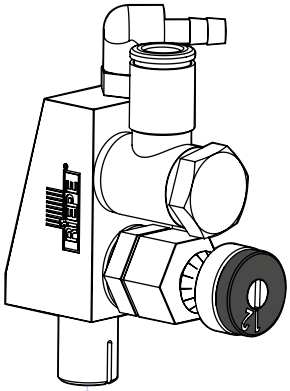
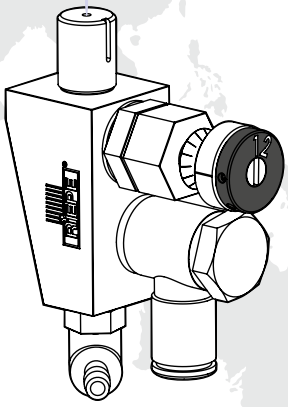
RIEPE®



Edge processing to Finish Quality

FITTING INSTRUCTIONS



Spraying systems and chemical products made in Germany

Content

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 made with 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.

Leading machine manufacturers work with and recommend
original RIEPE® products

RIEPE® fine nozzles

The RIEPE® spraying systems are made of high quality materials and subject to strict quality controls.

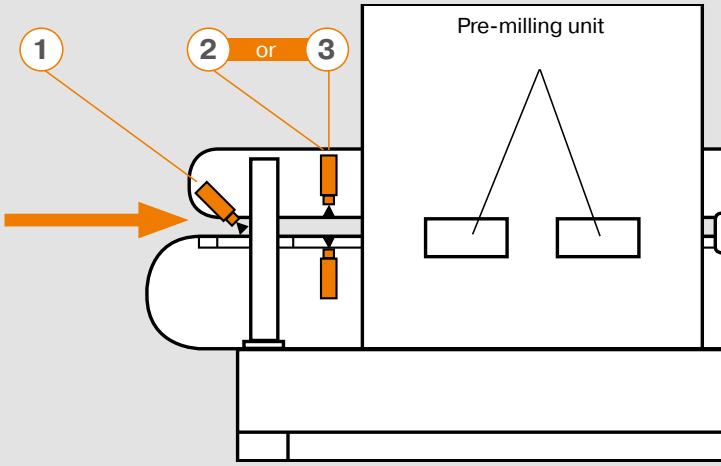
The heart of the spraying systems are the fine nozzles.

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.



Arrangement of RIEPE® spraying systems on the edgebanding machine

RELEASE AGENT LP113/03® 1

Area of application: Machine infeed
Container (litre): 30 | 200 | 1000
Colour: 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® 2

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

Spray onto the upper and lower edge area of the workpiece
- Prevents the adhesion of emerging glue onto the workpiece

RELEASE AGENT LP120/12® 5

Area of application: Pressure roller (Hot air / Laser machines)
Container (litre): 30 | 200 | 1000
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

ANTISTATIC COOLANT LP289/99® 6

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

CLEANING AGENT LP163/93® 8

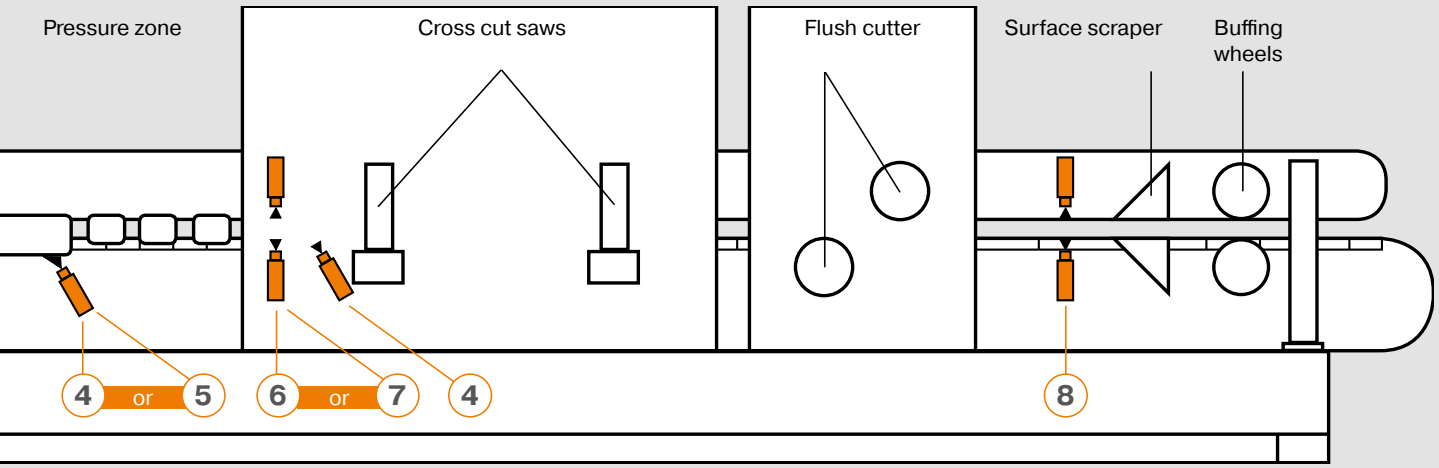
Area of application: Before buffing wheels/ surface scraper
Container (litre): 30 | 200 | 1000
Colour: Red

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 rematches the surface finish

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**



RELEASE AGENT TH97®

3

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

7

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

The RIEPE® spraying systems operate maintenance free only when used in conjunction with these specially developed liquids.

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

Scan here to order directly.

The following steps must be followed for all units:

A socket needs to be installed when using the 230V electronic.

The 24V electronic is connected directly into the machine power supply.

The 230V/24V supply must be connected to the conveyor drive (conveyor motor).The 230V/24V supply should only be live when the conveyor is running so that if the conveyor stops and the sensor is active the fine nozzle does not spray.

