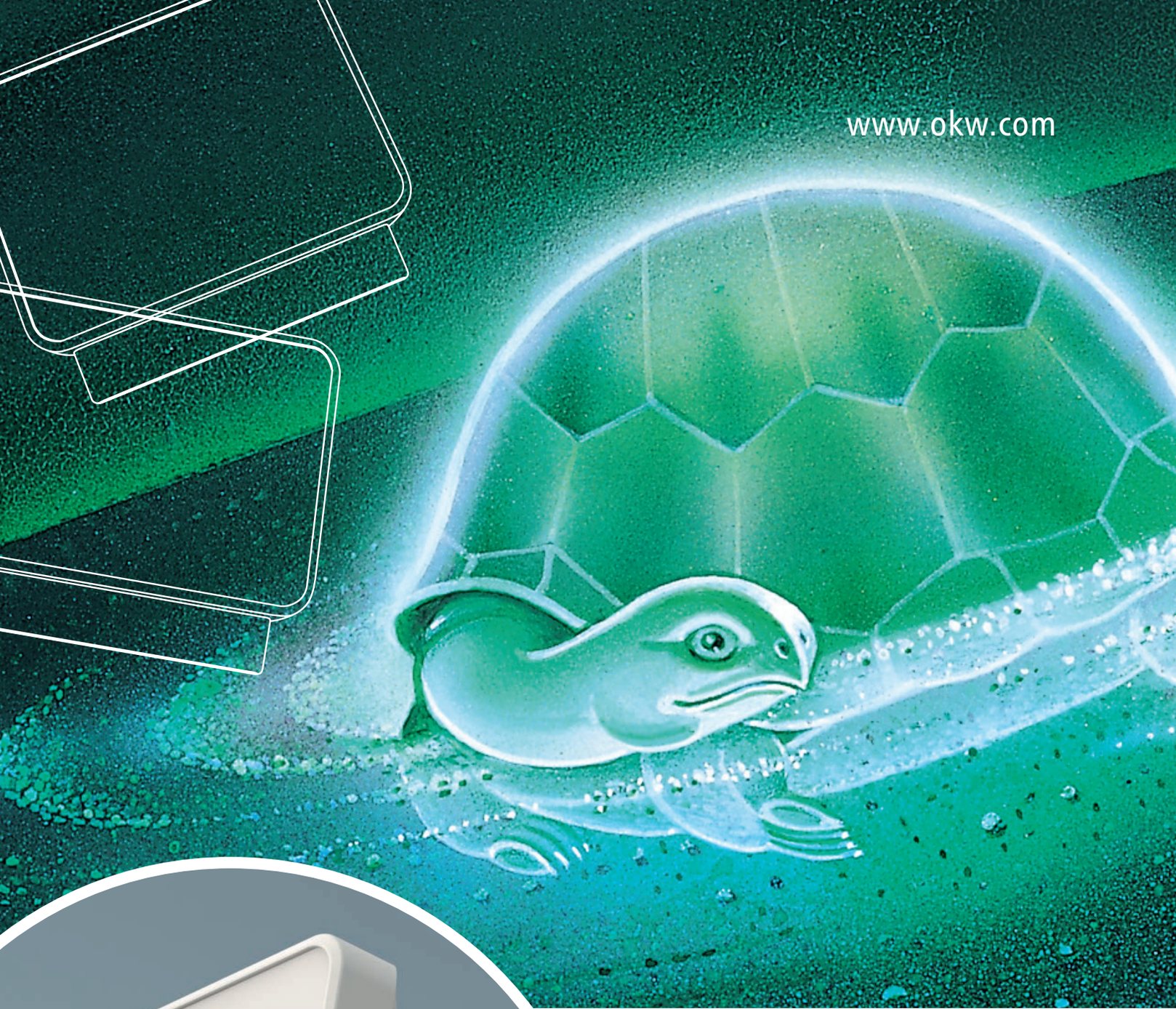
www.okw.com



INSIDE

THE CUSTOMER MAGAZINE

2026

OKW

GEHÄUSE SYSTEME

Dear readers

Welcome to the latest annual edition of OKW's customer magazine INSIDE!

Look forward to engaging reports, exclusive tips and the latest developments relating to the OKW enclosure portfolio, its related services... and much more.
From innovations and trends to practical advice, we'll keep you up to date.

The management team at OKW Gehäusesysteme hopes you enjoy reading and discovering what's new.

Dipl.-Ing. (BA)
Christoph Schneider

Dipl.-Betriebswirtin
Yvonne Ellwanger

FEBRUARY 2026
Our mascot is off on an adventure and clearly enjoying some ice climbing in Sellrain, Tyrol (Austria).

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NEW
ECG
PR (93)
NIBP
SV
SPO2
mkg

COMMUNITEC

The new COMMUNITEC enclosure series is the ideal solution for housing bulky and heavier components in a modern and design-oriented "package". But this stand-alone enclosure offers even more!

The 12° angle of the viewing and operating surfaces is ergonomically optimal for operating the device and reading the displayed content. Large displays with a diagonal of 11.5" to 14" can be installed, and the highlight: the table-top enclosure features an integrated handle and carrying option, making it easy to transport even heavier devices.

NEW

A large-volume table-top enclosure with an outstanding appearance

Author:
Oliver Herrlich
Research and Development

A high-quality appearance combined with a robust construction and plenty of space for large, bulky components – that's what makes the new COMMUNITEC from OKW Gehäusesysteme stand out.

The handle mentioned above allows the devices to be carried comfortably from patient room to patient room, for example. This opens up a wide range of application options in medical technology, such as patient monitoring, ventilators, neuromonitoring and much more. The standard enclosures can also be used for applications in aesthetic medicine (laser treatment, foot care, IPL devices). Other areas of application are of course also conceivable, such as measuring and testing devices in laboratories and environmental technology, automation, fault analysis and quality control. The rubber feet included in the scope of delivery ensure a secure footing on flat surfaces.

Large — and even larger

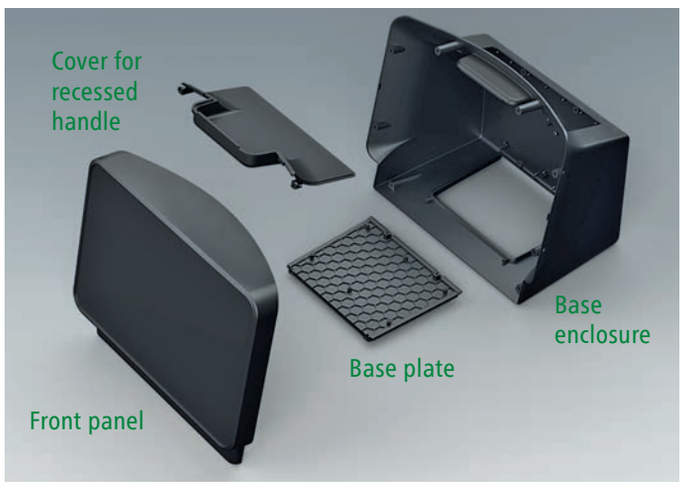
The voluminous table-top enclosure is available from stock in two different sizes: version "S" with 283 x 246 x 194 mm and the even larger version "M" with 344 x 274 x 219 mm (width x height x depth). The front viewing and operating surface has been designed with a 12° incline. This makes it easier to operate and allows the displayed data to be easily read from different angles. Depending on requirements, displays with a diagonal of 11.5" to 14" can be installed in the recessed area of the control front, which also offers a certain degree of protection for membrane keyboards. The flat surface below the inclined control panel can be used for front-mounted

controls/connections or for printing (logos, device data). On the rear of the enclosure, there is also a recessed area to protect built-in sockets, plugs and supply cables. This simplifies the necessary mechanical processing and results in user-friendly connection options. As usual with OKW, the surface of the new floor-standing enclosures is slightly textured and easy to clean.

