Engineering progress Enhancing lives

The perfect component

RAUKANTEX edgeband innovations build the base www.rehau.com/raukantex



RAUKANTEX edgebands are our core competency in the interior segment. They symbolise the values our partners love about REHAU: reliability, flexibility and a passion for innovation.

> REHAU solutions like our RAUKANTEX pro adhesivefree zero-joint edgebands have set new standards for kitchen and bathroom furniture.



Enabling exceptional design.

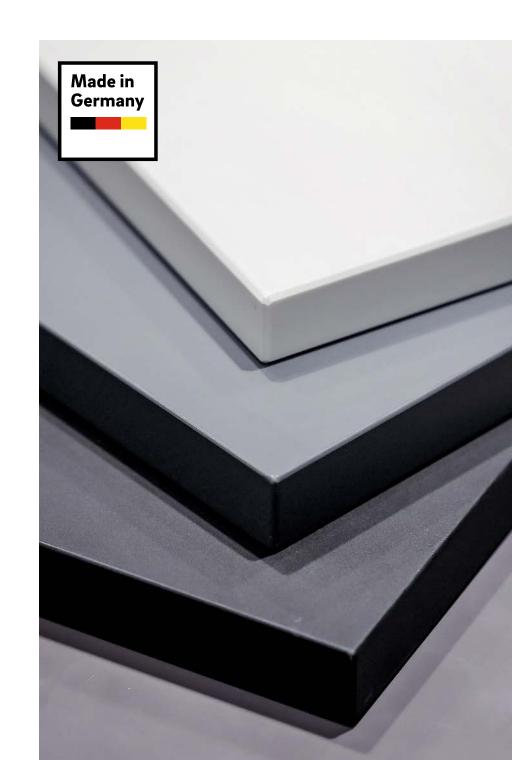
REHAU has been producing thermoplastic edgebands for over 60 years, over 50 of this have been under the brand name RAUKANTEX. We produce millions of linear metres of functional and design edgebands every year, taking us to the moon and back.

We are manufacturers, suppliers, idea-generators and technical problem-solvers for quality edgebands made in Germany.

We support all processes, all industries and solve any problem that our customers in the carpenter business or furniture industry may face.



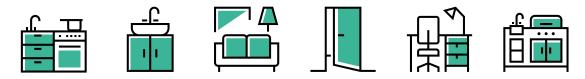
Be it one metre/coil or a large series, primer edgebands or laser edgebands with individual functional layers, in-stock programmes or edgeband innovation: we have the solution.





Professionals use RAUKANTEX pro

RAUKANTEX pro with 100 % polymer functional layer sets the standard for optical, functional and durable zero joints in industrial quality.



Our industry-specific functional layers for kitchens, bathrooms, living rooms, doors and even outdoor applications are truly unique.

The perfectionist: RAUKANTEX pro

Edgeband with polymer functional layer

Get perfect, seamless components with the 100% polymer functional layer. 100% colour match. 100 % adhesive-free.



Moisture resistance UV resistance

Adhesion/hardness Appearance

The classic: RAUKANTEX pure

Primer edgeband

Adhesive is melted before it is applied to the board or edgeband.

Example: EVA adhesive:



Moisture resistance
 UV resistance
 Adhesion/hardness
 Appearance

Example: PUR adhesive:



Moisture resistance UV resistance Adhesion/hardness Appearance

Three technologies for zero joints:



Laser technology In laser processing, a laser activates the edgeband's functional layer.



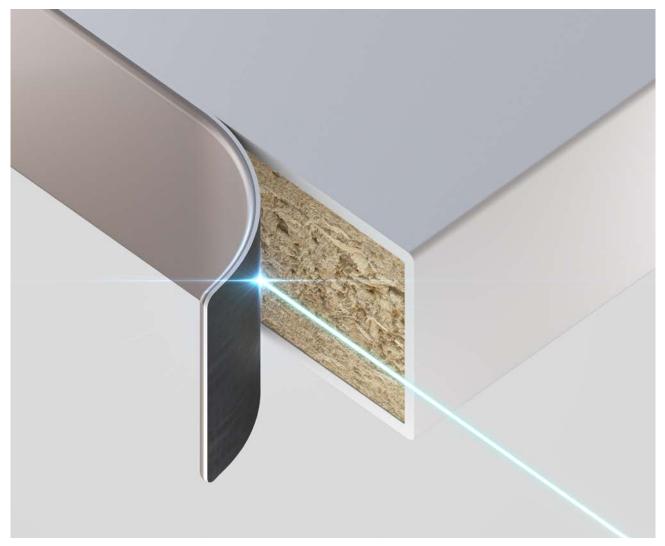
Hot air technology

In this procedure, compressed hot air melts the functional layer.