The pressure reducer should be connected to an air line (constant pressure). The pressure reducer should be set to **3 bar**. As a result a consistent, most cost effective application is guaranteed.

The optical sensor should fitted at the side of the upper fine nozzle in through feed direction (in-feed side). Two avoid accidental operation, there should be no components visible beneath the sensor.

The capacitive sensor should be fitted to the conveyor rail in front of the lower nozzle (see page 12).

If there is insufficient space to fit the sensor in front of the fine nozzle then it can be fitted on the opposite side of the upper pressure element (optical sensor) or conveyor rail (capacitive sensor).

ATTENTION: Narrow workpieces, not visible past the chain plates will not be identified by the sensors. A manual activation of the application is necessary.

The liquid containers must be mounted under the level of the lower fine nozzle. For fine nozzle adjustment, pipe connection and spraying system positioning see the following detailed illustration.

Release and cleaning agent should be applied in an approximately 10 mm strip on the edge area of the upper and lower side of the workpiece. The gap between fine nozzle and workpiece should be approximately 25 mm.

Depending on the product, the liquid quantity is set using the adjustment screw with scale. Please refer to page 26.

Liquid consumption per fine nozzle is less than 1 litre per 5000 running metres.

The client is responsible for the electrical connections.

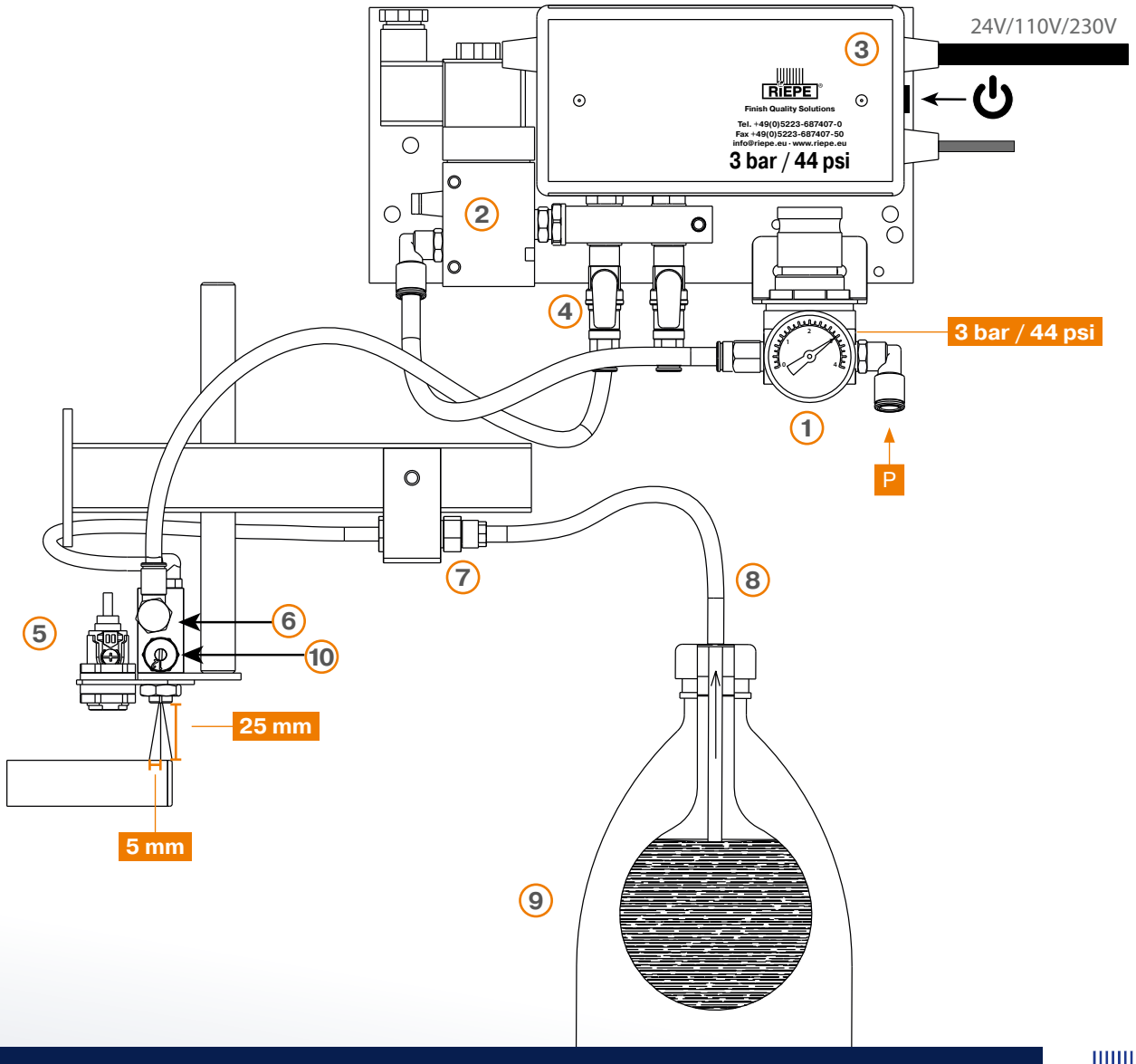
RIEPE spraying system in detail

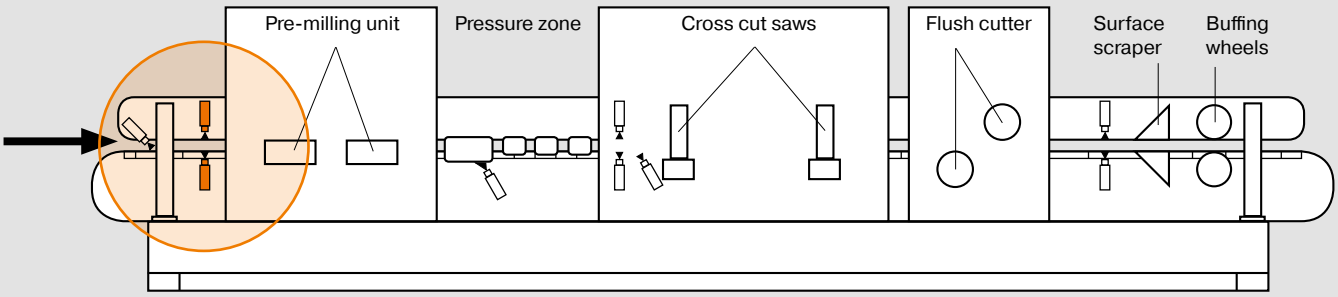
The picture shows the spraying system complete with electronic. A RIEPE retro-fit spraying system includes an electronic control and sensor. As a result it is not necessary to access the machine program. The sensor precisely identifies the beginning and end of the workpiece and gives the signal to spray.

This retro-fit unit requires only a compressed air connection and dependant on requirements, a 24V/110V/230V connection.

The fine nozzles specially developed by us stand above all for their low consumption and reliability.

1. Manometer
2. Magnetic valve
3. Electronic
4. Shut-off valves
5. Sensor
6. Fine nozzle
7. Non-return valve
8. Flow tube
9. 2 litre bottle
10. Adjustment screw





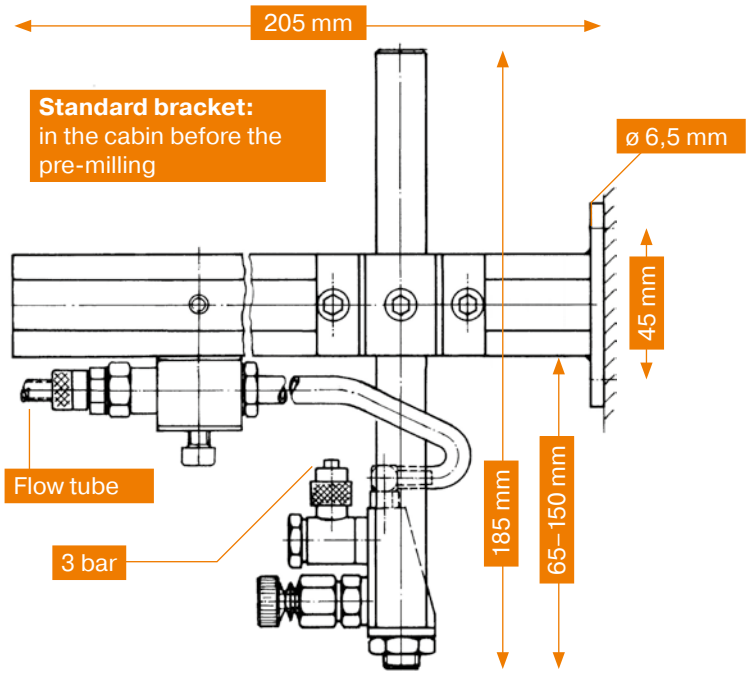
Release agent spraying system with standard bracket

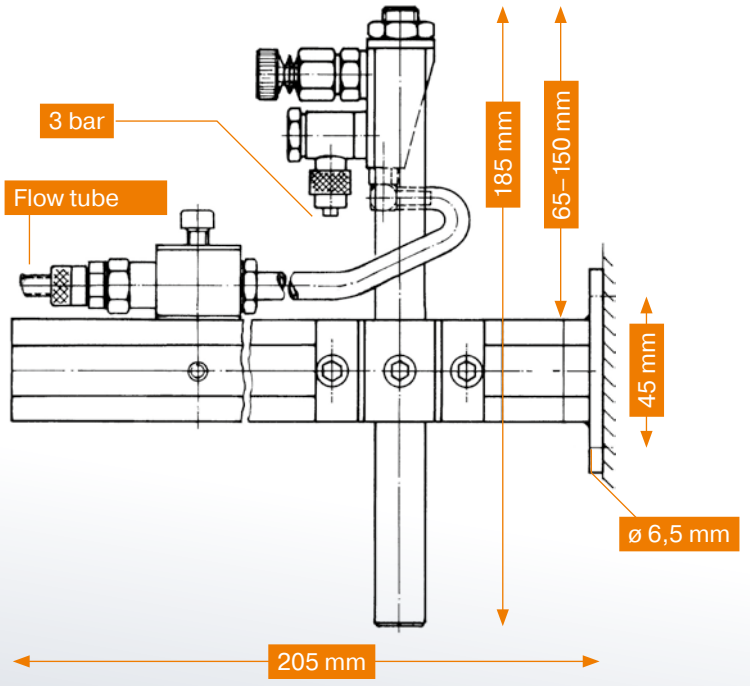
The release agent spraying system must always be fitted prior to the pre-milling unit (inside or outside the cabin).