Sophisticated technology

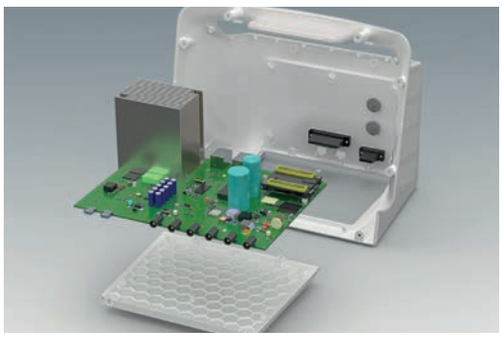
The COMMUNITEC consists of four individual parts, each made of high-quality, UV-resistant ASA+PC-FR material, and is available in traffic white (RAL 9016) or anthracite grey (RAL 7016). To assemble a complete housing, you will need a base housing, a control panel, a base plate and a "recessed handle cover"; the individual parts must be ordered separately. This allows you to combine the individual parts in your own colour scheme, which can be done quickly and easily. The "recessed handle cover" is also available in traffic grey A (RAL 7042). The base plate and the "recessed handle cover" are designed for use with both sizes "S" and "M".

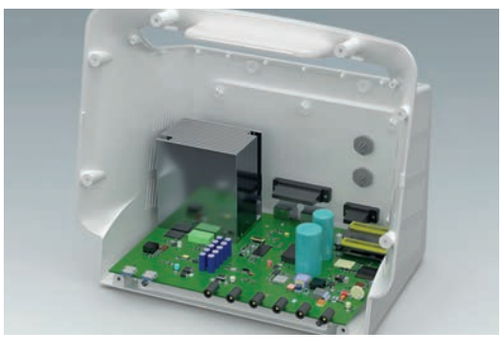
The individual parts are easy to assemble, service-friendly and are attached to the rear or inside of the housing using stainless Torx stainless steel screws. This means that the design on the front is not disrupted by screw heads –



PRODUCT ADVANTAGES

- Modern, timeless design with plenty of space for bulky equipment.
- With handle and carrying option for transport to a nearby location, e.g. from patient room to patient room.
- 4-part construction: base enclosure, front panel, recessed handle cover and base plate.
- Simple and service-friendly assembly of the individual parts.
- Several options for installing large-volume circuit boards and components – in the base enclosure, front panel and on the base plate.
- Recessed area in the front panel for membrane keyboards and for installing large-volume displays (11.5" - 14"). The flat surface underneath allows for front connections.
- Recessed area on the rear for installing and protecting plugs, sockets and supply lines.
- 2 sizes available from stock: Version S with 283 x 246 x 194 mm, Version M with 344 x 274 x 219 mm (W x H x D).
- High-quality ASA+PC-FR material with high UV protection.
- 2 standard colours: traffic white (RAL 9016) and anthracite grey (RAL 7016). As a colour contrast, the rear "recessed handle cover" is also available in traffic grey A (RAL 7042).
- The surface of the housing series is slightly textured.
- Rubber feet (included) for secure standing on flat surfaces.





Videos about the new COMMUNITEC enclosure series and much more can also be found on our YouTube channel.

YouTube

another plus for the appearance – and the screw connections are still easily accessible at all times.

There is a wide range of options for installing large-volume circuit boards and components in the base housing, the control panel and on the base plate. The base plate can be assembled outside the enclosure while it is still unmounted (optional); it is then secured inside the enclosure. If further assembly work needs to be carried out inside the enclosure, this can be done either from above, through the opening for the "recessed handle cover" or from the front.

Further useful information and ordering details for the new COMMUNITEC see at www.okw.com.

COMMUNITEC can be modified according to customer requirements

Mechanical processing
OKW's in-house service centre offers various mechanical processing options, such as milling, drilling, punching and countersinking.

EMC aluminium coating
To protect the electronics from external interference and their own interference emissions, the inside of the enclosure can be coated with aluminium.

Screen/tampo printing and digital printing
The enclosures can be individually printed or labelled. This allows the logo to be perfectly showcased or important functions of the end devices to be highlighted.

Special materials
On request, with a minimum order quantity of 200 pieces, the enclosures can also be manufactured in other customer-specific colours and materials.

Lacquering
To ensure that the plastic enclosures match the respective product application or the company's corporate identity, they can be lacquered in the colour requested by the customer. For special requirements, such as enhancing the feel of the product or creating metallic effects, OKW offers a range of other paint options to choose from.

Laser marking
Laser marking is ideal for permanent and abrasion-resistant labelling and marking. In particular, very small machine-readable markings, e.g. QR codes, barcodes, consecutive numbering of individual parts and texts, can be easily implemented.

Packaging / assembly
Assembly and gluing of housing accessories, assembly of components, individual fitting with mounting domes, light guides and much more are also available as services.

In order to meet your needs at all times, we maintain a large inventory of over 3,000 items, have a global logistics network, manufacture “Made in Germany,” and guarantee you long-term availability of standard housings and tuning knobs.

DATEC-COMPACT
lacquered in special
customer-specific colours

Completely relaxed in all project phases

With us as your expert partner, you can look forward to your next project with complete peace of mind. We are happy to advise and support you with all our standards, our knowledge and all the possibilities for customisation.

OKW enclosures and tuning knobs are always characterised by high functionality and innovative strength, aesthetic design, high ergonomics and surface quality, as well as tailor-made services according to your individual requirements.
Inquire now!

Comparing Screen, Tampo and Digital Techniques

Printing on Plastic Enclosures

Individual design is often essential for electronic enclosures, helping products stand out and create a unique identity. Printing on plastic enclosures plays a key role in this process.

There are several printing techniques available, each with distinct characteristics and advantages, chosen based on application and quality requirements. This article provides an overview of three common methods and their importance in printing on plastic enclosures.

Screen printing

This proven printing method works on the principle of stencil printing. A special screen with a fine mesh is prepared, and the ink is pressed through it using a squeegee. First, the desired design is transferred onto the screen using light-sensitive emulsions. The screen is then exposed and developed, leaving the unexposed areas open—allowing the ink to pass through and create the print.

Advantages of screen printing

- *High colour intensity:* Screen printing enables high density and opacity of colours – particularly important for vibrant and eye-catching designs.
- *Durability:* Thanks to its robust ink, this printing method offers excellent resistance to abrasion and chemical exposure.

