress from connecting and disconnecting, but it also saves a substantial amount of time as it removes the need to disconnect the residual current circuit-breaker. How much difference does this make? Watch the latest video on the Doepke YouTube channel, which compares residual current circuit-breaker measurements with

and without ISQ function to find out. Type B Doepke residual current circuit-breakers in the ISQ HD design can handle up to 63 A rated current and 500 mA rated residual current. Alongside the latest product videos, you'll also find recordings of previous webinars on the Doepke YouTube channel, as well as a virtual tour of the Doepke trade fair stand with new products and the latest trade fair highlights.

Take a look:

youtube.com/doepkegmbh



Norden, East Frisia, Germany

There are currently 309 employees working at the main plant in Norden and this is also home to Doepke's management and administration functions. This is where our products are developed, promoted, distributed, packaged and sent from. The heart of our main plant is our production area. Doepke products have a high production depth meaning that we make most of the product ourselves. That's why, as well as the production of RCCBs, MCBs and electronics, our production department also includes processes such as plastic injection moulding and tool manufacture. In order to be as close as possible to our customers, we work together with sales agencies, including internationally. You can find out which sales representative/agency is responsible for your area on our website.

www.doepke.de/en/contact

The return of direct current?

In recent years, the number of electrical devices using direct current in industry, the office and households has increased. This is generally obtained from the alternating current mains network via electronic adaptors. At the same time, more and more energy supply systems that supply direct current are in use, such as photovoltaic systems.

In light of this, both companies and private individuals are increasingly becoming interested in direct current supply, at least to complement their existing supply.

Why alternating current?

The reason that power is supplied from the grid with alternating current is not immediately obvious to begin with. In 1882, Thomas Edison was focused on direct current, whilst his competitor George Westinghouse was working on alternating current technology. At one point, both the competing systems ran parallel with each other before the tide turned toward alternating current.

The key advantage of alternating current at the time, was that the alternating voltage can be varied using transformers, which is not possible with direct current. At first the voltage could be increased to a level of a few thousand, and then subsequently to more than 100,000 V, while simultaneously decreasing the current with the same transmission power. This means that smaller cable cross-sections can be selected, making power transmission over longer distances much more cost-effective.

Transport

When it comes to the transmission of direct current, however, things have progressed in the last few years. The initial main advantage of alternating current compared to direct current has since been eroded. Converters that can be used to increase or decrease voltage to the required rate have been around for several years now.

This high voltage direct current transmission (HVDC) technology can also be used to transport direct current with an extra-high voltage of up to 1100 kV over long distances. Although these lines are more expensive to build, the higher costs are offset by a significant reduction in energy loss.

Production and use of electricity

More and more electricity is now obtained from renewable energy sources, and it is also more frequently produced where it is used. An example of this is private photovoltaic systems, which produce direct current.

This makes sense as the number of electrical consumers that run with direct current is constantly increasing, from computers to televisions, through to LED lighting.

In practice, however, the types of current used create a paradoxical situation: the direct current produced is converted via an inverter (with losses) before being fed into the grid as alternating current. For certain consumers, the alternating current from the socket is converted back into direct current (again with losses) via suitable adaptors in order to supply computers or lighting with power.

Although the losses in each case are low, in total the countless individual adaptors generate huge amounts of waste heat and considerable costs.

Requirements

If high-voltage lines can already be operated with direct current, why not also use direct current for low-voltage networks in offices and households? The problem is that the technology and material requirements between both systems are, in part, very different. For example, with alternating current, the switching arc extinguishes itself when the current crosses the zero point.

However, with direct current, depending on the type of load and at high currents, switching arcs no longer extinguish themselves from a voltage of 15–20 V DC after contact opening due to the fact that there is no zero point. Additional measures have to be taken and cables and insulation materials have to be specially adapted for direct current. Various working groups, such as the 'DC-Schutzsystem' (*DC Protection System*) project funded by the Federal Ministry for Economic Affairs, in which Doepke is also involved, are working on the (further) development of suitable components.