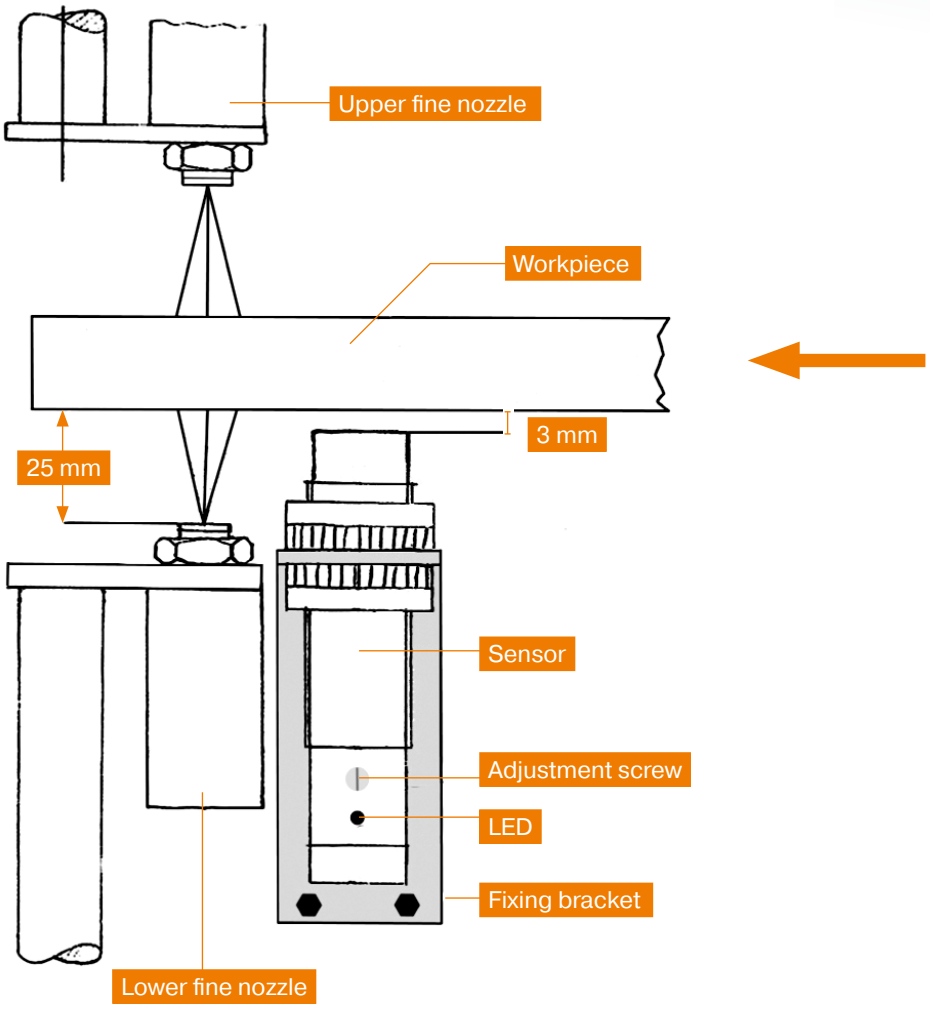
In this picture you can see the standard bracket (C-profile) fitted before the pre-milling inside the cabin. The sensor should be installed using the supplied mounting directly in before the upper fine nozzle. Care should be taken to ensure that the sensor is regularly cleaned. Where excessive soiling/chipping adhesion is a problem it is possible to fit a capacitive sensor onto the conveyor rail (see page 12).

The release agent should be applied in approximately 10 mm wide band to the edge area of the over- and underside of the workpiece. The gap between fine nozzle and workpiece should be approximately 25 mm.

Release agent spraying systems are generally supplied with standard brackets and additional brackets, enabling on-site determination of the most effective fitting position (inside or outside the cabin).







Fitting instructions for capacitive sensor

1. The sensor should be fitted with a separate bracket to the conveyor rail with the sensor 3 mm from the underside of the workpieces.
2. When adjusting the sensor there should be no workpiece above the sensor (measuring zone).
3. The adjustment screw should be turned clock-wise using the supplied screwdriver until the LED illuminates.
4. Turn the adjustment screw anti-clockwise until the LED extinguishes and then a further 1/8 of a revolution in anti-clockwise direction.

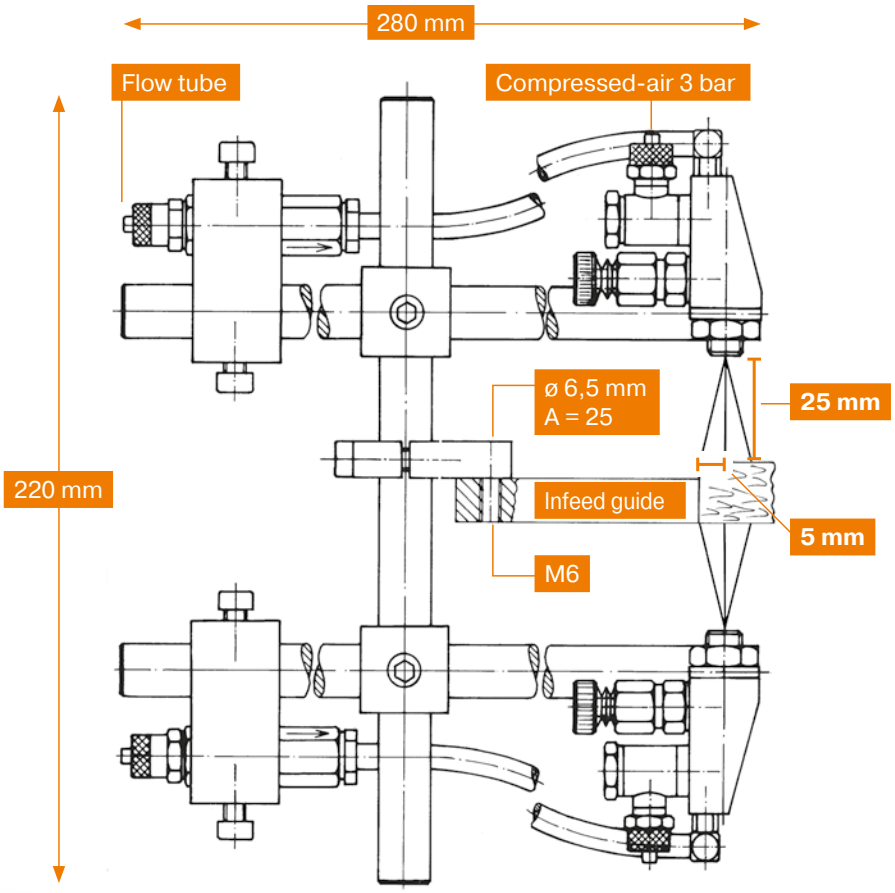
The workpieces activate the sensor (LED illuminates) and the fine nozzle sprays.

