

Edge processing to Finish Quality

Spraying systems and chemical products made in Germany

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Made in Germany

For more than 35 years RIEPE[®] in Bünde, has been developing and producing electronically controlled spraying systems together with the appropriate chemical products, for the woodworking industry.

Furthermore, the product range includes different types of buffing wheels and lamellar wheels, wax application system and other useful products for your production.

From the beginning, we put the focus on quality products from high quality raw materials and professional service. Years of research and development brought intelligent and patented solutions for various applications in edge processing. Against this background we are for example supplying our products to the leading machine manufacturers in the woodworking industry.

Customer proximity and individual counseling are two other important factors that have made us a global market leader.

Benefit from our experience and expertise in the field of edge processing and Finish Quality.





Why should you choose RIEPE® products?

RIEPE[®], has made edgeband processing to finish quality possible, through many years of research and development. Release Agent, Antistatic Coolant and Cleaning Agent are specially developed for the RIEPE[®] spraying systems by RIEPE[®] themselves. Our products are made of high quality raw materials and go through a special in-house quality control.

Currently, RIEPE[®] products are sold worldwide via a large distributor network, so that you can obtain RIEPE[®] products throughout the world. Thanks to our professional service team we operate flexibly and reliably on the international markets and realise individual customer requirements.

Working very closely with leading machine, edgebanding and adhesive manufacturers we ensure our products always meet the latest demands. Continuous progress and innovative ideas are the result of this knowledge exchange. Using original RIEPE[®] products you will cost effectively raise your production standard to new technical heights. In particular, the use of our spraying systems in combination with RIEPE[®] special Release, Antistatic Coolant and Cleaning Agent ensures effective, maintenance-free production.

We are pleased to offer advice and assistance in achieving Finish quality. We do not only offer you the right products, but also the technical know-how. Worldwide our customers already put their trust in us and our products.

Choose original RIEPE® products for your production too.



Satisfaction, Know-how, Trust

Customer orientation is one of the most important elements of the business culture at RIEPE[®]. The needs and satisfaction of our customers are at all times the first priority. Thanks to a professional service team every customer can receive individual advice and support. A worldwide based competent team of skilled people enables a simple and smooth service delivery. In addition to the installation of the RIEPE[®] spraying systems, the whole production process with regard the finished product is analysed and optimised to ensure RIEPE[®] Finish Quality. The targeted information exchange enables the customer to easily and effectively integrate the RIEPE[®] products into their production process.

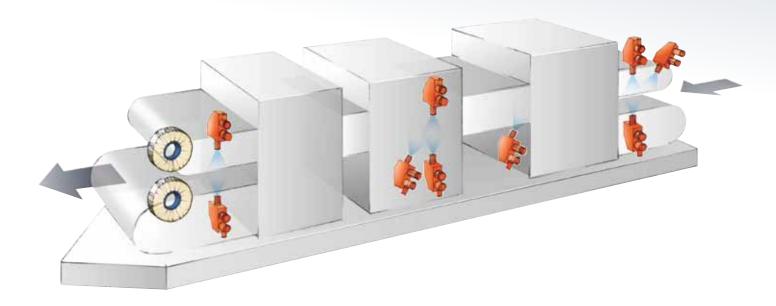
The service staff at RIEPE[®] receive regular training and are fully briefed with regard market demands. Every problem or customer enquiry is considered holistically and analysed in the context of the production process. Once professionally fitted, the RIEPE[®] spraying systems in conjunction with the original RIEPE[®] products generate immediate success. The focus is on perfection, in order to achieve the optimum result for the customer. Above all the regular two-way knowledge exchange with the leading machine, adhesive, edgeband and tool manufacturers strengthens the know-how of our service team. Over 35 years of experience in the woodworking industry makes RIEPE[®] a trustworthy partner. Our demand for quality mirrors not only the meticulous selection of our distributors, but encompasses all our value added processes. Innovation, quality and continuity are the three driving forces on the path to global player and market leader. At the same time the service performance is constantly developing and promises a professional and lasting cooperation with the customers.





OVERVIEW

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How to avoid undesired glue residue?

Glue residue squeezed out after the application of plastic or veneer edging material spoils the appearance of furniture parts. This glue residue quickly adheres to the workpiece and its removal requires time-consuming manual work. The installation of RIEPE[®] spraying systems and the application of our chemical products guarantees a workpiece edge which is absolutely free of glue.

6 Would you introduce our products if through doing so you would increase productivity and save on time consuming post-processing?

Frank Rave, Technical Director

An overview of our spraying systems

An electronically controlled **release agent spraying system** applies an ultra-fine coat of the Release Agent LPZ/II[®] to the top and bottom surface of the workpiece (in the edge area) prior to formatting. This prevents squeezed out glue residue from adhering to the workpiece.

Upstream of the buffing unit/flat scrapers, an electronically controlled **cleaning agent spraying system** applies the Cleaning Agent LP163/93[®] to the top and bottom of the panel edge (edging material). The Release Agent applied in the infeed area and the loose glue residue is removed by the application of the Cleaning Agent and the buffing process. In addition, the edging material radius is polished to regain its sheen and re-match the surface.

The perfect enhancement to the release and cleaning agent spraying systems is the **antistatic coolant unit.** The use of this spraying system after the edge application, leads to faster curing of the surface of the glue joint. Incrustation on the tools is notably reduced. The glue no longer adheres to the edging material. Furthermore, the edging material is statically discharged. Tracer rollers and workpieces remain free of milling chips.



The antistatic cooling agent spraying system can be equipped with an additional fine nozzle. This nozzle is used to apply the special Release Agent/Lubricant NFLY[®] laterally to the **edging material surface**, which helps avoid damage to the sensitive edging material. This damage is caused by the detection runners. In addition, damage to the protective film on the edgeband caused by the tooling is prevented.

When gluing problems occur the cleaning of the pressure roller is time consuming and labour intensive. The **release agent spraying system for pressure roller** offers the clean solution. The Release Agent NFLY[®] is periodically sprayed on the main pressure roller. The glue residue is thus prevented from adhering to the pressure roller.

G G RIEPE® Systems – 100% reliability from the outset

The edging of corner joints, particularly on thick workpieces, presents problems. The Release Agent LP113/03[®] is sprayed onto the corner area of the glued on longitudinal edge to prevent the adherence of the glue residue emerging from the corner during the **cross gluing process**.

For edgebanding machines that do not have size cutters at the infeed, our **release agent roller application unit** comes into play. The fine nozzle sprays the Release Agent very finely onto the application roller. Subsequently, this applies the Release Agent accurately to the edge of the workpiece. In this way the Release Agent is prevented from coming into contact with the unfinished edge and therefore the gluing process is not negatively affected.

For veneer and wrapping machines the electronically controlled spraying system sprays a water/air mix onto the veneer strip. In this way the cracking/breaking of the veneer in the problem zones is prevented.

We have developed special fluids for each of the above mentioned spraying systems. The spraying systems will only operate maintenance free and ensure the success of your production if these fluids are used. This is confirmed by our long years of experience.

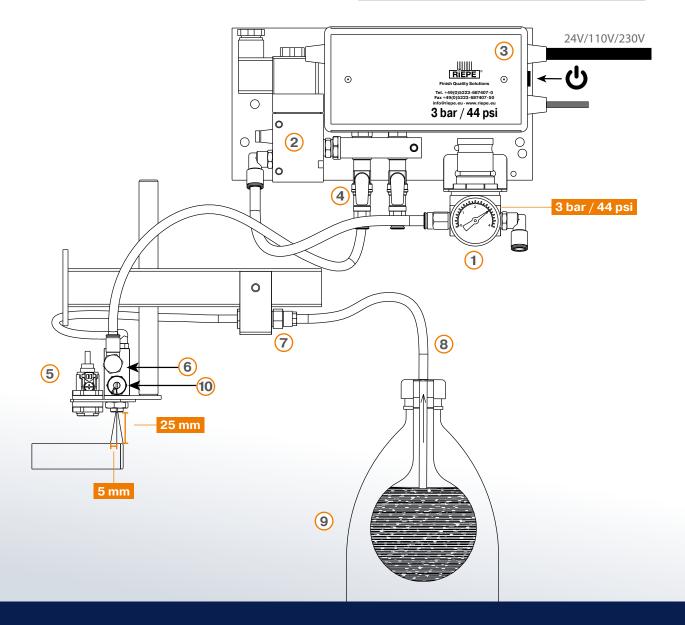
Electronically controlled spraying systems

The picture shows the complete system including electronics. A RIEPE[®] spraying system for retro-fit includes an electronic control with a sensor. As a result it is not necessary to enter the machine program. The sensor sees the beginning and end of the workpiece and gives the signal to spray.