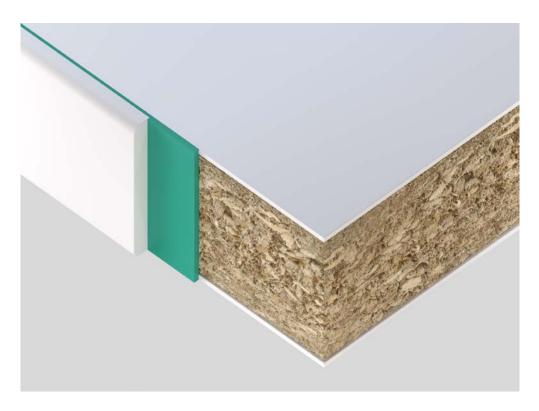
Near-infrared (NIR) technology

Thermal energy can be transmitted rapidly and with pin-point accuracy using NIR technology.



RAUKANTEX pro – structure and advantages at a glance

RAUKANTEX pro comprises two layers.



The top layer is made of standard PP, for example, which ensures good processing quality. The bottom layer is made up of a special polymer characterised by high flowability and reactivity.

The advantages of RAUKANTEX pro:



Design

- Permanent invisible joint
- Maximum lightfastness of PP
- Exact colour matching of functional and decorative layer
- Functional layer matched with the hardness of the decorative layer → no frictional wear on the joint in daily use
- No yellowing, no soiling



Quality

- Permanent, functional, invisible joint
- Improved heat and moisture resistance
- Maximum chemical resistance of PP
- New: Increased moisture resistance especially for kitchen applications
- Hygienic easy to clean
- Long-lasting high component quality

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Process

- Increased process reliability, no reworking
- Reduction in process steps and production equipment
- Low maintenance
- No adhesive and no contamination of units/ systems
- New: improved fluidity and adhesion
- New: optimised processing window



Reliability & Know-How

- Polymer functional layer replaces adhesive
- Less release agent and cleaning agent requiredMaterial purity of the PP waste enables more
- environmentally friendly disposal
- Hygiene (no accumulation of microbes)
- Polymer functional layer or adhesive-free laser edging is internationally patented in many countries*
- Component testing & certification (external institute) with the help of REHAU Technical Support → 15 years of experience in the laser process
- Successful use on pass-through machines from international manufacturers in the laser process

No adhesive

The innovative laser bonding process allows you to completely avoid adhesive.

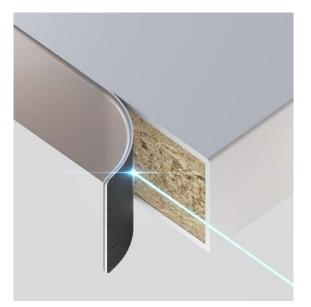
No joints

Welding creates a permanent invisible and functional zero joint

No problem

Processing method, quality and design are significantly improved.

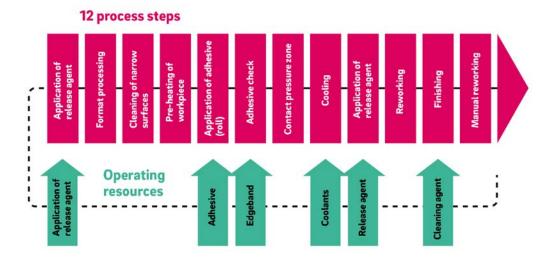
Find out more at www.rehau.com/zero-joint



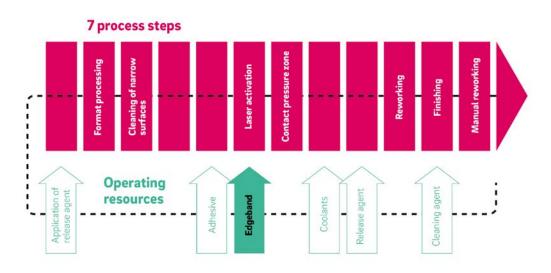
*Patent validity for India, USA, Mexico, China, Hong Kong, Indonesia, Brazil

Edgebanding techniques at a glance





RAUKANTEX pro (laser edgeband)



Various technologies can be used to process RAUKANTEX pro. The edgeband is "welded" to the board. The manufacturing process is reliable, stable and provides high replication accuracy.