Release agent spraying system with additional bracket ‘Guide’

In the picture you can see installation outside the cabin. The bracket for the fine nozzle is attached directly to the guide. As a result the fine nozzle is always correctly positioned, even when overhangs vary.

The upper fine nozzle should be adjusted to the thickest workpiece. If necessary the distance to the workpiece can be manually adjusted. The sensor is fitted directly before the upper fine nozzle using the appropriate bracket.

The ‘Guide’ bracket is supplied as an additional bracket.

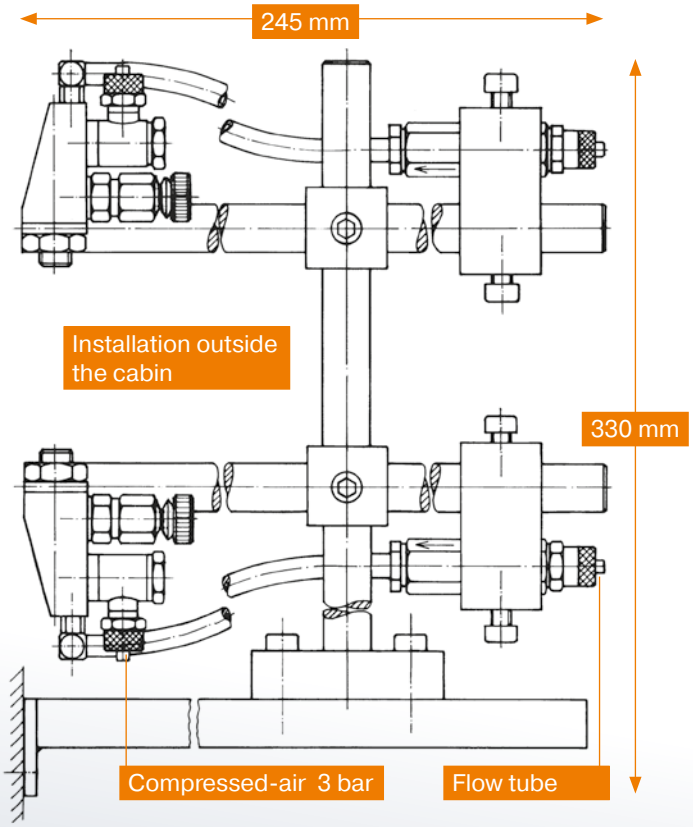


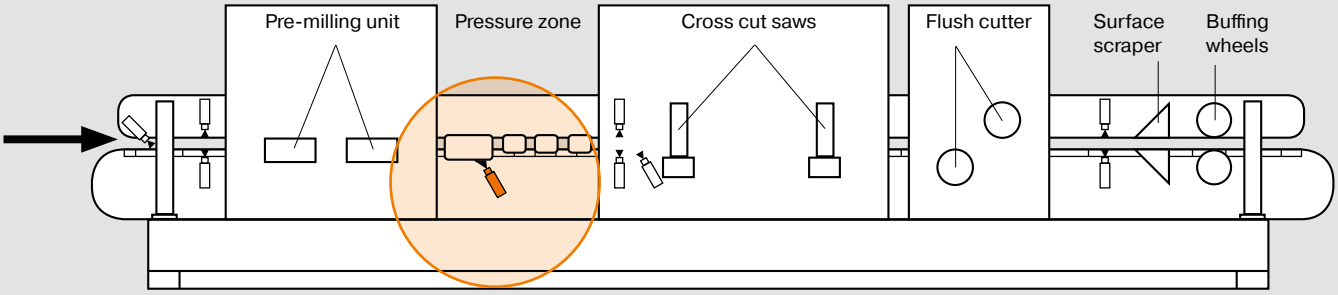
Release agent spraying system with additional bracket ‘Machine frame’

In this picture you can see the installation outside the cabin before the pre-milling, using the bracket ‘Machine Frame’.

This bracket is supplied additionally with every release agent spraying system.

With this bracket the upper fine nozzle must be adjusted to the largest workpiece to be processed. Here also the sensor is positioned directly before the upper fine nozzle using the supplied bracket.