This retro-fit system only requires a compressed air and 24V/110V/230V connection.

Our specially developed fine nozzles distinguish themselves above all for their low consumption and robustness.

(1) Manometer (2) **Magnetic valve** (3) Electronic Shut-off valves (4) (5) Sensor (6) **Fine nozzle** (7) **Reflux valve** (8) **Flow tube** (9) 2 Liter Bottle (10) **Adjustment screw**



RIEPE® fine nozzles

The RIEPE[®] spraying systems are made of high quality materials and subject to strict quality controls. The heart of the spraying systems are the fine nozzles. Thanks to optimised and innovative technology these are economical in use of the RIEPE[®] liquids (<1 liter per fine nozzle for 5000 running meters) and guarantee a smooth and continuous finish.

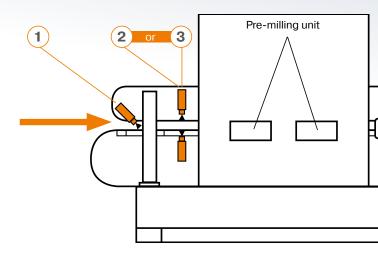
Due to their compact, but robust design, the fine nozzles can be installed on all current machine types and are easily integrated into the production process. The fine nozzles are resistant to vibrations of the machine and work continuously at an air pressure of 2 to 4.5 bar (recommended 3 bar). They also prove to be extremely durable and low maintenance. When using original RIEPE[®] products the customer has an unlimited guarantee on the hardware.

6 Who is in the position to offer an unlimited guarantee on their products.

René Riepe, Managing Director - RIEPE GmbH & Co. KG







Arrangement of RIEPE® spraying systems on the edgebanding machine

RELEASE AGENT LP113/03® 1

Area of application: Machine infeed Container (litre): Colour:

30 | 200 | 1000 Transparent

Apply to the corner area of the already applied longitudinal edge

· Prevents the adhesion of emerging glue residue (cross gluing process) in the corner area

RELEASE AGENT LPZ/II®

Area of application: Prior to the pre-milling Container (litre): 30 | 200 | 1000 Transparent Colour:

Spray onto the upper and lower edge area of the workpiece

· Prevents the adhesion of emerging glue onto the workpiece

RELEASE AGENT LP120/12

Area of application: Pressure roller

(Hot air / Laser machines) 30 | 200 | 1000

Container (litre): Colour:

Transparent

Intermittent application to the pressure roller

- · Use within high heat zones (Hot air / Laser machines)
- · Contamination of the roller is prevented
- · Avoidance of marking and damage

CLEANING AGENT LP163/93[®] 8

Area of application: Before buffing wheels /

Container (litre): Colour:

surface scraper 30 | 200 | 1000 Red

Spray onto the upper and lower edge area of the workpiece

- · Removal of release agent and loose glue residue
- · Cooling of the edgeband and glue joint
- · Matt radius of the machined edgeband re-matches the surface finish

ANTISTATIC COOLANT LP289/99®



2

Area of application: After pressure zone 30 | 200 | 1000 Container (litre): Colour: Blue

Spray onto the upper and lower edge area of the workpiece

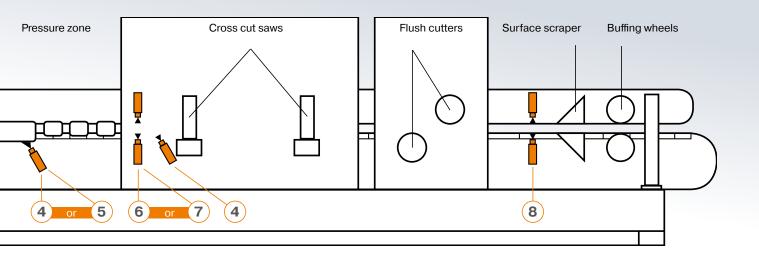
- · Statically discharges the edge area
- · Cooling of the glue joint and hardening of the glue
- · Tracers and workpieces remain free of chippings
- Tooling remains free of glue residue

WAX REMOVER LP175/11

Area of application: After wax application unit Container (litre): 30 | 200 | 1000 Colour: Transparent

Spray onto the polished edge

 Removal of wax residue on machines with polishing systems



3

7



Container (litre): Colour:

Area of application: Prior to the pre-milling 30 | 200 | 1000 Transparent

High heat resistant: For use on machines with high heat zones

(e.g. Post-/Softforming)

- · Workpieces can pass through high heat zones without any effect on the performance of the Release Agent
- · Prevents the adhesion of emerging glue residue onto the workpiece

COOLANT WZG 12

Area of application: After pressure zone 30 | 200 | 1000 Container (litre): Colour: Blue

Spray onto the upper and lower edge area of the workpiece

- · Prevents cracking of acrylic edges (lesser cooling effect)
- · Static discharging of the workpiece
- · Cooling of the glue joint and hardening of the glue
- · Tracers and workpieces remain free of chippings
- · Tooling remains free of glue residue

- **RELEASE AGENT NFLY®** 4 Area of application: (a) Pressure roller (b) Edgeband/ protective foil (c) Slide shoe (d) DUO scraper (e) Tooling 30 | 200 | 1000 | Aerosol Container (litre): Colour: Green (a) Intermittent application to the pressure roller Glue residues cannot adhere to the roller (b) Spray directly onto the surface of the edgeband
- Avoidance of marking and damage Protective foil is protected and not
- removed from the edge
- (c) Edge/protective foil automatically transfers the release agent to the slide shoes
- Glue residues do not adhere
- . Prevents marking and friction
- (d) Direct application onto the DUO scraper No clogging of the DUO scraper
- (e) Application to the tooling
- Prevents fouling of the trimmers



Scan here to order directly

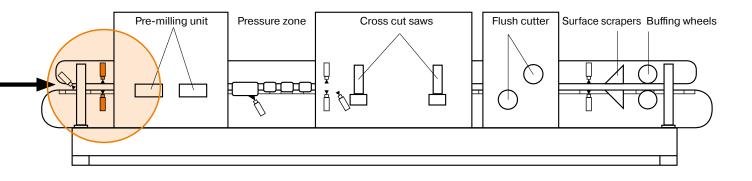
100% Riepe®-Spraying Systems +100% Riepe®-Chemical Products +100% Riepe®-Quality Control = 100% Success





SPRAYING SYSTEMS IN DETAIL

- 16 Release agent
- 18 Release agent (pressure roller)
- 20 Antistatic coolant
- 22 Release agent (edge material lubrication)
- 24 Cleaning agent



Electronically controlled release agent spraying system

Upstream of the formatting unit, an ultra-thin coat of the **Release Agent LPZ/II**[®] is applied to the top and bottom surface of the workpieces (edge area) by means of our electronically controlled release agent spraying system. This prevents squeezed out glue from adhering to the workpiece.

An ultra-thin application of our release agent in the edge area (consumption per nozzle under 1 liter per 5000 running meters) guarantees a perfect result. The electronically controlled release agent spraying system only requires a 3 bar compressed air connection and a 24V/110V/230V outlet. Our special release agents are adapted to all commercially available glues.

In illustration 1 you can see the installation of the spraying system outside the cabin, prior to formatting, with the appropriate bracket. On the opposite side of the machine the system is connected to the longitudinal fence with the appropriate bracket.

In illustration 2 you can see the installation inside the cabin directly before the formatting unit, with the relevant fixing bracket. Our fine nozzles are not sensitive to dust and can therefore be fitted directly in front of the tooling. We also have an assortment of special fixings to meet your needs. For post- or soft-forming machines our high heat resistant Release Agent TH97[®] is used. This special release agent can pass, problem-free, through hot zones without losing its effectiveness.