When should you choose screen printing?

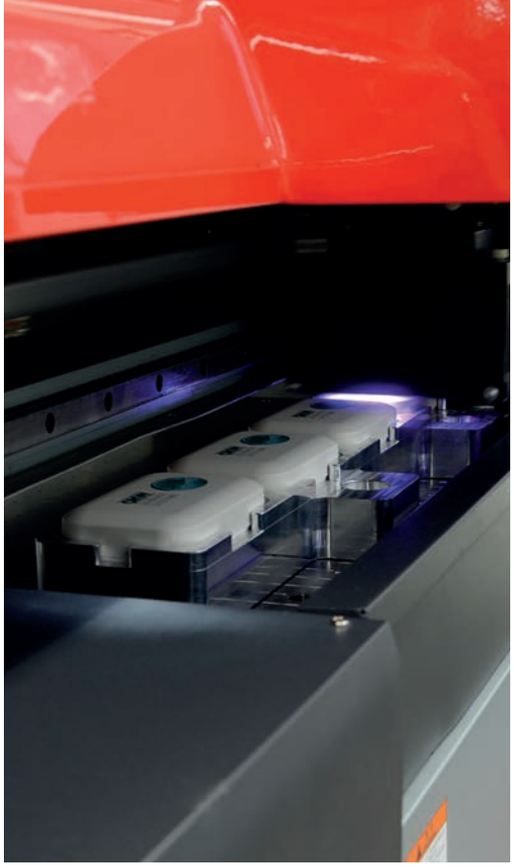
Screen printing is ideal for high-volume production, as the initial screen setup is time-consuming and costly. It's commonly used for large designs on flat surfaces.

Tampo printing

Tampo printing is an indirect process where ink is transferred to the product using a silicone pad. This technique makes it possible to print on irregular or curved surfaces, making it ideal for plastic enclosures and tuning knobs. The process involves several steps: first, ink is placed in the recesses of a printing plate; then the pad picks up the ink by pressing into the plate; finally, the ink is transferred onto the object.

Advantages of tampo printing

- *High level of detail:* This printing method enables highly detailed designs – ideal for logos and small text.
- *Flexibility:* Printing on a wide variety of surfaces and even irregular shapes is easily possible.




- *Cost-effectiveness for small quantities:* Compared to screen printing, tampo printing is more cost-effective for smaller production runs.

When should you choose tampo printing?
Tampo printing is often chosen when precision and fine detail are essential. A notable application is circular printing on tuning knobs, such as for scales.

Digital printing

This printing process works differently from the methods mentioned above. Here, digital image data is transferred directly onto the material using high-quality inkjet printers, which apply ink in fine droplets. There are several types of digital printing, such as UV printing and eco-solvent printing, each offering unique properties and application possibilities.

Advantages of digital printing
- *Shorter production times:* Printing directly from digital image data streamlines the process, resulting in much shorter lead times.
- *Customising:* Digital printing makes it easy to customise individual designs. Tailor-made solutions are easy to implement.
- *Environmental Friendliness:* Modern digital printing often uses eco-friendly inks and significantly reduces material waste compared to traditional printing methods.

When to Choose Digital Printing?
Digital printing is increasingly chosen for projects that require customised designs—such as images, colour gradients and unique layouts—as well as for small production runs. It's also a popular choice for prototyping and limited batches.

Conclusion

When selecting the best printing method for plastic housings, several factors should be considered: What does the design involve? What are the required quantities and budget? What standards must the finished product meet? Screen printing is ideal for large, durable designs, while tampo printing excels at accurately applying smaller details to irregular surfaces. Digital printing, by contrast, provides a fast and flexible solution—perfect for personalised or variable prints.

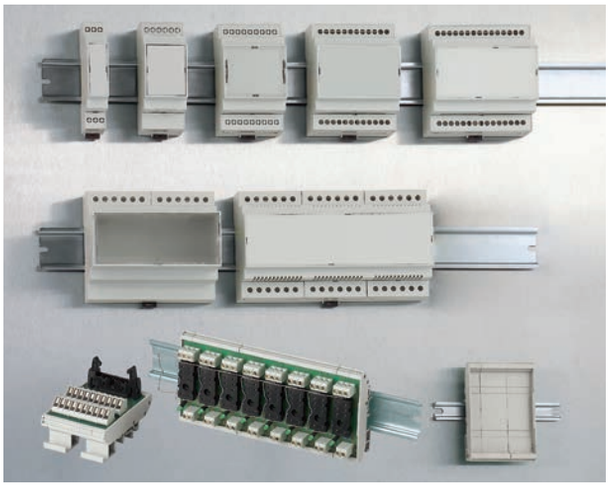
Each technique has its own advantages, so the choice depends on the specific requirements of your project. It's wise to consult the housing manufacturer to determine the most suitable method. This not only ensures optimal product quality but also presents your brand in the best possible light.

Control cabinet – the heart of technical systems

While the final assembly and commissioning of a control cabinet may seem straightforward, the reality is often more complex. In the preliminary phase, precise design and planning of components are essential, along with strict adherence to applicable standards and regulations. Integrated electrical and electronic components—such as fuses, contactors, relays, and controllers—combine to form a sophisticated switch cabinet unit that serves as the core of an electrical system or a complete production facility.

Devices in the control cabinet

Much like the human heart, the control cabinet comprises a wide array of individual components that must operate in harmony and, ideally, with minimal downtime over extended periods. High-quality electronics are indispensable in this context. Equally critical are the enclosures that shield these electronics from external influences—features such as flame-retardant materials,



secure locking mechanisms for standard rails, varied module widths, and both flat and high-profile designs. These are among the many attributes that DIN rail enclosure manufacturers must consider to accommodate a broad spectrum of customer requirements.

Different types of enclosures for the top-hat rail

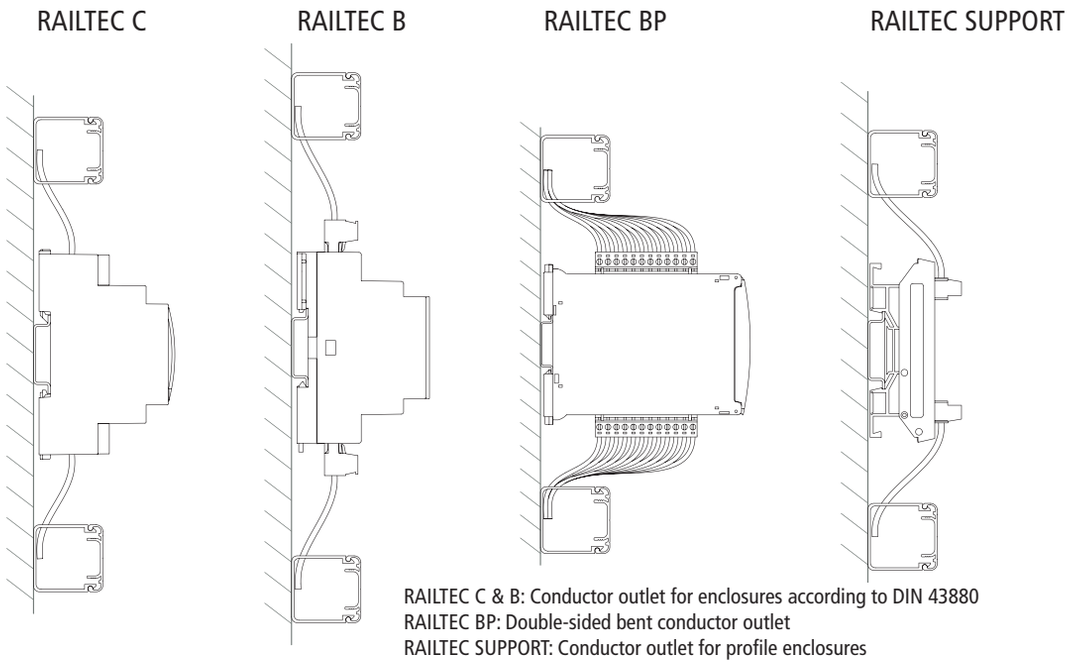
Each control cabinet is typically customised to suit a specific application. However, to facilitate streamlined planning and efficient installation, established standards are incorporated into the design and development of top-hat rail enclosures. These standards are outlined in greater detail below.