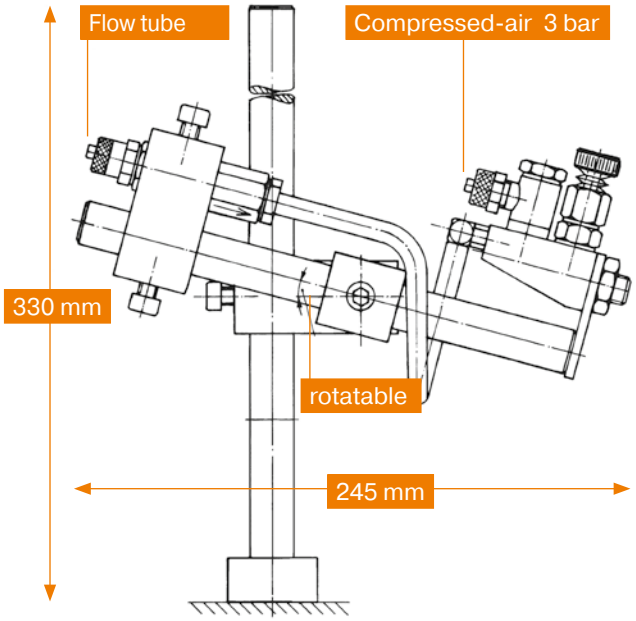


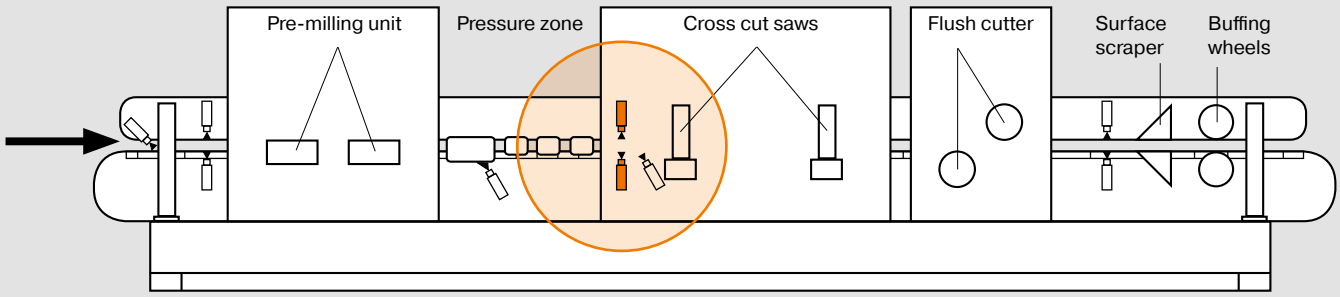
Release agent spraying system for pressure roller

For this application the sensor does not need to be fitted in the same position as the fine nozzle. As can be seen in the picture the sensor is mounted on the upper pressure element.

By means of this electronically controlled spraying system the Release Agent NFLY® is applied via fine nozzle to the main pressure roller. This takes place at adjustable intervals. The duration of each application is 3 seconds. As a result the glue is prevented from adhering to the pressure rollers. There is no more need for manual cleaning of the pressure rollers. In addition the release agent is transferred to the edging and then to the following pressure rollers and slide shoes. For hot air and laser machines release agent LP120/12® is used as this has been developed specifically for use in high heat zones.

POST-/SOFTFORMING:
For post and soft-forming the release agent is applied before the slide shoes directly to the surface. The release agent is transferred to the slide shoes and builds a lubricant film. Glue residues are prevented from adhering to the slide shoes or the workpieces. As a result a considerable production improvement is achieved in the post-/softforming process.



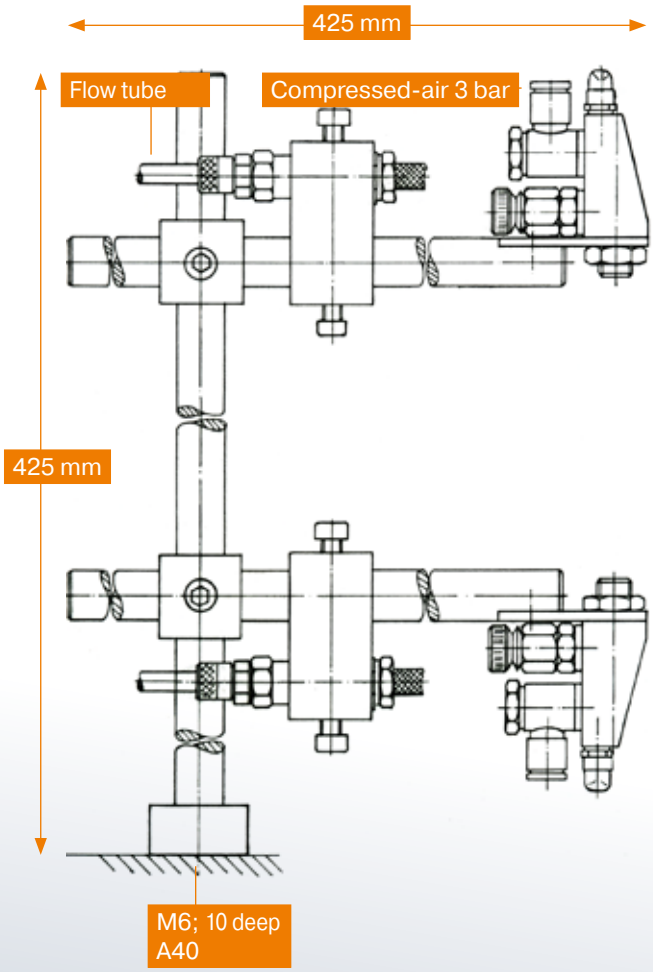


Antistatic coolant spraying systems with bracket ‘Before the Cabin’

In this picture the antistatic coolant spraying system is fitted after the last pressure roller with the additional bracket ‘upright bracket long’. If there is not enough room after the last pressure roller, then the fine nozzles can be installed above and below the last pressure roller.

The sensor must be positioned between the last and last but one pressure rollers, fixed with a separate bracket to the upper pressure element as the max. distance to the workpiece of 25 mm cannot be exceeded.