RELEASE AGENT LPZ/II®

Area of application:Prior to the pre-millingContainer (litre):30 | 200 | 1000Colour:Transparent

RELEASE AGENT TH97®

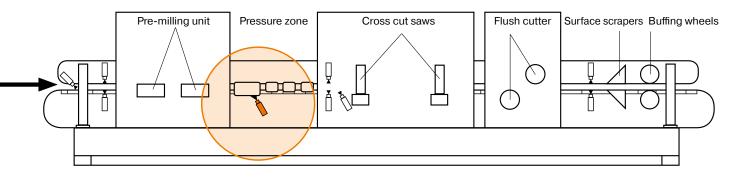
- High heat resistant -

Area of application:Prior to the pre-millingContainer (litre):30 | 200 | 1000Colour:Transparent



2 In si

Installation example release agent spraying system in cabin



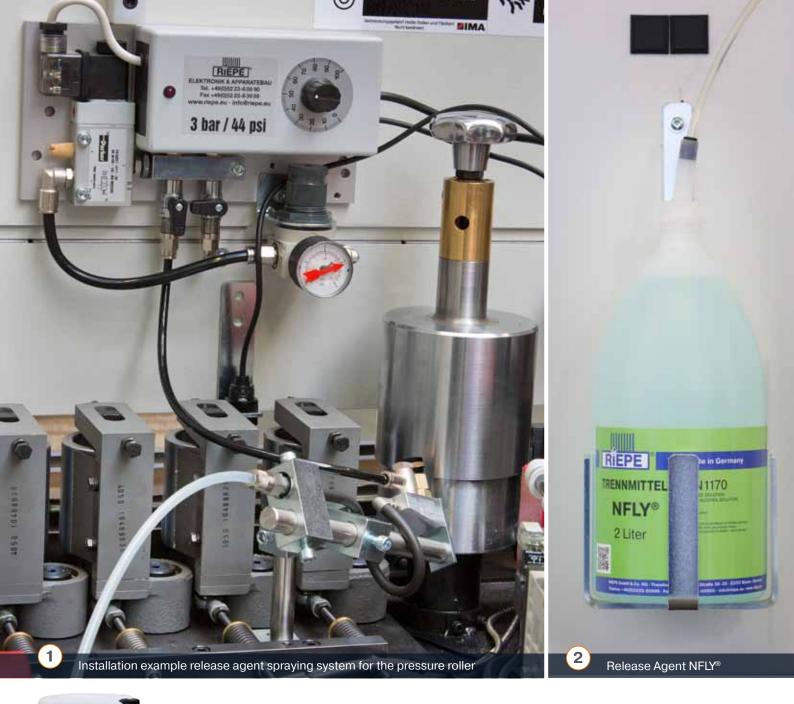
Electronically controlled release agent spraying system for pressure roller

The fine nozzle of this electronically controlled unit applies the **Release Agent NFLY**[®] to the contact pressure roller. This is achieved by an adjustable timing interval. The spray duration is about 3 seconds. In this way glue is prevented from adhering to the contact pressure rollers. In addition the special release agent is taken from the edge and transferred to the downstream contact pressure rollers or antifriction shoes. The contact pressure rollers and the anti-friction shoes remain free of glue residue. The anti-friction shoes are simultaneously cooled. Result: A notably enhanced quality. Contact pressure rollers and anti-friction shoes need no longer be cleaned.

Post-/Soft-forming:

For Post-/Soft-forming work, the Release Agent NFLY[®] is sprayed directly on the top coat in front of the anti-friction shoes. The special release agent is transferred to the anti-friction shoes to form a glide film.

This prevents squeezed out glue residue from adhering to them and the workpiece.



RELEASE AGENT NFLY®

| Area of application: | Pressure roller |
|----------------------|----------------------------|
| | Edgeband / protective foil |
| | Slide shoe |
| | DUO scraper Tooling |
| Container (litre): | 30 200 1000 Aerosol |
| Colour: | Green |
| | |

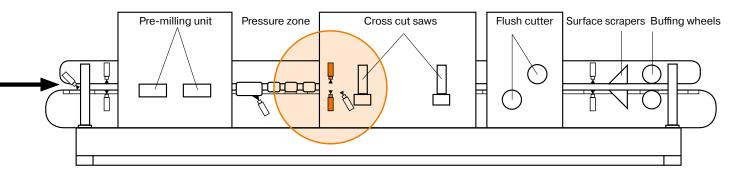
RELEASE AGENT LP120/12

Area of application: Pressure roller Container (litre): Colour:

INCOME.

(Hot air / Laser machines) 30 | 200 | 1000 Transparent





Electronically controlled antistatic coolant spraying system

To cool the glue joint and statically discharge the edging material. The perfect addition to the release agent spraying system fitted at the machine infeed and the cleaning agent spraying system fitted at the end of the machine is the antistatic coolant system. It can be fitted downstream of the last contact pressure roller, upstream of the cross cut saws or upstream of the flush cutters.

The Antistatic Coolant LP289/99[®] is sprayed directly on the upper and lower edge area of the workpiece (glue joint) by means of our spraying systems. As a result the glue joint surface is hardened. The glue build-up on the tools is notably reduced and consequently the glue is no longer transferred onto the edging material (indispensable for PUR). Furthermore, the edging material is statically discharged. Tracer rollers and workpieces remain free from milling chips.

Milling (flush trimming) of the ABS/PP/PVC etc. edges causes static charging of the edging material and the adjoining top and bottom face of the workpieces. Milled off chips adhere to the edging material and on the top and bottom surface of the panel negatively impairing the function of the tracer rollers and making a precise finishing by scraper blades or milling impossible. This system remedies the problems mentioned above, instantly!

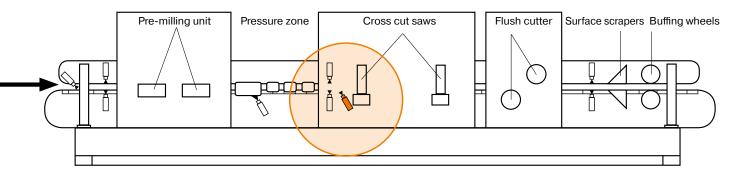


ANTISTATIC COOLANT LP289/99®

Area of application:After pressure zoneContainer (litre):30 | 200 | 1000Colour:Blue

COOLANT WZG 12

Area of application:After pressure zoneContainer (litre):30 | 200 | 1000Colour:Blue



Electronically controlled release agent spraying system for edge material lubrication

The antistatic coolant spraying unit can be equipped with an additional fine nozzle. This nozzle is used to apply the **Release Agent NFLY**[®], laterally to the edging material surface.

As a result, damage to sensitive edging material, caused by the detection shoes, is avoided. In addition, protective foil on the edgeband is prevented from becoming detached.

Also available separately (see image).



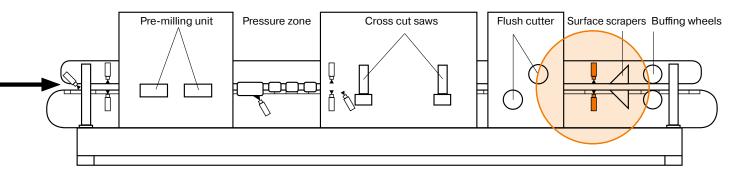


Single solution for the edge material moistening



RELEASE AGENT NFLY®

Area of application: Pressure roller | Edgeband/protective foil Slide shoes | DUO scraper | Tooling Container (litre): 30 | 200 | 1000 | Aerosol Colour: Green



Electronically controlled cleaning agent spraying system

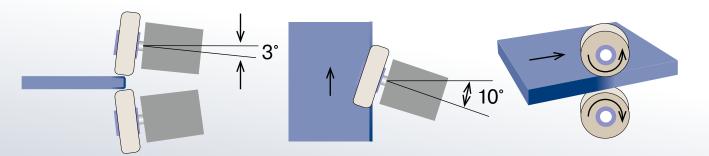
This system is used to spray the **Cleaning Agent LP163/93**[®] on the top and bottom surface of the board edge, as well as the edgeband. The Release Agent, applied at the machine infeed side and the loose glue residue are removed by the application of the cleaning agent and subsequent buffing.