The required maintenance effort in direct comparison to conventional edgebanding is lower as aggregates do not become contaminated. The result is highly resistant components that can permanently withstand moisture and water vapour.



RAUKANTEX pro duo – highest component quality in multilayer optics

Limited or narrow spaces often make interior design more challenging.

Sharp edgebands that could lead to injuries are a big no-no. That said, items of furniture in these spaces are still put through their paces and need to retain their high-quality appearance for a long time.







Find out more at www.rehau.com/caravan

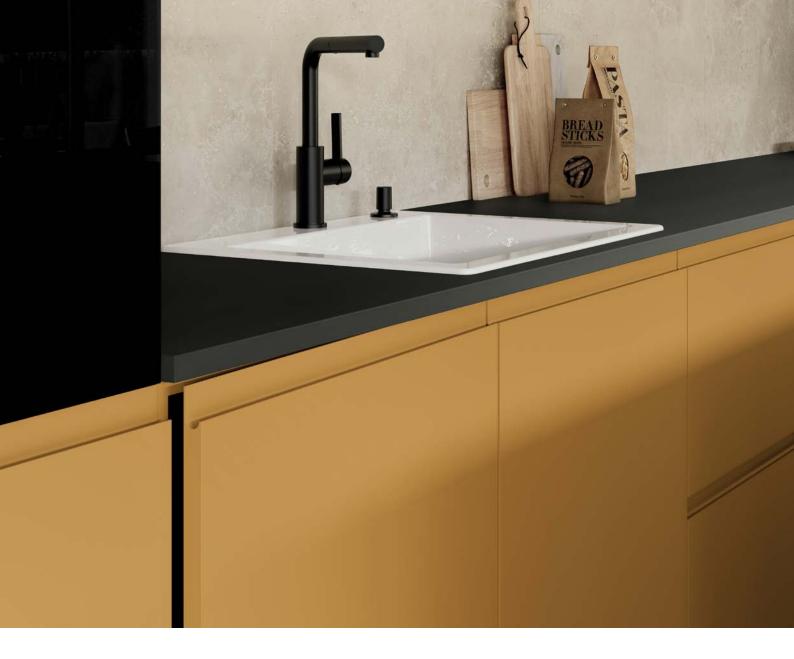
Safe & easy in the process

With the RAUKANTEX pro duo multilayer edgeband, the first edgeband to be applied is roughened by milling. The edgeband applied on top is then "welded" to the first edgeband.

The benefits at a glance:



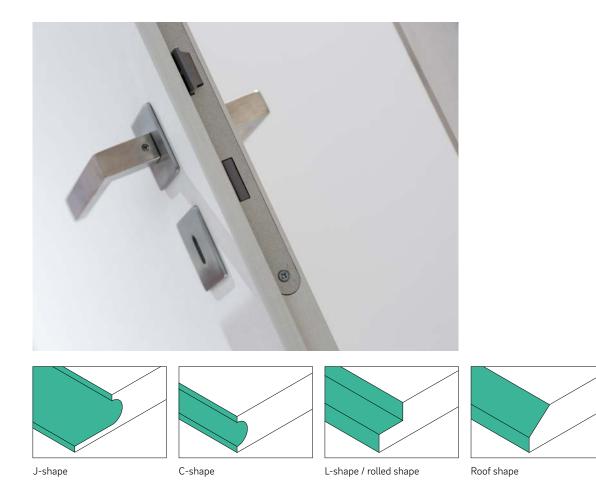
- Total edgeband thickness: > 3 mm
- Multi-layer structure: tight outer and inner radii on free-form parts
- Impact-resistant and robust, prevents injuries
- Can be processed with hot air or laser
- Improved resistance to heat and moisture
- Maximum hardness and adhesion
- Easy-flowing functional layer, best adhesion and radius flexibility
- The perfect component, visually and functionally thanks to zero-joint processing
- Individual touch on tables and shelving
- Natural, real-wood appearance possible
- No colour deviation between edgeband and functional layer



RAUKANTEX folding – for all edges and borders

Edgebands that can be shaped in various ways during the manufacturing process and fulfil the highest demands in terms of durability, resistance and a high-quality appearance: that is RAUKANTEX folding.