Use

There is good reason for the recent increase in interest – using direct current in low voltage ranges, such as homes, office buildings or industrial facilities, offers considerable savings potential. A central transformer replaces the many individual transformers and adaptors, thus saving energy. It can also reduce the price of end devices. There are already some office buildings in which computer centres, air-conditioning systems and lighting are supplied by direct current. There are also industrial pilot projects in which robots in individual production sections are already operated entirely with direct current.

However, little is known about the behaviour of a DC network, in which many different consumers and sources interact, so research is required. The DC-Schutzsystem development project is working on forward-looking network monitoring for DC networks and the components contained therein. Through continuous monitoring, it should be possible to detect deteriorations, such as decreasing insulation resistance in cables. This should make it possible to replace any individual components before any damage or faults occur.

SCHUTZ

SYSTEM

Outlook

Direct current is due for a comeback. It will certainly not replace alternating current technology for the time being; in some areas, however, the use of direct current makes economic sense. As things stand, the most efficient way is to use both systems in parallel. However, the DC-Schutzsystem development project, amongst others, is looking at exactly what this coexistence might look like, what standards and guidelines are required and how protection systems should be designed. ■



The safest way to use electricity.

Our electrical finds

Be it cable chaos, a curious installation or even 'chindogu' – the electrical curiosities we encounter have one thing in common: they are out of the ordinary and catch our eye. Chindogu, by the way, is Japanese and means 'unusual tool'. The term refers to inventions that the world doesn't really need but finds very amusing. We want to make you stare in amazement, shake your head or laugh out loud by sharing our favourite electrical finds with you in this regular feature.

I bet they have egg on their face about this one. This is the control unit for a chip extractor, installed in a 5-litre mayonnaise tub! Many thanks to Harald Boomgaarden for this interesting find.



Photo: Harald Boomgaarden

Do you have an entertaining electrical find to show us? If so, please take a photo of it and send it to us at:

kommunikation@doepke.de

Important: We can only consider photos that you have taken yourself. ■

Sabiene flies to Saxon Switzerland



Sabiene has once again been on her travels for Doepke. Her business trip in the autumn took her to Saxon Switzerland. Quite a change if you're used to the East-Frisian lowlands, but a great place for hiking tours. Sabiene's location in the photo is to the east of Bad Schandau at a height of approx. 425 m in front of the 'Schrammsteine', a long, strung-out, very jagged group of rocks in the Elbe Sandstone Mountains. You can reach this point by foot via inclines, stairs and secure ladders. It's definitely an advantage to have wings when visiting though! ■

Mario Sembritzki is the new point of contact for industry

Mario Sembritzki took up his new post at Doepke during the autumn. His title is Head of Industry Sales Promotions and he is the first port of call for industrial customers. The 31-year-old has worked at Doepke since 2018 and was previously responsible for the Northwest region as sales promoter. He is sure

to face many exciting challenges in his new position. Among other things, he will be the point of contact for the products that Doepke is developing together with twingz, see DIZ 4/2020. ■



Training not just trading

Visitors to the Light+Building 2020 should have had the chance to find out about the safe use of electricity and our new products – all through our exhibition displays. But then, as we all know, the coronavirus struck and trade fairs were either cancelled or went digital.

Many exhibition displays were therefore surplus to requirements, and it's anyone's guess when trade fairs will be able to take place in person once again. However, we've found a great way to make use of some of the Light+Building displays. They are now on display in the Dortmund and Düsseldorf Chamber of Crafts to teach

prospective electricians and master craftsmen about miniature circuit-breakers, tripping times of residual current circuit-breakers, fire protection, emergency stops and self-monitoring, as well as specific information for charging electric vehicles. ■



Our colleague Mario Sembritzki with Thomas Blättermann from the Düsseldorf Chamber of Crafts



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QUOTE OF THE QUARTER

We don't want to predict the future, we want to make it happen.

Antoine de Saint-Exupéry

DATES/NOTES

Doepke Academy

Interactive webinars on our new products and latest topics.

All the dates and additional information can be found at

[www.doepke.de/
doepke-akademie](http://www.doepke.de/doepke-akademie)