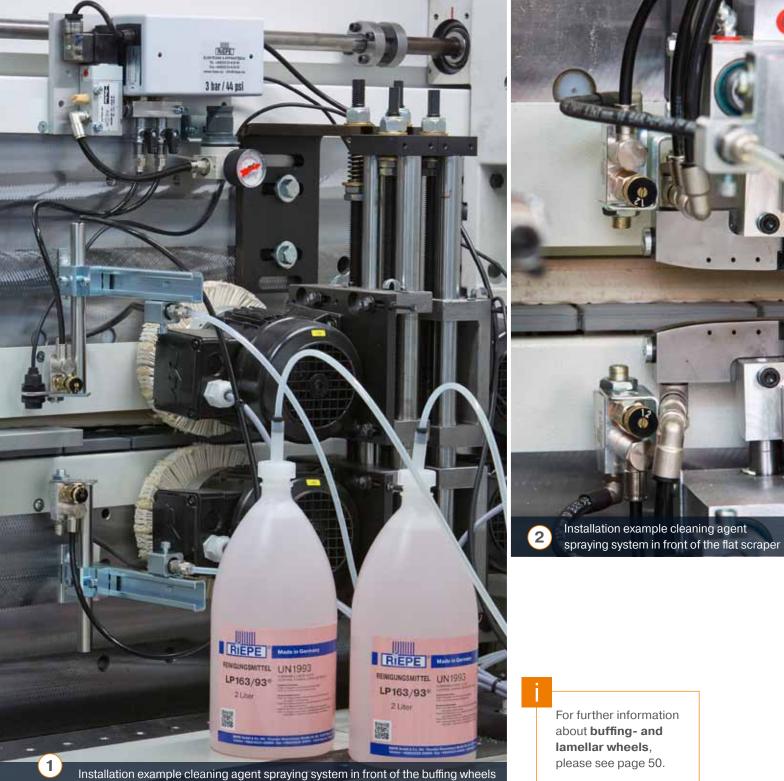
Furthermore, the glue joint and the edge banding are cooled. Heat generation during buffing is considerably reduced by the application of the liquid. Smearing of glue emerging from the joint is avoided. The edge banding radius is wet buffed with the special Cleaning Agent LP163/93[®]. As a consequence, heating of the thermoplastic material is notably reduced, and a smearing of the plastic is prevented.

Moreover, the radius re-matches the surface finish. Glue residue no longer adheres to the buffing wheels. **Result: An absolutely clean board edge!** This result can only be obtained when the buffing wheels are used without oscillation and applying only slight pressure. The buffing disc must be used with an inclination in relation to the workpiece of 3°, 10° inclined to the support and with a lateral overhang of 5mm to the workpiece edge. Rotational direction should be in synchronous run to reduce heat generation.

With the current flat scrapers with skids the fine nozzles are arranged directly in front of the flat scraper. This prevents the adhesion of glue residue on the scrapers and skids.

Consumption per fine nozzle: Under 1 liter for 5000 running meters. The electronically controlled cleaning agent spraying system only requires a compressed air connection of 3 bar and a 24V/110V/230V socket.





CLEANING AGENT LP163/93®

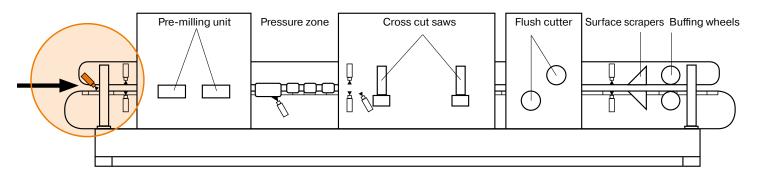
Area of application: Before buffing wheels / surface scraper 30 | 200 | 1000 Container (litre): Colour: Red





OPTIONAL EQUIPMENT

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Electronically controlled release agent spraying system for leading and trailing edges

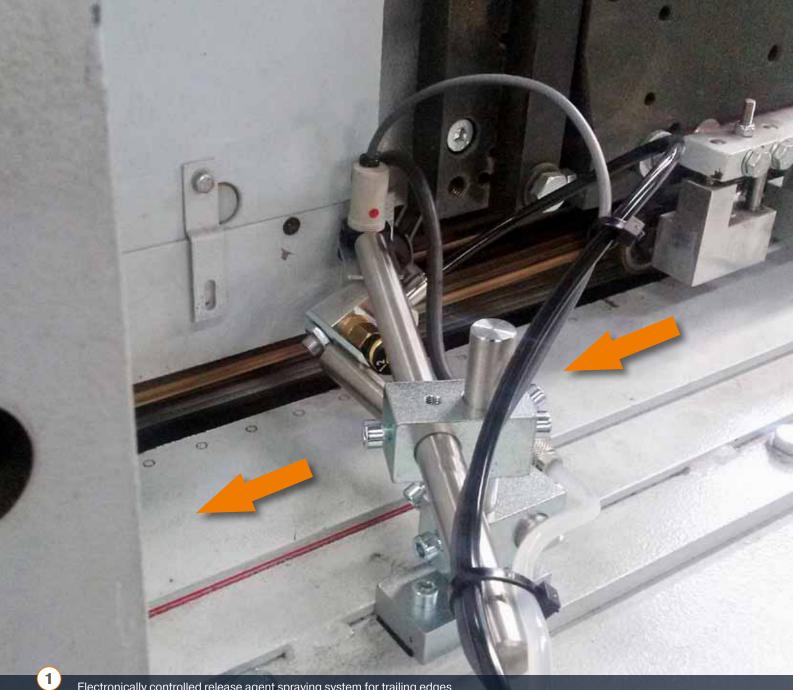
The **Release Agent LP113/03**[®] is sprayed onto the corner area of the glued on longitudinal edge to prevent the adherence of glue emerging in the corner as a result of the cross gluing process.

The picture shows a fine nozzle used to spray the Release Agent LP113/03 $^{\circ}$ onto the trailing edge moving in the running direction.



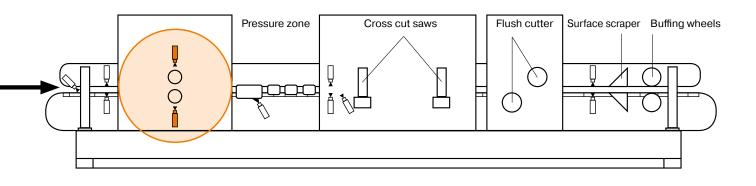
RELEASE AGENT LP113/03®

Area of application:Machine infeedContainer (litre):30 | 200 | 1000Colour:Transparent



Electronically controlled release agent spraying system for trailing edges





Electronically controlled release agent application system (application via roller)

For special requirements (e.g. machines without formatting), the roller application device pictured here operates upstream of the edge feeder of the machine. The release agent application roller is misted with a special RIEPE[®] release agent by a fine nozzle, and then the roller applies the release agent precisely to the top and bottom of the workpiece edge area.

As a result the release agent does not come into contact with the unfinished edge and therefore cannot hinder the bonding process. Due to the applied release agent the emerging glue residue can no longer adhere to the workpiece.



RELEASE AGENT LPZ/II®

Area of application:Prior to the pre-millingContainer (litre):30 | 200 | 1000Colour:Transparent

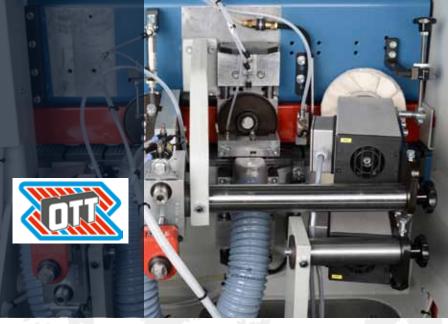




Electronically controlled release agent application system (application via roller)