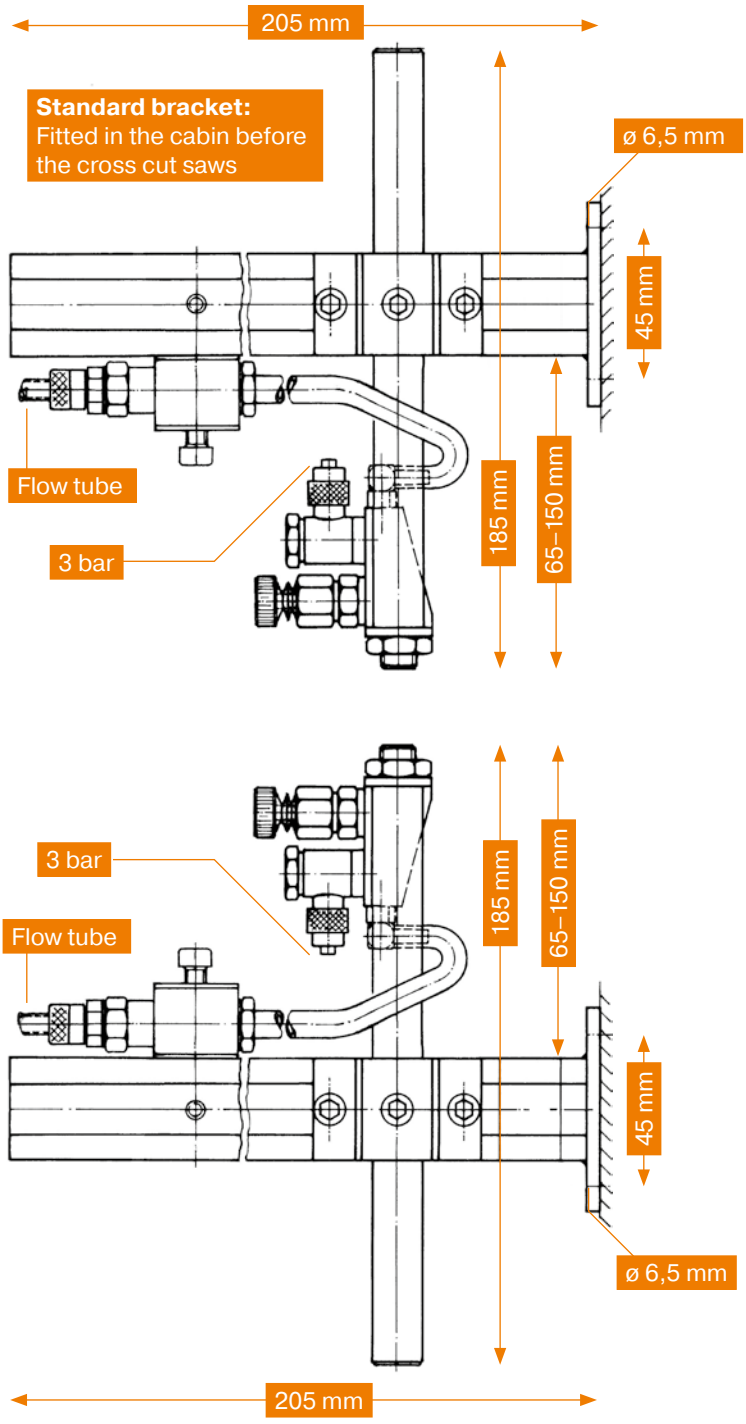
The vertical bar is screwed to the machine frame. The horizontal bars are adjusted to the available space. When applying the antistatic coolant agent an exact distance between the fine nozzle and workpiece is not necessary. The distance can be between 25 and 60 mm.



Antistatic coolant spraying system with standard bracket ‘In the Cabin’

In this picture you can see the standard bracket for the antistatic coolant system fitted inside the cabin before the cross cutting saws.

It is necessary to ensure that when the cross cutting unit is in its home position that there is sufficient space for the fine nozzles together with sensor (about 50 mm).



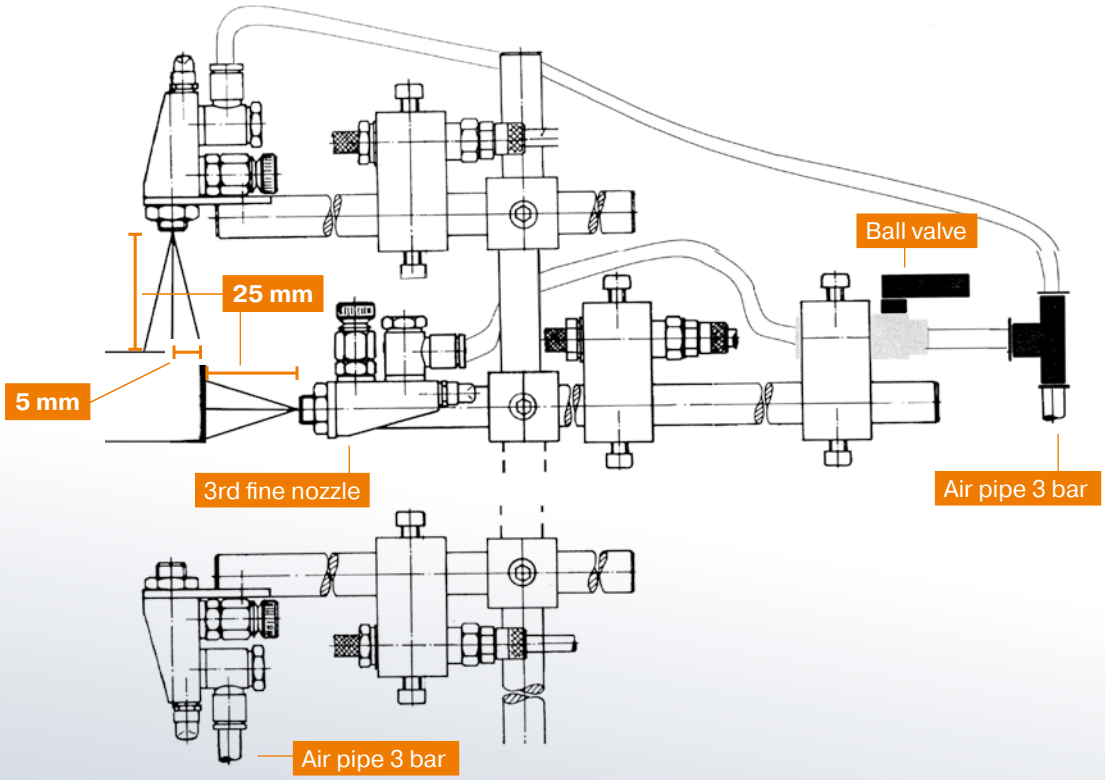
Application to edgeband with a third fine nozzle