There are DIN rail enclosures, which are primarily designed for front wiring, as well as enclosures for side cable outlets (e.g., the new RAILTEC BP) and profile enclosures (RAILTEC Support). Based on their design, all three housing types are mainly used in open control cabinets or small distribution boards where the installation depth is not a significant factor and the devices or live components do not require touch protection covers (refer to the section 'Conductor separation for enclosures according to DIN 43880 and small building distributors'), e.g. as devices for

- Switchgear
- measuring and monitoring relays
- technical machinery and equipment
- building automation
- communication technology and much more.

Enclosures intended for use in so-called 'open' control cabinets offer considerable flexibility in depth; however, their height should not exceed 90 mm. This limitation arises from two key factors: many circuit boards adhere to applicable standards, which are more cost-effective manufacturing processes, and sufficient space must be maintained for installation and removal when devices are closely positioned within the cabinet. These enclosures feature a rear mounting bracket equipped with snap hooks designed for DIN rail installation. This mechanism permits vertical movement of the enclosure—swinging up and down from the pre-mounted rail. In the absence of adequate clearance above or the possibility of lateral access, installation becomes significantly more challenging.

Conductor separation for enclosures according to DIN 43880 and small building distributors



RAILTEC C & B: Conductor outlet for enclosures according to DIN 43880
RAILTEC BP: Double-sided bent conductor outlet
RAILTEC SUPPORT: Conductor outlet for profile enclosures

The RAILTEC B and RAILTEC C enclosure series from OKW are ideal for this application, although both top-hat rail enclosures are also popular in open control cabinets, depending on the device characteristics. The module widths are based on DIN 43880, ranging from 1 module (width 17.5 mm) to 12 modules (width 210 mm), with depths up to 45 mm and maximum heights of 90 mm. After final assembly of all electrical devices in the small distribution board, everything is sealed with a protective cover, leaving only the operating elements and status indicators visible (the cover has standardised cut-outs for this purpose). All connections and cabling are securely enclosed behind the cover, rendering them inaccessible to unauthorised individuals.

Installation on standard mounting rails compliant with DIN EN 60715

RAILTEC enclosures are designed for snap-in mounting on the most commonly used DIN rails in accordance with DIN EN 60715 – 7.5 mm or 15 mm (2 different versions, each with the same depth) with a height of 35 mm. In addition, the RAILTEC B enclosure series offers the option of mounting the devices directly on the wall or on the rear panel of the control cabinet using appropriate wall brackets.

Different connection techniques

Various connection techniques are available (see figure below), and their application depends on the available space within the control cabinet and its design. In distributors requiring the protective covers referenced above, wiring space is significantly restricted. Cable routing is limited to entry from the top and bottom, with cable lengths needing to be kept short. It is important to note that cables and plugs must be disconnected and reconnected during servicing and insufficient cable length presents a clear issue in this context.

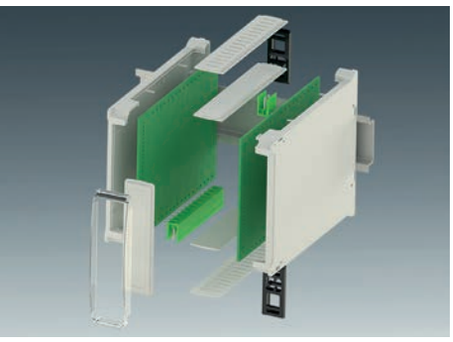
Cable Connections

There are basically two ways to connect the supply lines to the device: a fixed connection via screw/spring connections directly on the circuit board or via plug-in connections. In the latter case, the cable conductors are connected to a plug and the counterpart is connected to the circuit board.

Heat dissipation

Devices and components always release heat into the environment during operation. Since plastic insulates rather than dissipates heat, and since enclosures are usually arranged close together to save space, meaning that heat cannot escape from the sides, enclosures with ventilation slots are often used. For this reason, the RAILTEC product range also includes a wide variety of versions with integrated ventilation slots or variable configuration options.

NEW



Expansion of DIN Rail Enclosure Program with a New Panel Variant

RAILTEC BP M22

OKW has extended its RAILTEC BP M22 DIN rail enclosure range to include a new panel variant. Specifically designed for DIN rail mounting in accordance with EN 60715 TH35, the RAILTEC BP M22 is a versatile electronic enclosure ideal for measuring and control devices. It adheres to widely recognised industrial standard sizes, ensuring seamless compatibility with other commercially available enclosures.

Further useful information and ordering details can be found on the Internet at www.okw.com.

The RAILTEC BP M22 is offered in three different side panel configurations: fully closed, closed/with ventilation slots and a version with ventilation slots on both sides for improved heat dissipation. These adaptable configurations allow users to optimally adapt the enclosure to meet the specific demands of their applications.

A standout feature of the RAILTEC BP M22 is its optional transparent, foldable cover. This accessory provides robust protection for the enclosure's front side, safeguarding integrated elements such as operating controls, plugs, device information, light indicators and more. At the same time, it maintains clear visibility of these components, enhancing usability and ensuring the safety of the device. The RAILTEC BP M22 presents a reliable and customisable solution for developers, delivering innovation, convenience and practical benefits for modern electronic devices.

NEW

Expansion of the product range

Pole/mast mounting bracket

To enable the secure and stable mounting of IP-rated and robust enclosures on pipes or masts of various diameters, we are adding portfolio with a universal pole/pipe mount.

The new bracket, made from UV-resistant ASA plastic in anthracite grey, allows for mounting on masts/pipes with diameters ranging from a minimum of 30 mm to over 70 mm.

Note:
Each application (environment, tightness, enclosure size/version, pole diameter, etc.) is different. For this reason, no mounting screws or fastening clamps are included, only the pole mount! However, on request, we can offer a wide range of solutions that are tailored precisely to the intended area of application.