Installation examples of various OEMs

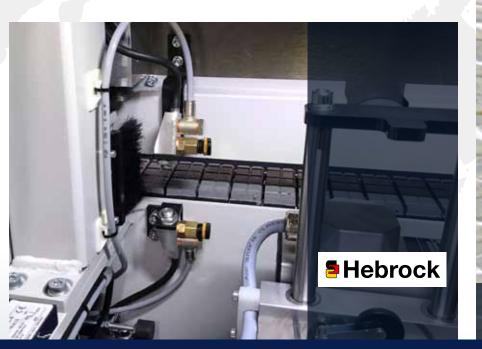


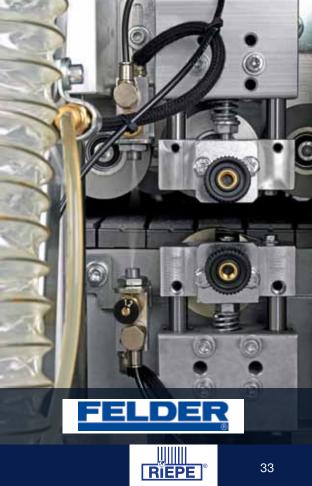






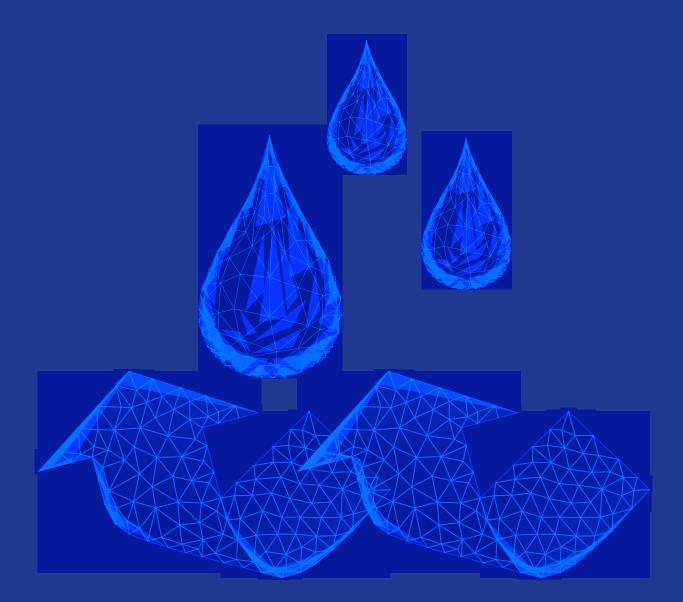








HYDROPHOBING IN FINISH QUALITY





Installation example on an Edge Banding Machine. Easy to see: The RIEPE® precision fine nozzles for exact liquid application

Hydrophobing in Finish Quality

Why is hydrophobing important?

The kitchen and bathroom furniture sector in particular makes special demands on the joint quality of a furniture component.

Constant contact with moisture and steam can cause the furniture panels to swell.

Here RIEPE[®] offers the perfect solution with its hydrophobic system that improves the water resistance of the glue joint between wood-based material and edging material many times over.

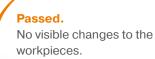


Proven Quality

RIEPE[®] hydrophobing agents have been successfully and independently tested for various quality-relevant properties.

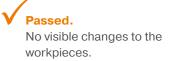


WATER BATH (6 hours in cold water)





STEAM (According to AMK test norm)





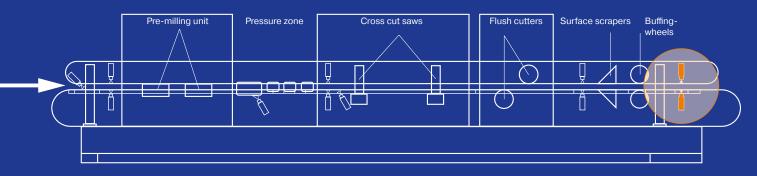
CLEANING (with cleaning agent, then 6 hours in cold water)

Passed. No visible changes to the workpieces.

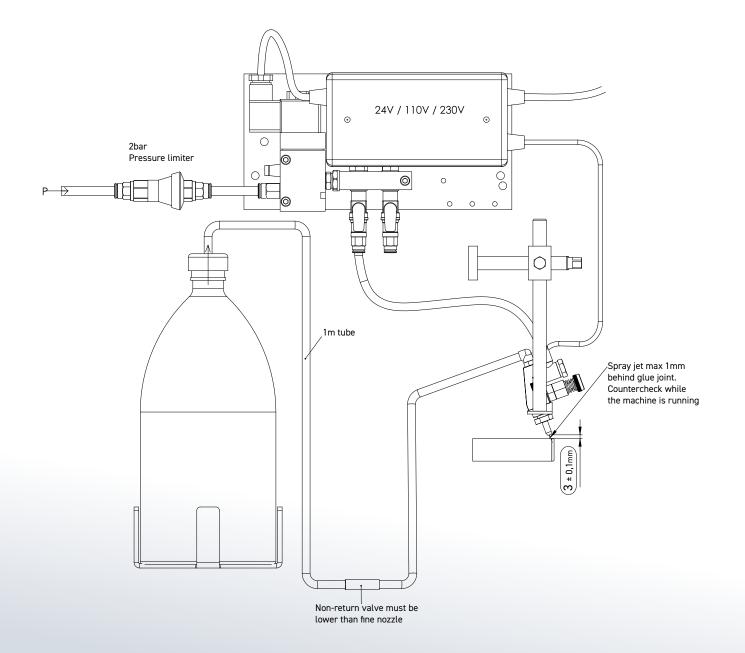
* Test Setup: Edge material: ABS. Adhesive: EVA. Workpiece: Raw particleboard.



Technology in detail



Placement of the hydrophobing system on an edge banding machine The assembly is always the last unit on the machine



Important instructions for installation and commissioning



For the 230V electronics a socket must be installed. The 24V electronics are directly linked to the machine electrics. The 230V / 24V supply line should always be switched dependent on the feed rate (chain motor). The 230V /24 V power supply may only be activated when the chain is running, so that the fine nozzle does not spray when the feed stops and the sensor is occupied. The electrical installation must be carried out by the customer



The supplied pressure limiter must be supplied with an air line. The pressure reducer is permanently set at 2.0 bar (29 psi). This ensures a constant application rate and thus the lowest possible consumption.



The optical sensor must be mounted laterally in front of the upper fine nozzle, in the direction of flow (inlet side). There must be no components underneath the sensor to prevent false triggers



FINE NOZZLE ADJUSTMENT

Spray jet max. 1,0 mm behind the glue joint (check against it while the machine is running).

The distance between fine nozzle and workpiece must be **3.0 mm** at the top and bottom.

The amount of liquid is adjusted at the dosing pin (see drawing) so that a wafer-thin spray jet can be seen. For fine nozzle spacing, line connection and position of the spraying systems, see the following detailed drawings.



The liquid containers must be mounted below the lower fine nozzle.

The black Viton line (approx. 1 m) between fine nozzle and non-return valve must not be shortened.

The non-return valves must be mounted below the fine nozzles.



An extraction unit (connection Ø 80 mm) must be provided by the customer in the centre of the nozzles / workpiece.



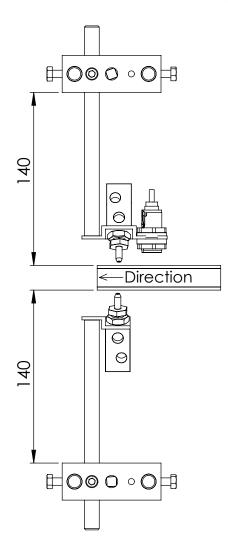


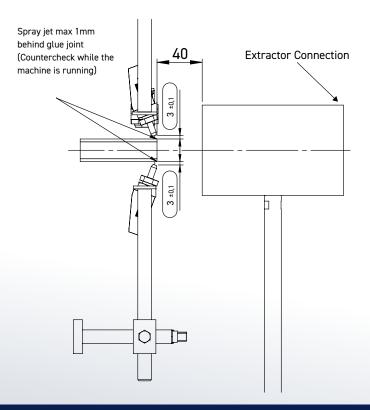
The user is responsible for adhering to the operating parameters specified here. For further information on optimum storage and processing, please refer to our Technical Data Sheets and Safety Data Sheets.





Assembly in detail







Hydro Pen hydrophobing made easy

THE CHALLENGE

Constant contact with moisture and steam can cause the furniture panels to swell.

THE SOLUTION

The Hydro Pen seals already finished workpiece edges against moisture penetration and extends the water resistance by many times over. Ideal for quick use in all areas - even on the road.

The application is uncomplicated: Open the pen, draw the special felt over the area to be sealed and let it dry for a short time.

Easy handling

- High yield (approx. 350 rm)
- Fast drying
- Nearly invisible
- Fast and flexible to use everywhere

HYDRO PEN

Container: Colour:

Area of application: workpiece edges 100 ml Transparent



This is how we tested:

| [| |
|------------|---|
| Workpiece: | CPL coated chipboard. Two-sided edged |
| Setup: | 2 cm deep water bath |
| Duration: | 6 hours |
| Result: | The hydrophobised workpiece shows no swelling |





STRUCTURED SURFACES

40



Perfect Edge Finishing of Structured Surfaces

THE MARKET

Structured surfaces are growing in popularity

In recent years, the trend towards more deeply structured, coated particle board has continued. This embossing up to a depth of 1 mm creates a very attractive effect with a natural look and feel.