The innovative edgebands can be individually shaped using bevelled or soft-formed edgebanding to create unique, handleless fronts, for example. The possibilities of the slimline side panel design are also diverse.



New: RAUKANTEX folding premium was specially developed for complex geometries (e.g. J and C shapes). Its unique formulation makes the edgeband even more flexible. This completely eliminates the memory effect.



Find out more at www.rehau.com/raukantex-folding

The benefits at a glance:



- Harmonious, handleless interior components
- No white breakage or bending discolouration
- Perfect transfer of the front decors to the edge
- Comfortable touch
- Resistant optimised surface for the softforming process
- Easy to clean & durable
- Endless variety: all gloss levels and embossing available
- Tested expertise: surface treatment, coating, pigmentation
- Suitable for all industries and areas of application



RAUKANTEX pigmento – Frameless. Seamless. Effortless.

Ceramic, concrete, stone: any material, any feel, any look can be imitated – right down to the chamfered area.

The pigmented milling radii produce a frameless look. The negative properties of natural materials, such as heavy weight or fragility, are eliminated.

In combination with laser technology, components are produced at the highest level.







The benefits at a glance:



- Virtually invisible transition from board to polymer radius thanks to seamless joint
- Design match: board-edgebandmaterial-printing in perfect harmony
- Lots of decorative designs and colour choices available
 100% adhesive free
- 100% adhesive-free
- Colour-matched functional layer for decor edgebands
- Better UV stability, no yellowing
- Very good adhesion even with all zero-joint-technologies
- Very good surface smoothness

Find out more at www.rehau.com/pigmento

RAUKANTEX scratch.protect – for a long-lasting matt look

The trend away from high-gloss surfaces and towards elegant, matt designs is sweeping through the entire furniture industry. Whether in living spaces, offices, kitchens, bathrooms, shop fittings or hotels – matt is everywhere.



Yet with matt surfaces in particular, differences in the quality of the materials and their machining are especially noticeable. It is often the edgeband of a component that is exposed to especially heavy wear. This begins during component production when the edgebands are processed and continues later on through the stresses the edgeband is subject to in everyday life.

RAUKANTEX scratch.protect is the innovative solution.

The benefits at a glance:

Quality

- Long-lasting quality throughout the component's service life
- High scratch resistance
- Easy to maintain and resistant against dirt particles
- Soft to the touch

Design

- Long-lasting matt look, no visible effects of ageing
- Elegant, even structure
- No fingerprints thanks to anti-fingerprint effect
- Anti-sheen effect: prevents shine on the matt surface, even at a flat viewing angle

Process

- No "smoothing" due to button on edgeband surface
- No protective foil required
- Stable and simple production
- Available for all machining processes







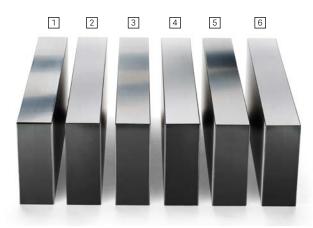
Gloss levels make the difference

The already familiar positive properties of the noble matt are now also available in other gloss point gradations. All polypropylene and ABS edgebands in the solid colour, decor and designo ranges are available with scratch.protect finish.

The following gloss levels are available to order:

- Noble matt SP
- Gloss level 06 SP
- Gloss level 08 SP

The picture shows the previous coating qualities alternating with the new RAUKANTEX scratch.protect quality. Samples 2, 4 and 6 do not show any reflections.



Find out more at **www.rehau.com/raukantex-sp**



RAUKANTEX eco.protect – natural knowledge

Taking responsibility for the future of the next generations is a key part of REHAU's DNA. Sustainability is therefore an integral component of the corporate strategy – and RAUKANTEX is no exception.

Thicker worktops (especially in the kitchen), more stable side board and protruding cover plates and tabletops increase the amount of material used and the weight of the components. We tackle these problems with the edgebands and service solutions under the eco.protect umbrella.

Our goal:

to continuously increase the use of recycled material and non-fossil-based polymers and reduce $\rm CO_2$ emissions.

Product overview

Our entire RAUKANTEX programme made of polypropylene (PP) is Nordic Swan Ecolabel-compliant.



Edgeband (PP) with 50% post-industrial recyclate in the base material.



RAUKANTEX evo

Edgeband (PP or ABS) with non-fossil primary raw materials in the base material. Transparent throughout its entire supply chain thanks to ISCC PLUS certification (mass balance).