Author:
Kay Hirmer
Strategic Product Management
and Head of Marketing

How can condensation be prevented in sealed enclosures?

Goodbye moisture

Enclosures intended for outdoor use or in demanding industrial environments are usually robustly constructed and made from materials that protect the integrated electronics from external adversities. To protect against moisture and dust, the enclosures must, of course, also be sealed. However, this sealing, usually achieved by tongue and groove joints with an intermediate seal, is far from sufficient to completely prevent moisture from penetrating the device. Nature poses particular challenges for technology in this regard, as condensation forms. But where does it come from?

How does condensation form?

Condensation is a physical phenomenon and becomes visible when water settles on surfaces. It forms as soon as warm, moist air meets a colder surface and cools below the so-called dew point. This indicates the temperature at which the relative humidity is 100% and the air is saturated with water vapour. If the temperature falls below the dew point, the excess water vapour condenses and becomes visible as water precipitation. Condensation is particularly common in winter when there is a large temperature difference between the cold outside air and the heated inside air, e.g. on windows or walls. In this case, it helps to ventilate the room several times to create a balance through air circulation.

Causes of condensation in the enclosure

Understanding the causes of condensation in the enclosure is essential for taking effective protective measures. In hermetically sealed enclosures used outdoors, a pressure difference arises between the

interior of the enclosure and the external environment when temperatures change constantly. The differing pressure conditions cause moist air and dirt particles from outside to be "sucked" into the enclosure, where they condense on colder surfaces when the temperature rises. In the next step, small water droplets form, which remain inside sealed enclosures and cannot drain away unless further measures are taken. In addition, moisture ingress due to inadequate sealing at cable entries and operating elements can increase the risk, as can residual moisture trapped during installation or maintenance. The consequences of all the scenarios described can be problematic if, for example, electronic components corrode and the performance and service life of the devices are adversely affected.

Classification of enclosures according to protection type

Depending on the location and conditions, electrical and electronic devices must be protected with an enclosure against the ingress of dirt, dust, water or even body parts and objects in order to prevent hazards to persons or device failure. Mechanical stress caused by impact must also be prevented to ensure reliable function and safe use. For this purpose, an international and uniform classification has been established in the form of IP protection classes, which facilitates the selection of devices and enclosures according to the application requirements.

Please note:
The protection classes specified for OKW enclosures refer only to stock items. The standard enclosures are tested under standardised conditions (as unique items VDE or IEC529) in appropriate laboratories for safety in terms of protection against contact and against the ingress of foreign bodies and water in harmful quantities. However, and this is important, without any processing or fitting, such as drilling or recesses for plugs, cables, etc. and their installation. It is not possible to guarantee in advance that the protection classes will be complied with in the customer's subsequent area of application, as these are not known and depend on a variety of variables, such as use in outdoor areas with constant changes in environmental conditions. In addition, the IP standard test conditions do not take into account the ageing process of the products or the extent of subsequent modifications to the product itself. We therefore recommend that you have the end device certified to be on the safe side. Suitable OKW enclosure series with high protection classes, which are ideal for protected outdoor use, can be found in the following article on pages 22-25.

Air circulation reduces the risk

The choice of suitable materials, a well-designed enclosure and the use of high-quality seals are of great importance for protection against condensation. Materials with low thermal conductivity reduce rapid temperature changes and thus minimise the risk of moisture formation inside. Controlled ventilation also ensures constant air exchange and prevents humid air from stagnating. The pressure equalisation elements from the OKW portfolio described below are an excellent solution for this purpose . Choosing a dry and well-ventilated installation location also contributes significantly to reducing moisture. This ensures that your equipment remains reliably protected – regardless of changing environmental conditions.

FEBRUARY 2026
The turtle gets sporty at a Premier League football match in Germany.

Pressure compensation elements

The OKW pressure compensation elements in sizes M6 and M10 (light grey RAL 7035) enable the necessary air flow in smaller outdoor enclosures. For larger devices, we now offer two new versions with M12 (RQ* with 10 l/h or 24 l/h), each in light grey (RAL 7035) and black (RAL 9005). The membranes are water/dust-tight and oil-repellent to prevent condensation from damaging the integrated electronics and causing damage to or complete failure of the electronic devices. Important to note: Pressure compensation elements do not function if they are blocked by dust and/or placed under water.

*RQ – theoretical air flow RQ of the two new versions through the usable area is $\Delta p = 0.07$ bar.

Cable glands with pressure compensation

Another interesting option is cable glands with an integrated pressure compensation function. These cable glands are available in 3 sizes, M12, M16 and M20, each in black RAL 9005 and light grey RAL 7035. They combine the advantages of a classic cable gland with strain relief, including protection class IP68 and pressure compensation to prevent condensation.

SOLID-BOX

SMART-BOX

Robust plastic enclosures for harsh conditions

Author:
Kerstin Riedling
Marketing/Communications

Protecting the internal electronics and ensuring device functionality are the most important characteristics of a plastic enclosure. However, not every enclosure can withstand operation in a factory or demanding environments without damage; this requires so-called "robust industrial enclosures". These are specially designed for use in harsh conditions and offer a wide range of features in this context, which are explained in more detail below.

A plastic enclosure for use in industrial environments and/or for protected outdoor areas must have a number of technical features: The enclosure design must be suitable for the environmental conditions and therefore be robust and impact-resistant. In addition, a high IP protection rating against dust and moisture is important, and flame-retardant materials should be used, ideally with UV protection additives. The required interior volume must not be overlooked, circuit boards must be able to be securely screwed in place, and there should be sufficient flat surfaces for mounting plugs and cable glands.

Below, we look at four models from OKW's product portfolio that we believe are best suited for use in air conditioning/heating and ventilation technology, mechanical/plant engineering, measurement and control technology, electrical installation, agriculture and smart factory.

Elegance for industrial applications in IP66/67

The SOLID-BOX is a robust and versatile new enclosure series for tabletop and wall applications. Flush-fitting, snap-on covers creatively conceal the screw connection areas and, together with the highly polished enclosure surface, create an elegant appearance. The SOLID-BOX is available from stock in the standard colours anthracite grey (RAL 7016) and light grey (RAL 7035). Three different versions measuring 135 x 115 x 50 mm, 180 x 145 x 60 mm and 225 x 175 x 70 mm (LxWxH) enable the creation of visually uniform device series. A recessed area for the integration of membrane keyboards, for example, is located on the top surface. The enclosure series is made of high-quality, flame-retardant V0 material (PC+ABS-FR) with improved heat resistance (Vicat/B 120 = 110°C). The interior is sealed to IP66/IP67 to protect the electronics from moisture, dust and dirt. In addition, the enclosure series lives up to its name with an impact resistance of IK 08. To obtain IK 08 certification, an enclosure must withstand an impact force of five joules. This means that the enclosure must withstand an impact with a 1.7 kg hammer from a distance of 30 cm.