With these high-quality surfaces, it is also important to perfectly finish the edge. Some challenges therefore have to be overcome in automated, industrial processing:

THE CHALLENGE

Tools:

Profile cutters, trimming cutters and scrapers cannot precisely follow the contour of a surface within the structure. A rough, unacceptable finish of the edge is the result.

Glue residue:

Remaining adhesive residue and protrusions of the edge banding significantly limit the possibility of cleaning the furniture board.

Result:

The overall appearance is inadequate as a whole.





THE SOLUTION

RIEPE® structure processing

A perfect edge finish can be achieved with minimal effort through the use of the new structuring brush unit in conjunction with special structuring and polishing brushes. Abrasive bristles follow the contour of the structure of the workpiece surface and remove the protruding edges and glue residue. The result: The edge now corresponds to the structure of the workpiece surface at every point.

(1) Structuring brush unit

By using an abrasive special brush after profile milling, the remaining protruding edges are removed precisely in such a way that the edge corresponds to the structure contour.

The edge banding now ends flush with the surface of the furniture boards at every point along the workpiece.



(2) Horizontal brush unit

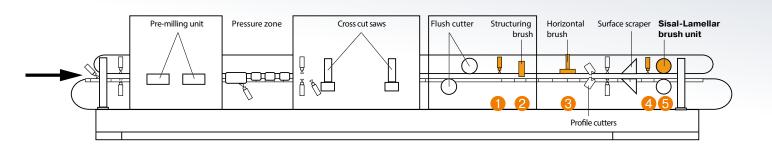
In the further course of processing, the edge banding surface is levelled with a horizontal polishing brush.

The brush works against the grain direction of the furniture board and is inclined vertically towards the edge banding. Optimal contact pressure is always achieved thanks to the spring-loaded mounting.

(3) Electronics

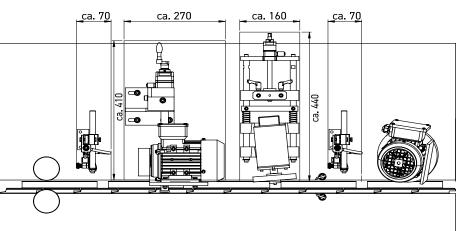
A frequency converter is a part of the complete system and serves to set the optimum rotational speed depending on the application.

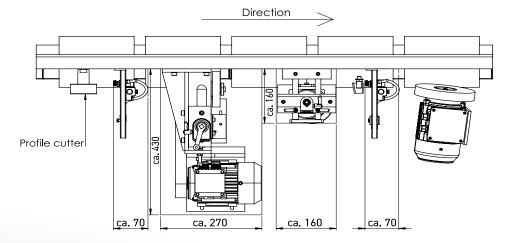
Technology in Detail



| | Component | Position | Description |
|---|---|---|---|
| 1 | Cleaning agent spraying system LP163/93 | After the profile cutters Before the structuring brush | Prevents the structuring brush from becoming clogged with glue residue |
| 2 | Structuring brush unit | After the profile cutters | Aligned at a right angle to the workpiece Revolution approx. 6,000 min ⁻¹ |
| 3 | Horizontal brush unit | Before the profile scraper | Inclined vertically towards the edge banding Revolution approx. 1,400 min ⁻¹ against the running direction |
| 4 | Cleaning agent spraying system LP163/93 | Before the sisal finned brush unit | Prevents the sisal finned brush from becoming clogged with glue residue |
| 5 | Sisal-Lamellar brush unit | | Creates a final, perfect finish. Brush unit must be equipped with Sisal-Lamellar wheels |











FROSTED EDGE TECHNOLOGY

Matt is the new glossy!

For many years, high-gloss surfaces were the leading development in the field of modern furniture components. There is now a new and rapidly growing trend in the market place, as the appealing look and feel of matt decors enjoy increasing popularity. Whereas complex and expensive painting is often employed to rectify the situation, there is now a far more effective and economical solution, enabling the manufacturer to produce a perfect matt finish directly from the edge bander, every time.

Whilst this new trend offers the consumer exciting new options, it however presents the furniture manufacturer with technical challenges in the field of edge processing. Matt edge bands have been produced to perfectly match the matt surface, but in processing the edge banding machine will often create an undesirable glossy surface on the radius.



Our newest innovation: Frosted Edge Technology

F.E.T. creates a matt radius finish and a harmonious overall impression with adapted haptics



Matt finish without varnishing

Frosted Edge Technology is introduced as the final process on the edgebanding machine, applying an environmentally friendly, specially formulated, organic blasting material through a fine nozzle to the edge band radius with pinpoint accuracy.

Advantages of RIEPE® Frosted Edge Technology

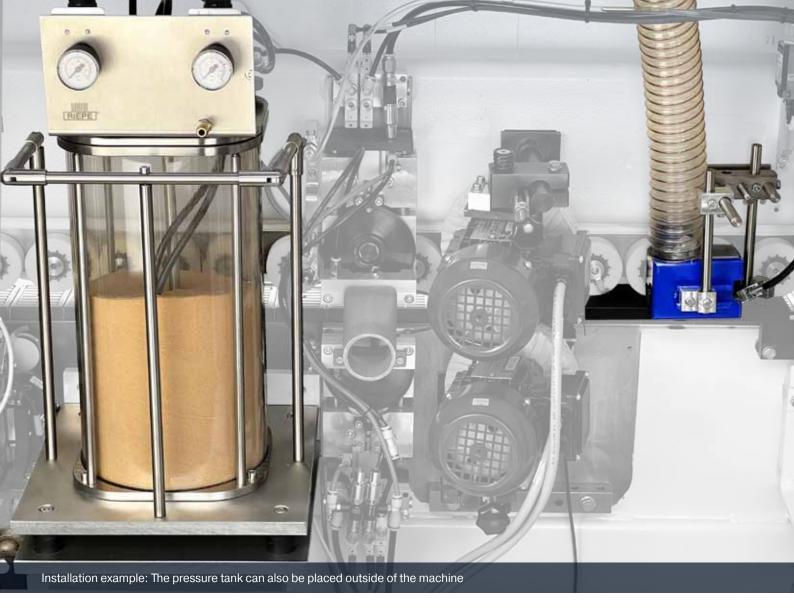
- Adapted haptics
- Frosted radius
- Perfect finish
- Harmonious overall impression
- Milling stroke reduction
- **Process stability**
- Low operating costs





The application unit has a compact design, this means that it can usually be retrofitted even in the tightest spaces available on edge processing machines. The special blasting material is stored in a transparent pressure tank.

This tank can be placed in close vicinity to the machine and simply requires an electrical and compressed air connection. (24V/230V - 3 bar)



Installation example



Watch our application video



The application unit is connected to the existing machine exhaust. The switching and workpiece detection is carried out via the known RIEPE® electronics or via integration into the machines PLC by your machine manufacturer.

With one filling of blasting material (approx. 5 kg), you can run up to 2,500 linear meters at 20 m feed speed.









WAX REMOVER LP175/11

Area of application:After wax application unitContainer (litre):30 | 200 | 1000Colour:Transparent

Automatic wax application system

Using the polishing process for throughput production technology, the machined edge radius is given a high gloss finish by the polishing system. The wax bar is held by means of two clamping cylinders. When the 5/2 way valve is switched, the feeder cylinder moves the wax bar onto the application wheel. After the time, as set on the timer, has elapsed (approx. 3 sec.), the 5/2 valve is switched over and the wax bar returns to the home position.

The amount of wax applied is regulated by means of the central knurled-head screw (adjustment between 0,2 - 2 mm). By turning anti-clockwise more wax is applied and clockwise less. The recommended wax amount is between 0,2 - 0,3 mm.

This system cannot be retrofitted.

System consisting of:

- Automatic Wax Application Unit WZG
- Hard Wax Bar RWR1770
- Wax Application Brush WZG 160/25/50 mm
- Cloth Polishing Wheel WZG 160/20/50 mm
- Wax Remover LP175/11
- Antistatic Coolant WZG12

The Polisher High gloss without framing effect

The Polisher has been specially developed to fulfill the requirement for high gloss finish in the radius area. Without the need for high investment the Polisher enables the quick and cost effective production of high gloss furniture parts.

The compact construction of the Polisher guarantees a user friendly and process enhancing addition to your production. The workpiece produced on an edgebander is fed along a roller table past three polishing wheels angled at 45°. This is in a constant lengthwise movement from right to left. Special hard wax is manually applied to the lamellar wheel and from there to the workpiece. For longer elements optional additional roller units can be fitted to the left and right sides of the Polisher. A regular replacing of the polishing wheels guarantees consistent high quality results.