The advantages of RAUKANTEX evo and eco at a glance:



- Available as a classic primer edgeband or with a polymer functional layer for laser production
- Available with standard lacquer, in noble matt and mirror gloss
- Decor lines: RAUKANTEX color, RAUKANTEX decor, RAUKANTEX designo
- Available to order for all types of embossing
- Simple processing without changing machine
- parameters
- Perfect designDurability
- 100% colour and decor match
- Dimension range: 0.4 mm to 3.0 mm / 16 mm to 104 mm



RAUKANTEX basic edge

- Innovative, patented supporting edgeband to stabilise the thin cover layers of the honeycomb boards in the radius area
- Easy realisation of thin cover layers for lightweight construction boards or any free-form parts
- Processing of tight radii
- Easy to handle, low weight
- 100% from production waste/recycled materials



RAUKANTEX pro

- 100% adhesive-free functional layer
- · Fewer release agents and cleaning agents in use
- The purity of the produced PP waste allows for environmentally friendly disposal



The most important furniture trend: recycle and reuse.

We take over the responsibility for unused edgebands and ensure they are appropriately recycled.

Our primary objective:

to prevent thermal utilisation and disposal!

No longer need your edgebands?

Then give them a new life with the REHAU edgeband return concept.

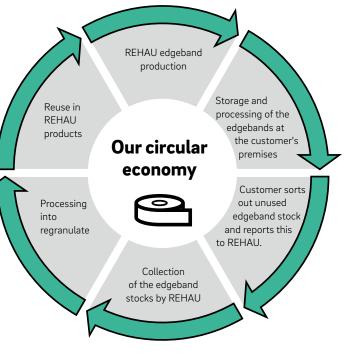


How REHAU ReTurn works:

- 1. The remaining quantities of edgebands made of PP and ABS are collected/sorted separately.
- 2. You report the quantities to REHAU and receive a collection order when the minimum quantities are reached.
- 3. You fill in the collection order and send it back to REHAU.
- 4. REHAU arranges for the collection of the unprocessed edgebands. You arrange a suitable transport restraint or other form of transport securing device.
- 5. REHAU sorts the edgeband material and processes it into regranulate.
- 6. REHAU uses the recycled material to manufacture products from the REHAU productrange.



Find out more at www.rehau.com/eco-protect





RAUKANTEX fire.protect (FP) – the edgeband for preventive fire protection

In the event of a fire, the fire behaviour of the materials is important. Flue gas emission is also important!

For fire protection in building construction or in the rail sector, thin-walled or very complex alternatives to edgebands are currently mainly used to fulfil fire protection requirements. However, this often involves compromises in processing and injuries caused by missing radii.

With RAUKANTEX FP, we have developed a self-extinguishing edgeband with halogen-free flame retardants for wall panelling or furniture. The edgebands are easy to process, have material thicknesses \geq 1.0 mm and fulfil all important fire protection requirements in Europe.



Did you know?

95% of fire victims die as a result of smoke inhalation

3 breaths of highly toxic fire smoke lead to unconsciousness

2 minutes can be fatal

Application areas

Whether it's an exhibition hall, hotel, kindergarten, school, hospital or local and long-distance transport: in all of these places, fire protection is paramount.

Objectives of fire protection









Protection for life & limb

Protection for property

Protection for the environment

Insurability



Comparing a conventional edgeband to RAUKANTEX FP

The benefits at a glance:

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- Halogen-free ABS-blend material
- Tested for building construction according to EN 13501-1*: B - s2, d0
- Tested for rail vehicles according to EN 45545-2: R24 HL1, HL2, HL3
- Available in various decorative designs and colours
- Impact-resistant and robust
- Simple and time-saving installation using standard edgebanding machines
- Use with free-form partsDesign freedom, even with high edgeband
- thicknesses
- Reduced risk of injury due to large radii

*For composite testing with a specific combination of edgeband, board and adhesive, please see our technical information at www.rehau.com/ti.



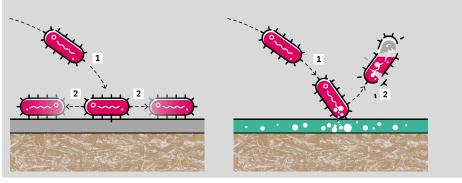
For improved hygiene and safety: RAUKANTEX health.protect

of up to 99% in 24

Whether in hospital or at home, we touch objects and surfaces all over the place all the time. We absorb 30 to 50 % of the organisms lingering on these surfaces every time we touch them.