Smart packaging in IP 66

With its rounded edges, the SMART-BOX looks elegant without compromising its robust character. The enclosure family is available in 8 sizes, each made of high-quality ASA+PC (UL 94 V-0) in light grey (RAL 7035): 120/160 x 90 x 50 mm, 140/200 x 110 x 60 mm, 160/220 x 130 x 60 mm, 180 x 150 x 60 and 280 x 170 x 60 mm (LxWxH). The entire screw connection area is innovatively concealed by hinged flap covers. The supplied lid locks prevent the cover from falling off when open. This facilitates service and installation work. The SMART-BOX is available from stock in protection classes IP65/IP66 and forms an ideal basis for use in harsh environments.

Versatile terminal and electronics enclosures

The IN-BOX enclosure is available in two plastic materials, both of which have IK impact resistance. The ABS (UL 94 HB) versions have an IK rating of 07, which corresponds to an impact with a 0.5 kg hammer from a distance of 40 cm, while the polycarbonate (UL 94 5V) variants are rated and tested to IK 08. The IN-BOX enclosure series also has something to suit everyone in terms of size: starting at 84 x 82 x 55 mm (LxWxH) up to 302 x 232 x 110 mm for large-volume devices.

The top and bottom parts are efficiently assembled using stainless steel quick-release fasteners. The enclosures can be mounted directly on the wall in designated channels or, if necessary, with separate wall brackets (available as accessories). The range of accessories also includes: pressure compensation elements, cable glands/gland fittings, mounting plates, DIN rails, a hinge set and sealing sets to protect against unauthorised access. The recessed field on the top panel is ideal for protecting and integrating membrane keyboards. For even greater flexibility, the top panels are available in either the enclosure colour light grey (RAL 7035) or as a transparent version.

Dual enclosure system in IP66

With the ROBUST-BOX, the user decides whether to use the flat or tall housing section as the base. This is very easy to do, as both housing halves are equipped with pre-formed threads. This, combined with the fact that the enclosures are available in 11 different basic dimensions, different heights and in 2 materials (PC and ABS), makes the ROBUST-BOX extremely interesting for demanding table and wall applications and even applications on DIN rails with corresponding mounting parts, which are available as accessories. The appearance of the ROBUST-BOX is also maintained by clip-on covers that skilfully conceal the captive, stainless steel fastening screws. The entire assembly takes place outside the IP66-sealed electronics compartment.

Unlike the other models presented in this article, the cover strips of the ROBUST-BOX are available as standard in light grey, silver grey, red, yellow, green and blue in addition to the light grey housing colour for colour coding or branding purposes. Accessories also include mounting brackets for easy wall mounting of corresponding complete devices, hinges, cover locks, sealing sets, PCB holders, cable glands/gland fittings and pressure compensation elements.

HIGHLIGHTS

How does light enter a housing?

There are several ways to integrate lighting elements effectively and functionally into a plastic housing: light guides, LED-based optoelectronic components, illuminated lines or backlit areas. Which solution is best suited to your device depends on whether the 'light' is intended to provide functional and/or additional emotional value.

Which lighting serves which purpose?

Light guides, made of transparent plastic, enable light sources to be directed precisely and without loss from an LED mounted on the circuit board to a specific area on the housing surface. This is suitable, for example, for status indicators to visualise operating states and much more. As the light can be directed virtually can be guided 'around the corner', LEDs not be placed directly behind the housing opening, which significantly simplifies the PCB layout.

Furthermore, there are light guides that can direct the light along the guide. This allows the light to be coupled out over a wide area for illumination. This technique can be used when homogeneous, glare-free illumination of larger areas is required. Alternatively, translucent housing components and custom-cut housing surfaces can be backlit using energy-saving LED technology. There are virtually no limits to the variety of designs and colours available.

The effect of light

Radiating lines and backlit surfaces are frequently used as design elements, creating visual highlights, enhancing the perceived quality and adding accents.

But that's not all: light can also enhance functionality, e.g. through targeted colouring, lighting in dark environments for orientation, or for night-time use. The integration of these components requires precise planning in terms of material selection, surface finish and light source.

Important to know

Our standard enclosures are not supplied from stock with machining or cut-outs to ensure flexibility across different applications. The same naturally applies to accent lighting or the integration of light guides, which vary greatly depending on customer requirements and device specifications. If required, we can quickly produce the necessary cut-outs in the housing to exact dimensions using CNC machining and adapt individual components. Combining these with standard parts allows you to create a cost-effective, customised solution with lighting.

To support the creative thought process for your next project, we have provided some case studies below on lighting options for standard enclosures.

For smaller batch sizes, 3D printing offers a wide range of possibilities for manufacturing translucent housing components, such as intermediate rings, which are designed and manufactured to fit the upper and lower parts of the housing series. Of course, the light source and uniform light distribution must be taken into account here. For larger quantities, tool-specific recesses or entire housing components can be a sensible solution.

Case study: an illuminated handle

At the customer's request, we designed and had manufactured a customised "3D-printed part" to

Translucent grip parts for the CARRYTEC housing series

replace the standard TPE handle component. The requirement was that the upper handle needed to be illuminated to ensure clear orientation of the medical device even in darker environments. The challenge here lay in the limited space available inside the handle itself. A solution was created on a trial basis for the customer using an LED light strip, which is 'clamped' into the 3D component. As can be clearly seen in the images, the lighting effect works and thus serves as the basis for the subsequent development of the end device.

Case study for an illuminated spacer ring

More installation height is required and, at the same time, a lighting accent is to be created – these were the specifications for the design of a printed intermediate ring in translucent plastic for the EVOTEC housing series. An important criterion was that a homogeneous light distribution be generated around the housing. Which light source is ultimately used and how the corresponding control and power supply for the customer's device are implemented is, of course, down to the development planners. However, with this example, we can demonstrate that lighting effects can be achieved where required by using additional components (in combination with the standard top and bottom sections).

In the accompanying images, you can see further housing series with backlit mounting rings. They serve as examples to provide you with ideas for incorporating the theme of 'light' into your creative process for your next development project. We would be happy to support you in this!

The EVOTEC desktop enclosure with a red-illuminated intermediate ring and the robust SMART-BOX industrial housing with a blue-illuminated intermediate ring. EASYTEC with a yellow ring and the SLIM-CASE handheld housing with green accent lighting.

Successful migration to SAP S/4HANA – milestone in SAP project completed

OKW successfully completed the migration from SAP R/3 to SAP S/4HANA in January 2026, thereby concluding a three-year SAP project on schedule.

OKW has been working with SAP since 1996 – then as now with the aim of using a future-proof system as the basis for stable and scalable business processes. Over the years, the original R/3 environment has evolved into a comprehensive SAP landscape that now includes ERP, EWM and CRM functionalities, among others.

The overall project kicked off in 2023 with the introduction of SAP CX as a CRM solution. This was followed in 2024 by the implementation of SAP EWM, coinciding with the commissioning of the new logistics hall – an important step towards making warehouse and logistics processes more efficient and transparent. With the successful conversion in January 2026, SAP R/3 finally became SAP S/4HANA.

A key project milestone was the kick-off in April 2025: at that point, OKW was still in the early stages of S/4 implementation. Despite the preliminary projects that had already been completed, much was still new, individual points needed to be clarified, and the scope of the upcoming changeover required careful planning and a high degree of coordination. Looking back, it is clear how quickly a large task can be turned into a stable result: today, the project is complete, S/4HANA has become part of everyday life and is being used productively. This is precisely where the success can be measured – the system is no longer a "project" but a tool in daily business.