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The Polisher im Überblick

- Manual polishing system
- Flexible deployment
- Low investment costs
- Appropriate accessories
- Extendable

Ŵ

RIEPE



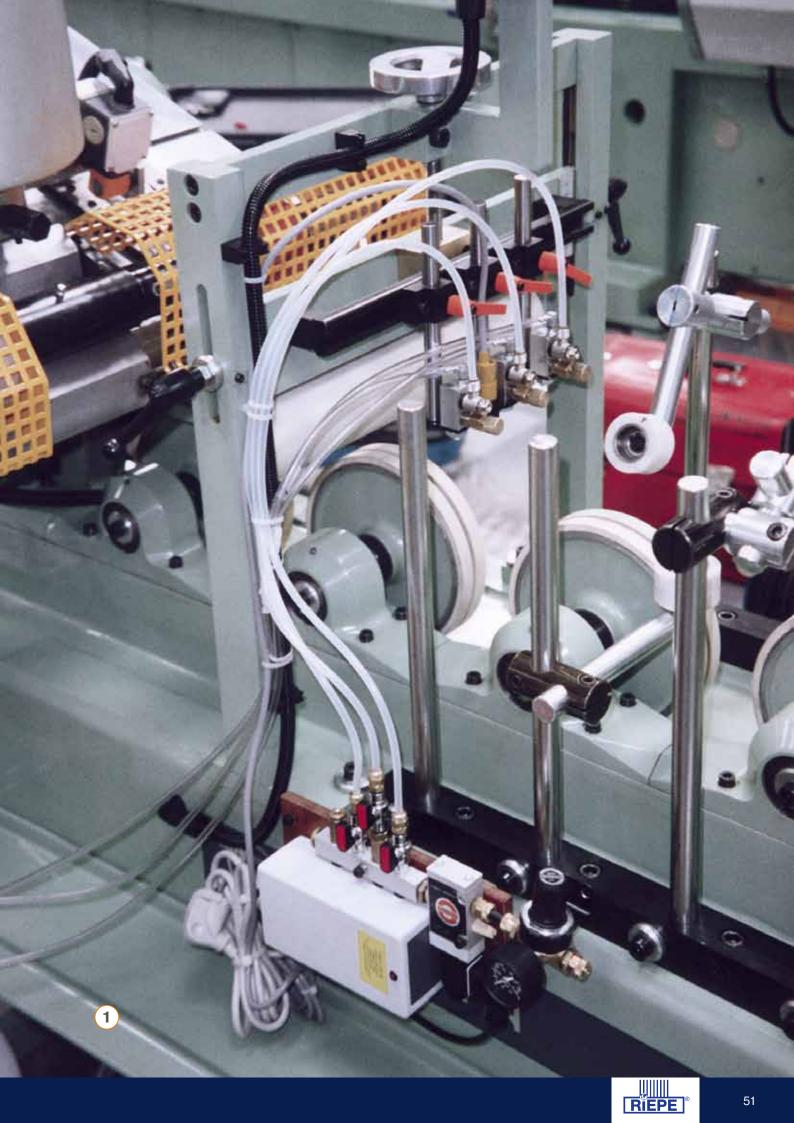
Electronically controlled veneer moistening spraying system

Solution for profile wrapping problems

Wrapping machines and edgeband application.

This electronic moistening system sprays an air-water mix onto veneer strips via fine nozzles. A micro-fine moistening spray is applied to the veneer directly before fitting, thus ensuring that the veneer is flexible and does not crack at critical points.

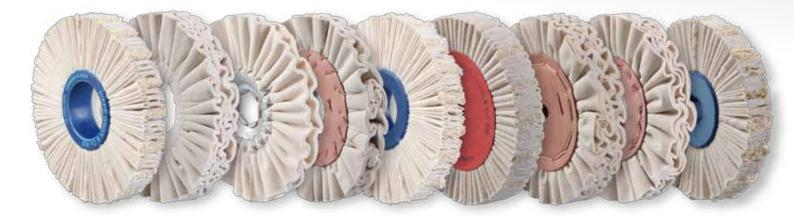
The picture on the right shows a unit with fine nozzles and the attendant electronics. The veneer strip is accurately moistened from start to finish. For larger surfaces (wrapping) it is possible to connect several fine nozzle units.





SERVICE PRODUCTS

- 54 Buffing and lamellar wheels
- 58 Special Plastic-Cleaner
- 59 Universal Cleaner 🚧
- 60 Chain Plate Cleaner
- 61 Filling Station
- 62 Lube Pen



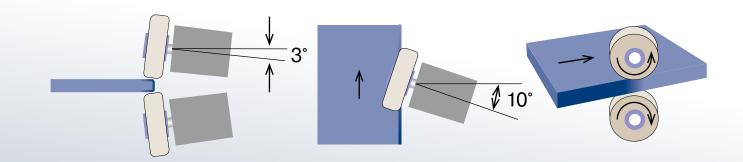
Premium Buffing and lamellar wheels for your edge processing

Buffing wheel arrangement in combination with RIEPE® release and cleaning agents:

It is only possible to obtain an absolutely clean board edge in combination with the original RIEPE® Release and Cleaning Agents when the buffing wheels do not oscillate and are applying only slight pressure. The buffing wheel must be inclined by approx. 3° to the workpiece, rigid (no oscillation), and with a lateral overhang of 5 mm to the workpiece edge. Rotational direction in synchronous run to reduce heat.

Buffing wheel adjustment

- approx. 3° inclined to the board (vertical)
- approx. 10° inclined to the support (if possible)
- 5 mm lateral overhang to the workpiece edge
- approx. 1400 rpm motor speed (if possible)
- no oscillation
- rotational direction in synchronous run



Premium Fabric-Sisal-Lamellar wheels 3:1 ratio

The fabric-sisal-lamellar wheels are brushes with a cast mounting core. The lamellar are composed of the following ratio: 3 x fabric and 1 x sisal. The cloth in the lamellar serves to remove the previously applied special Cleaning Agent LP163/93[®].

The fabric-sisal-lamellar wheels are suitable for all types of thermoplastic edgings. In addition, they have, in combination with the special Cleaning Agent LP163/93[®], a very long operating life. The use of the fabric-sisal-lamellar wheels while processing thin edges (<1mm) leads to the following result.

Result:

- Material re-finishing
- Removal of the protruding edging material
- Smoothing of the edge band (sharpness)
- Reduction in stress whitening
- Radius optic adapts to the workpiece surface



| ltem No. | Outer diameter (mm) | Width (mm) | Boreholes (mm) |
|-------------|------------------------|---------------|-------------------|
| 1871 | 120 | 20 | 19 (Hex.) |
| 1873 | 140 | 25 | 11 |
| 1877 | 160 | 25 | 40 |
| 1878 | 160 | 25 | 50 |
| 1880 | 160 | 25 | 55 |
| 1881 | 190 | 20 | 40 |
| 1885 | 190 | 25 | 50 |

(special sizes on request)

Premium Fabric buffing wheels

The fabric buffing wheels offered by us are distinguished by a strong fabric quality. Composed of 2 \times 14 layers of fabric they are extremely strong. As a result, a spreading of the buffing wheels on the edge radius is avoided.

In connection with the special Cleaning Agent LP163/93[®], the edge radius is polished so that its sheen matches that of the surface. The life of the buffing wheels is also considerably increased by the Cleaning Agent LP163/93[®].