Surfaces are therefore some of the biggest carriers for spreading viruses and bacteria.

This is where the RAUKANTEX health. protect product family can help.



Without anti-microbial finish

With antimicrobial finish

Thanks to specially adapted formulations and coatings, these edgebands unleash their antibacterial and antiviral effect. In normal humidity, more than 99.9% of bacteria and certain viruses* are destroyed within 24 hours. RAUKANTEX pro in particular reveals its full range of benefits here. Thanks to its jointless appearance, it not only looks perfect, but also prevents the build-up of dirt in joints.

*SARS-CoV-2_COV2019 Italy/INMI1: 91.87% efficacy after 8 hours; influenza H3N2 and H1N1: 99.9% efficacy after 24 hours. Tested according to ISO 21702





RAUKANTEX designo & digital printing – decor and print brilliance in perfection

Individualisation is key. The original feel and natural look of stone or wood decors or even logos, lettering or graphic decors should be creatively placed in kitchens, hotels or reception areas.

Every detail counts and these details should be transferred to components such as the worktop/ work surface to perfect the atmosphere. This can be extremely challenging in production when it comes to printing technology and quality.

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Unlimited design variety



With the innovative inline digital printing technology, even the most sophisticated designs and looks can be reproduced in outstanding quality, including photorealistic motifs. The base colour is combined with a matching decor. The digitally printed RAUKANTEX designo PP edgebands can be ideally matched to (kitchen) worktops and are resistant to water vapour.

The benefits at a glance:

Possible print width: 104 mm, material thickness: from 0.3 mm

2,700 active variants in different dimensions and gloss levels • Adherence to metamerism specifications

decors as well as photo motifs Stable series production in small quantities (from 600 m) Quick decor adjustment

joints in combination with the laser

(max. 3,000 mm) Brilliant print/decor image,

functional layer

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Digitalised edgebands: the base for a smart factory

#edgeisdigital the digital edgeband

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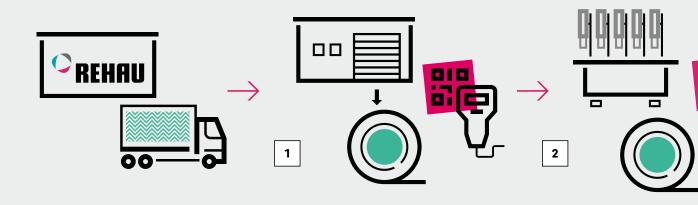
Problem:

- A lot of time required to book edgebands into the warehouse
- Incorrect stock levels, no overview
- The correct program has to be selected on the machine
- Only master data are included in the edgeband, no actual data
- Data has to be read off the label (time required)
- Very susceptible to errors: incorrect edgeband/edgeband data, incorrect process specifications
- Consumption or residual quantities cannot be recorded
- Production data can only be traced to a certain extent
- High personnel expenditure







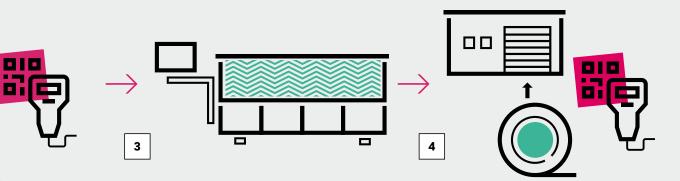


1 **The edgeband is scanned upon goods receipt** Actual stock is recorded (management of residual quantity) Booking out edgeband coils from the warehouse Inventory management

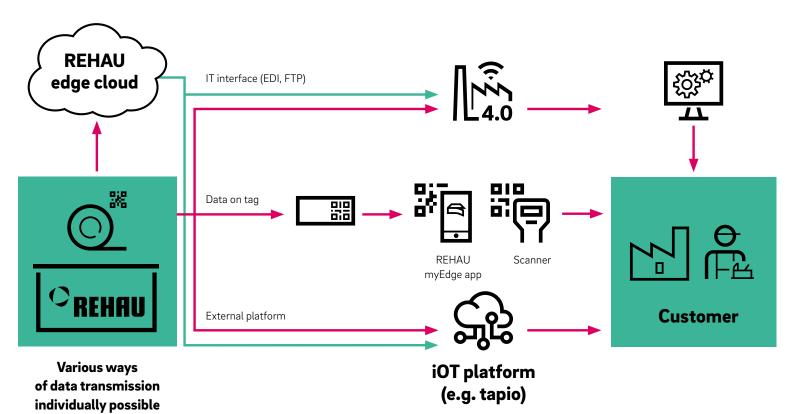
The REHAU solution: Data service #edgeisdigital

Both nominal and actual data can be provided via a label in the inner core of the coil ("on tag"), via a cloud or via a direct IT interface and transferred directly from the edgeband to the machine.