BLOG

Interesting facts, innovations and tips at www.okw.com

The new go-to source for expertise on plastic enclosures, aluminium profile enclosures, tuning knobs, modification services and much more.

Look forward to comprehensive insights into industry trends, FAQs, useful tips and innovations that are relevant to engineers, designers and decision-makers across all industries.

Whether you are planning a new project or simply want to stay up to date, our blog offers expertise, inspiration and deeper insights into the world of enclosures and tuning knobs.

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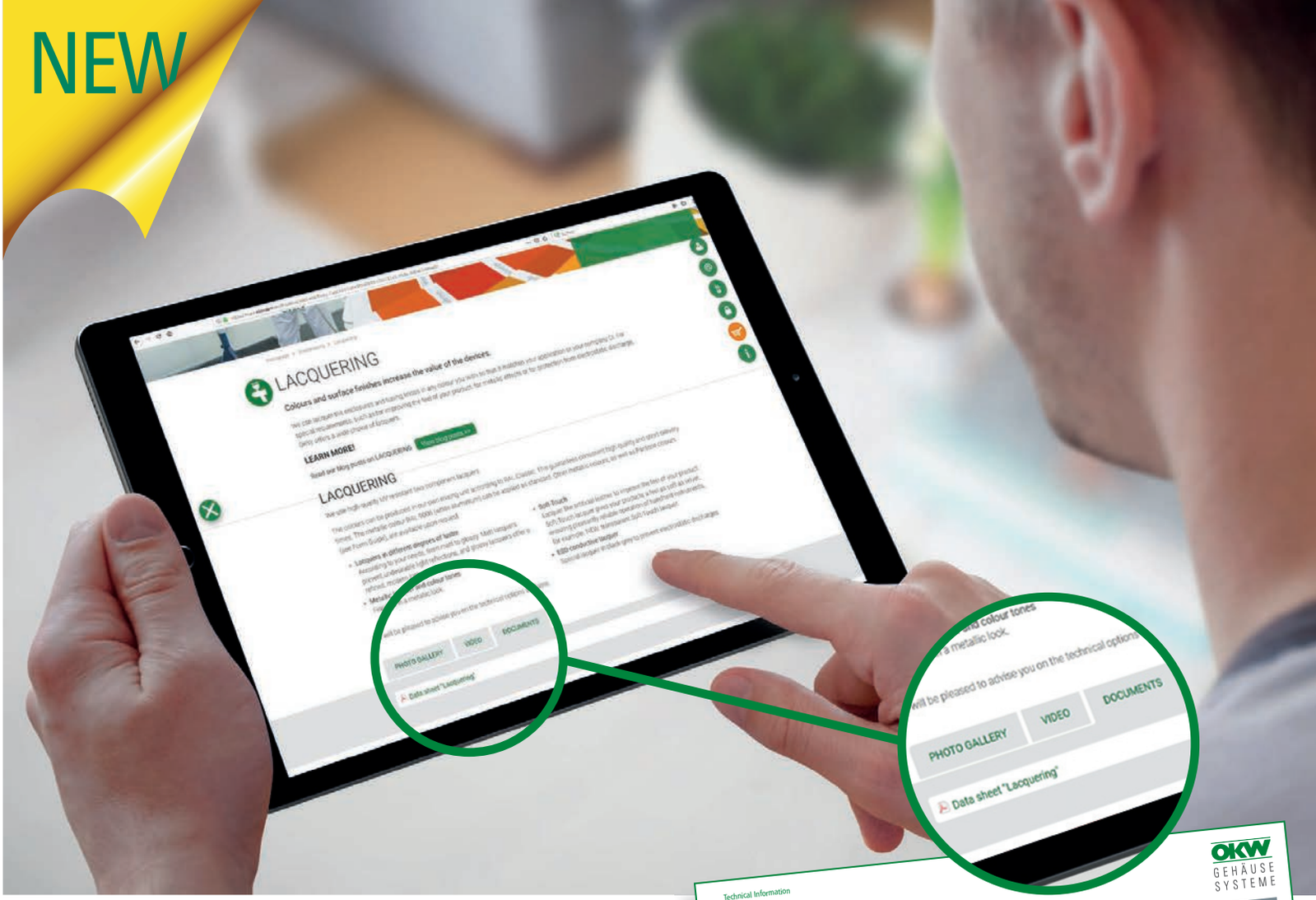
NEW



Data sheets for modification services available for down-load on the website

We have now made technical data sheets for the individual services available for download at www.okw.com — at no cost.

This allows you to quickly and easily obtain the information you need on topics such as CNC machining, printing, laser marking, lacquering, assembly and packaging, EMC shielding and the manufacture of standard enclosures in special colours and V0 materials.


Technical Information
27.01.2026

LACQUERING

OKW GEHÄUSE SYSTEME

LACQUERING

We can paint the plastic enclosures and tuning knobs in the colour you require, either to enhance the look and feel of your product or to protect it from electrostatic discharge. We do not use any special masks, meaning that some paint mist may settle on the inner surface.

SYSTEM AND RANGE OF PAINTS AND COLOURS

SYSTEM
Paint booth, hand-held spray gun, paint mixing unit, drying oven.

RANGE OF PAINTS:

STANDARD PAINT
UV-resistant 2-component paints by Mankiewicz are used in accordance with quality standard 461-73.
These constitute a weather-resistant top-coat system with maximum gloss and colour stability in industrial paint quality.

COLOURS
The colour should be defined according to RAL Classic.
The metallic colour RAL 9006 (white aluminium) can be applied as standard.
Other metallic colours, as well as Pantone colours (see Form Guide), are available upon request.
We can mix your paint from 20 available basic colours, using our own paint mixing system.
This guarantees consistently high quality and short delivery times.
A colour deviation of up to ΔE = 2.5 is possible.

SURFACE FINISH
Besides the colour, the gloss level plays a decisive role in the appearance.
We can apply the standard paint in different degrees of gloss,
namely: dull matt, matt, satin matt, semi-gloss, and gloss.
If no gloss level is specified, the finish will be effected in satin matt (standard).

SOFT-TOUCH PAINT (OPTIONAL ON REQUEST)
For this we use the translucent paint Alexit 401-75 by Mankiewicz.
This is painted over the part that has already been painted with standard coloured paint.
The soft-touch paint gives your products a velvety, leather-like feel.

All information is provided without guarantee / subject to change

Sponsoring

Our contribution to sustainable mobility

OKW is proud to continue sponsoring the TUfast Eco Team at the Technical University of Munich.