Result:

- Material re-finishing
- Reduction in stress whitening
- Radius optic adapts to the workpiece surface



| ltem No. | Outer diameter (mm) | Width (mm) | Boreholes (mm) |
|-------------|------------------------|---------------|-------------------|
| 1832 | 120 | 11 | 19 (Hex.) |
| 1847 | 150 | 27 | 11 |
| 1836 | 150 | 20 | 19 (Hex.) |
| 1848 | 160 | 20 | 40 |
| 1853 | 160 | 25 | 50 |
| 1855 | 160 | 25 | 55 |
| 1857 | 190 | 20 | 40 |
| 1858 | 190 | 20 | 50 |

(special sizes on request)

FABRIC-BUFFING WHEELS



Art: 1832 Fabric buffing wheel 120x11x19 mm (hexagonal)



Art: 1833 Fabric buffing wheel 120x20x19 mm (hexagonal)



Art:3694 Fabric buffing wheel 150x10x19 mm (hexagonal)



Art: 1846 Fabric buffing wheel 150x25x50 mm



Art: 1847 Fabric buffing wheel 150x27x11 mm



Art: 1848 Fabric buffing wheel 160x20x40 mm



Art: 1843 Fabric buffing wheel 150x 19x50 mm



Art: 1835 Fabric buffing wheel 150x20x19 mm (hexagonal)



Art:3204 Fabric buffing wheel 150x25x25 mm



Art: 1853 Fabric buffing wheel 160x25x50 mm



Art: 1855 Fabric buffing wheel 160x25x55 mm



Art: 1857 Fabric buffing wheel 190x20x40 mm

FABRIC-SISAL-LAMELLAR WHEELS



Art:1871 Fabric-Sisal-Lamellar wheel 3:1 ratio 120x20x19 mm (hexagonal



Art:3116 Fabric-Sisal Lammelar wheel 140x20x19mm round bore



Art: 1875 Fabric-Sisal-Lamellar wheel 3:1 ratio 140x25x50 mm



Art:3140 Fabric-Sisal-Lamellar wheel 2:1 ratio 150x20x19 mm (hexagonal)



Art: 1877 Fabric-Sisal-Lamellar wheel 3:1 ratio 160x25x40 mm



Art: 1878 Fabric-Sisal-Lamellar wheel 3:1 ratio 160x25x50 mm



Art: 1880 Fabric-Sisal-Lamellar wheel 3:1 ratio 160x25x55 mm



Art:3140 Fabric-Sisal-Lamellar wheel 2:1 ratio 150x20x19 mm (hexagonal)





Special plastic cleaners

The special plastic cleaners developed by RIEPE[®] are the first choice for the manual cleaning of plastic surfaces. Due to the exclusive use of only high quality raw materials, the RIEPE[®] special plastic cleaners affirm their position as premium products in the market.

| LP208/56 | The mild one for slight to middle residue contamination |
|---------------|--|
| LP305/98 | The allrounder removes effort- lessly all glue residues |
| LP305/98 PLUS | The strongest removes even PUR residues completely |
| LP805/16 | Anti-Cloud Cleaner especially suitable for dark surfaces |

Plunger can

The perfect addition is the 2 liter plunger can, which ensures the safe and cost effective use of the various chemical products. It stands out through high quality workmanship and long-lived reliability and makes all manual cleaning easier.

We would also be very pleased to develop chemical products to suit your particular needs.

Please just contact us.

LP208/56, LP305/98, LP305/98 PLUS, LP805/16

Area of application:manual cleaningContainer (litre):1 | 10 | 30 | 200 | 1000Colour:Transparent



Special plastic cleaners

- Effortlessly removes glue residues
- Strong cleaning power
- Quick drying
- Residue-free evaporation
- Low odour
- Hexane and Benzene free



Plunger can

- Easy to use
- Safe use of various chemical products
- Increases cost efficiency



Universal cleaner MultiClean20

The new universal cleaner Multiclean20 for general and gentle cleaning of surfaces in the industry.

Suitable for almost all surfaces such as plastic, metal, painted surfaces and many more

Effortlessly removes heavy soiling, e.g. on edge processing machines, factory equipment, rolling doors, etc.

Not classified as dangerous goods and free of any warning symbols

 \checkmark Not classified as dangerous goods and free of any warning symbols

Proven RIEPE® Quality made in Germany





Watch our application video

MULTICLEAN20

Container (litre): Colour:

Area of application: closed surfaces 10 | 30 | 200 | 1000 Transparent





Premium Chain Plate Cleaner Perfect quality assured products

Ensure the consistent high quality of your workpieces by including the cleaning of the chain plates in your maintenance cycle.

Contaminated chain plates lessen the grip on the workpiece and as a result the applied pressure of the top pressure belt has to be increased. In addition, contaminated chain plates can result in markings on the workpieces.

Our specially developed Cleaning Agent LP407/13 for chain plates, top pressure belts and rubberised roller conveyors will greatly assist in cleaning without attacking any of the materials.

Watch our application video



Unsuitable cleaners can cause damage to the surface of the plates. In addition, a change in the shore hardness can occur.

Even a liberal use of LP407/13 has no negative effect on the chain plates, top pressure belts or roller conveyors.

Application:

With the machine stationary, use a well wetted lint free cloth to clean plate by plate.



Filling Station Safe storage and filling

The RIEPE[®] filling station ensures safe handling with the Release, Cleaning and Antistatic Coolant Agents. For more than 35 years RIEPE[®] processes and produces high quality chemicals for the edge banding process and has an extensive knowledge in the handling of dangerous goods. The filling station is a device for the secure storage and filling for various container sizes.

- ✓ For various container sizes
- Space-saving storage
- Removable collection chamber
- Solid construction
- Stainless material
- ✓ Now with lockable hinged doors





Lube Pen Intelligent solution for the infeed guide

Problem:

The infeed guide, in the inlet area of edge banding machines, feed the workpieces to the correct position on the conveyor track. The edge of the workpiece to be processed is positioned flush against the infeed guide and then fed along the guide to the transport chain.

In this process the infeed guide is normally moistened with a lubricant, so that the workpieces can be fed smoothly into the machine. In most companies unsuitable lubricants, for example silicone-based, are sprayed imprecisely onto the infeed guide. The result is a permanent soiling of the machine inlet. Key elements such as the chain plates or rubber components may be damaged.

Solution:

The RIEPE® Lube Pen with its sponge applicator, enables a precise and direct coating of the infeed guide. Because of this new, easy and effective development another edge banding process is optimised.

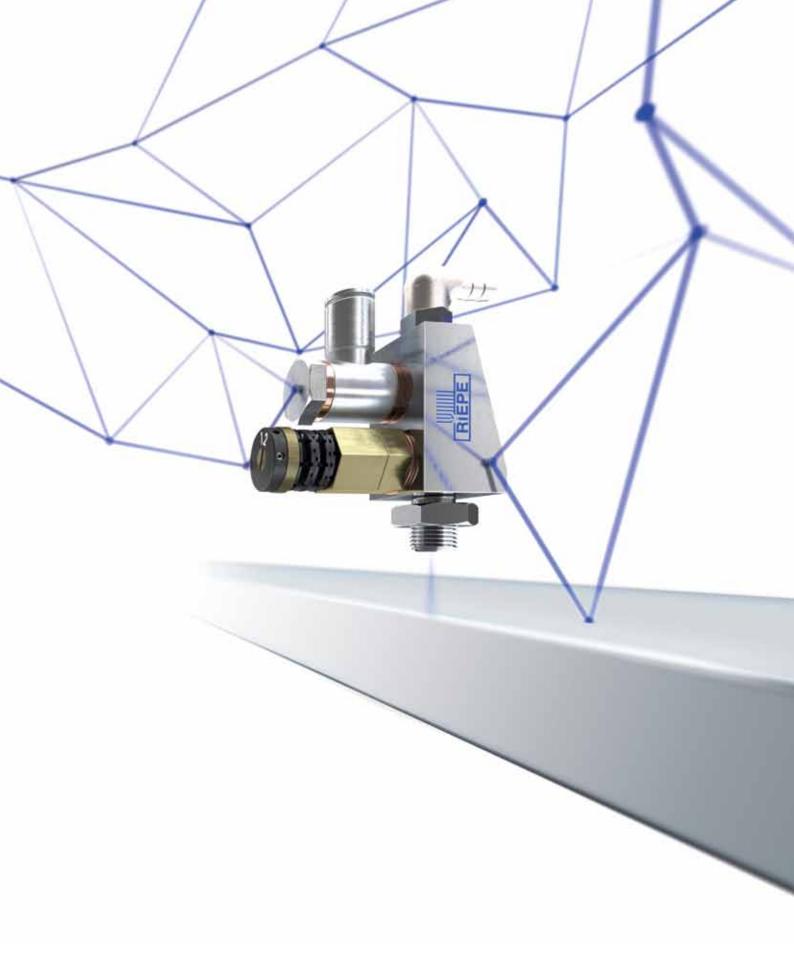
- Precise sponge application
- Easy to use
- Gentle alternative to other available lubricants
- No contamination of the machine infeed



LUBE PEN

Container: Colour:

Area of application: Machine infeed 100 ml Transparent







Original RIEPE® products are available worldwide



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