- Digitalisation for the edgeband production (Industry 4.0)
- Digitalisation and networking of the edgeband coil using code
- Master and instance data on the edgeband coil
- Different systems available for reading in
 - Data on tag (barcode, 2D code)
 - Option FTP, EDI, etc.
 - Cloud-based data transfer (REHAU → Cloud → Customer)



3 **The edgeband coil is scanned into the edgeband supply** Plausibility check: is the right edgeband inserted in the shaft/ sufficient coil length/does the edgeband fit the board > machine parameters are automatically set (master and actual data) 4 **Edgeband is replaced in storage** Stocks are maintained, with residual quantities stored for each coil

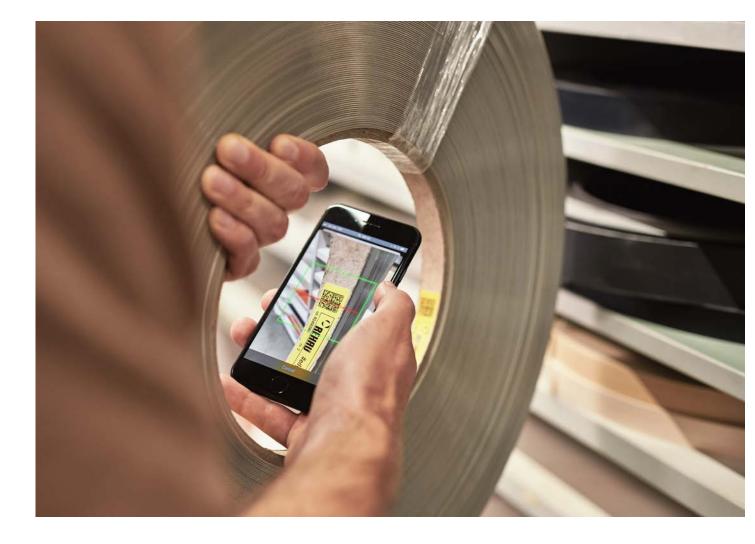


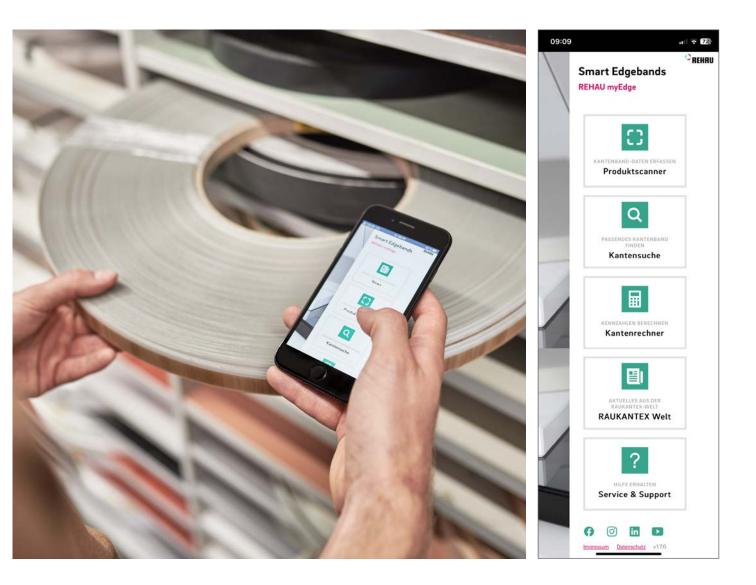
myEdge – the REHAU app

The REHAU app is yet another service we offer to start the digitalisation of your edgebands.

A wide range of functions help you in your daily work:

- Scan function for labelling service #edgeisdigital
- The right edgeband for the board RAUKANTEX edgeband search
- · Remaining quantities, outer diameter, coil weight: RAUKANTEX edgeband calculator
- Always up to date: RAUKANTEX edgeband news
- Service & support: direct contact to REHAU technical service





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Have we piqued your interest? Get in touch. Together we will find a solution:

edge-support@rehau.com

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