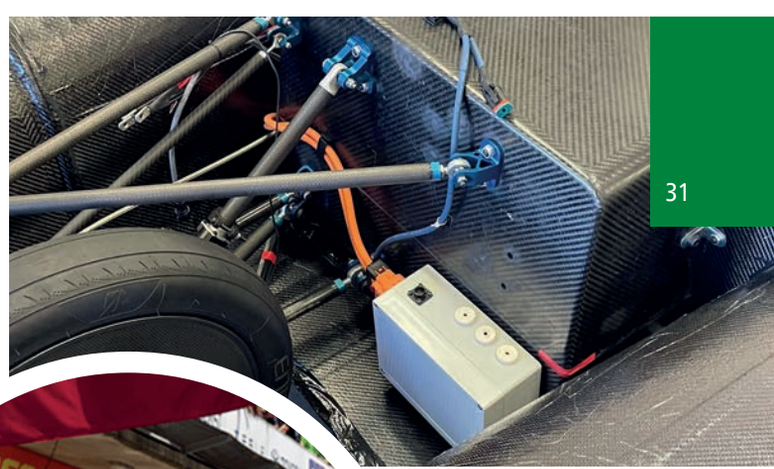
We first partnered with the team in 2016. For many years, they have been dedicated to developing innovative, highly energy-efficient vehicles. This year, we were proud to once again support their efforts to advance sustainable mobility and electric transportation.

The TUfast Eco Team brings together around 90 students from diverse disciplines at the Technical University of Munich. In late August, they competed in the Bridgestone World Solar Challenge in Australia—the world's most prestigious solar vehicle competition—with a fully solar-powered car. The event saw the best teams worldwide race at speeds of up to 140 km/h along a 3,021-kilometre route from Darwin to Adelaide.

The TUfast Eco Team already has impressive successes to its name: in 2023, they broke the world record for the longest distance travelled on a single battery charge with their vehicle muc22 – over 2,573 kilometres without interruption.

For this competition, the team relied on our IN-BOX plastic enclosures and matching cable glands for critical areas of the electrical system. These housings protect the inverter and MPPT solar charge controllers, providing IP66/67-rated shielding against dust, dirt, and moisture—a decisive advantage in the harsh conditions of the Australian outback. With secure sealing and robust mounting options, our components ensure reliable, resilient, and efficient system integration.

We are proud to play a role in advancing sustainable vehicle technologies and to support the talented young engineers at TUM on their journey. This partnership highlights the crucial role of high-quality enclosure solutions in modern electromobility.



www.tufast-eco.de

Sponsoring

Stronger together!

As a company based in the region, we are delighted to have supported the SpVgg Hainstadt junior football tournament and sponsored the medals. Thank you to the organisers and congratulations to all the teams for a great tournament!

www.spvgg-hainstadt.com

Talent development

MINT for me

Tinkering, building, constructing – and turning your own ideas into reality!

This course offered by the Joachim & Susanne Schulz Foundation is aimed at young people from the 5th grade onwards from secondary schools in the foundation's region who are enthusiastic about tinkering, DIY, building and constructing. In the open workshop of the Amorbach Research Workshop, participants can use the technical equipment once a week and implement their own projects – with plenty of room for creativity, curiosity and teamwork.

Our employee Ralf Kiesewetter, Product Manager R&D, was on site as an expert together with cluster coordinator Nadja Schneider and supported the young inventors with his know-how. As a cluster and practical partner, we are delighted to actively support this initiative and pass on technical knowledge in a practical way.

We are convinced that early support in the STEM field creates enthusiasm, strengthens skills and opens up perspectives for the future.

www.js-schulz-stiftung.de

Working for a good cause

Participation is a matter of honour

On International Volunteer Day, we also said, 'It's an honour to participate!'
We received a whole day of energetic support from a pupil at Burghardt Grammar School in Buchen. The money raised goes directly to a regionally selected good cause.

Since 2003, the Baden-Württemberg Youth Foundation and Stuttgarter Jugendhaus gGmbH have been successfully implementing this state-wide initiative – and we are proud to be part of this great campaign!

Mitmachen. Ehrensache!

TURTLE ON TOUR

MARCH 2026
The mascot visited the pop-up exhibition by world-famous street artist BANKSY, near Frankfurt.

Old devices, new opportunities!

Donation drive

We are thrilled to be part of the wonderful project at www.pc-spenden.de!

With our donation of decommissioned computers and laptops, we are supporting an initiative that addresses exactly where help is urgently needed: The devices are refurbished, tested, and then passed on to people who lack access to digital equipment—such as schoolchildren, college students or socially disadvantaged households. This not only enables digital participation but also makes an important contribution to sustainability.

Present at the handover were Mr. Doppler from computer-spenden-statt-wegwerfen as well as our colleagues Lilly Kempf (Executive Assistant) and Andrea Dietrich (Process Management). A big thank-you also goes to Computer Creativ GmbH (www.computer-creativ.com) for handling the donation campaign.

RETIREMENT

LOTHER BÜTTEL

takes well-deserved retirement.

For 36 years, Lothar Büttel was responsible for product support in our company's technical department.

ANDRE PUMMER

takes over responsibility for product groups.

We are delighted to welcome Andre Pummer as his successor. We would like to take this opportunity to welcome him and wish him every success in this varied and challenging role.

From left to right:
Christoph Schneider (Management)
Philipp Schell (Purchasing and Technical Manager)
Lothar Büttel (former Product Support)
Andre Pummer (successor to Product Support)
Yvonne Ellwanger (Management)

Further retirements:

MARIA BRAUN
Production employee, after 30 years working at OKW Gehäusesysteme.

LYDIA KNAUS
Production employee, after 20 years working at OKW Gehäusesysteme.

SERGEJ BAGRI
Production employee, after 9 years working at OKW Gehäusesysteme.

We wish all our 'retirees' all the best and, above all, good health. Enjoy this new chapter in your lives!

Employee news

EDUCATION

SALMA HAMRITA

We would like to congratulate Salma Hamrita on successfully completing her training as an industrial clerk!

We are delighted that Salma will be staying with us – she is now joining the sales team in the order processing department.

The photo shows our graduate together with training officer Lilly Kempf and sales manager and member of the management board Yvonne Ellwanger, who will be her future supervisor.

We wish Salma a great start to her career and look forward to our future together!

EDUCATION

SOPHIE GAMERDINGER

Congratulations to Sophie Gamerdinger on passing her industrial clerk qualification!

We are delighted that Sophie will continue to be part of our team. She will now be supporting the purchasing department, where she will be contributing her expertise. The photo shows our new graduate together with her trainer Lilly Kempf, Purchasing/Technical Manager Philipp Schell and member of the management board Yvonne Ellwanger.

We wish Sophie a successful start to her new career and look forward to continuing to work with her!

ANNIVERSARY

25 YEARS

- Katharina Stang
  Production
- Michael Reimold
  Sales

10 YEARS

- Tanja Döllinger
  Logistics
- Galina Schneider
  Production
- Liliana Marques Gomes Fernandes
  Production
- Andreia Maria Pinto Pereira
  Production

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Turtle © by OKW Gehäusesysteme, Buchen.

ON TURTLE TOUR

FEBRUARY 2026
Ski mountaineering trip in Vinschgau/
South Tyrol (Italy).

We're sending our mascot out into the world! Whether on holiday, on an adventure or enjoying special leisure moments — our turtle will join colleagues and show what our team gets up to outside of work.

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