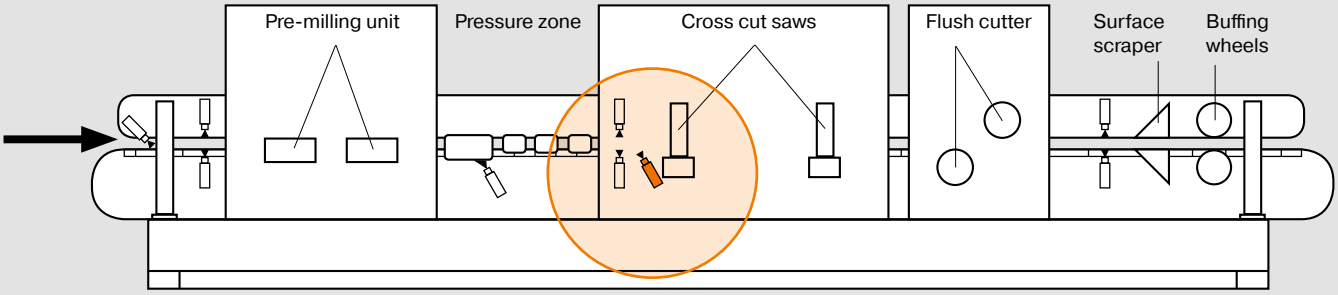
The antistatic coolant spraying system can be fitted with a third nozzle. A separate electronic is therefore not necessary. The third nozzle is positioned in in-feed direction, directly behind the antistatic coolant fine nozzles (see picture).

The third fine nozzle can be switched off by means of a ball valve.

The fine nozzle, mounted horizontally, applies release agent NFLY® onto the edgeband surface. As a result damage and marking by the detection/sliding shoes of delicate edges is prevented.

In addition the applied protective film is not loosened from the edgeband during processing.





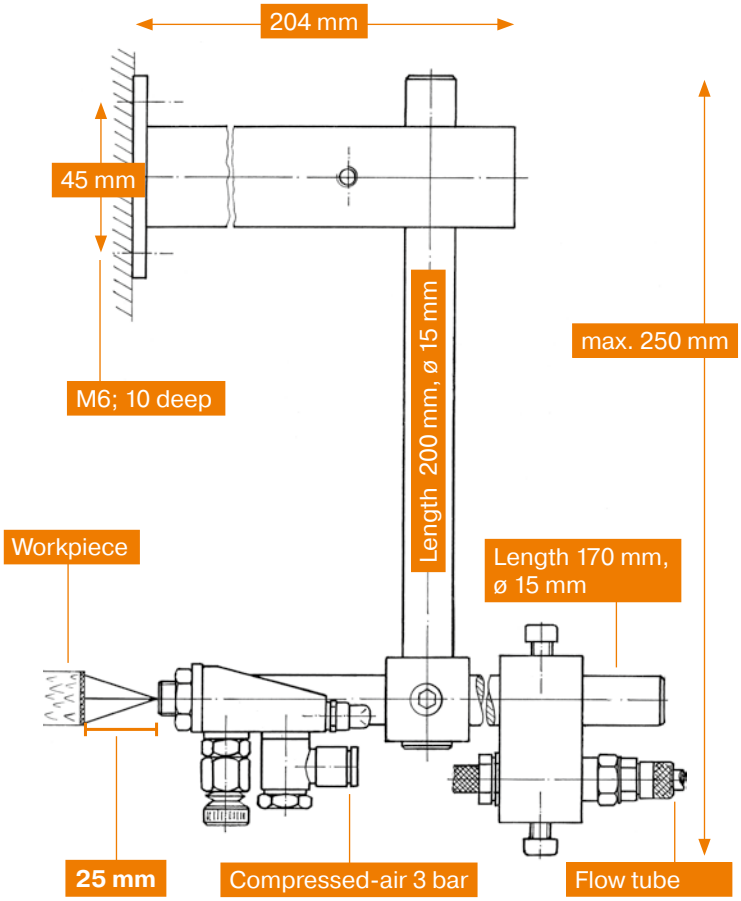
Application to edgeband (Individual solution)

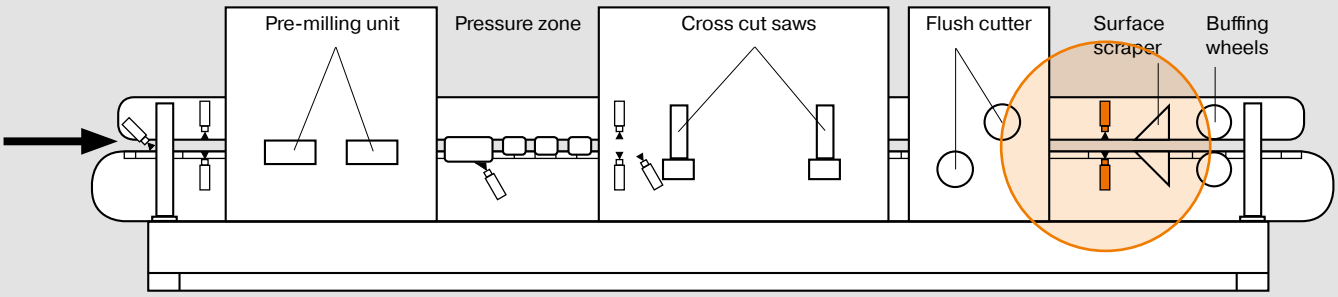
When fitting a separate release agent spraying system for application to edgeband the standard bracket is mounted on the upper pressure element.

The distance from fine nozzle to workpiece should be 25 mm.

The fine nozzle, mounted horizontally, applies release agent NFLY® onto the edgeband surface. As a result damage and marking by the detection/sliding shoes of delicate edges is prevented.

In addition the applied protective film is not loosened from the edgeband during processing.





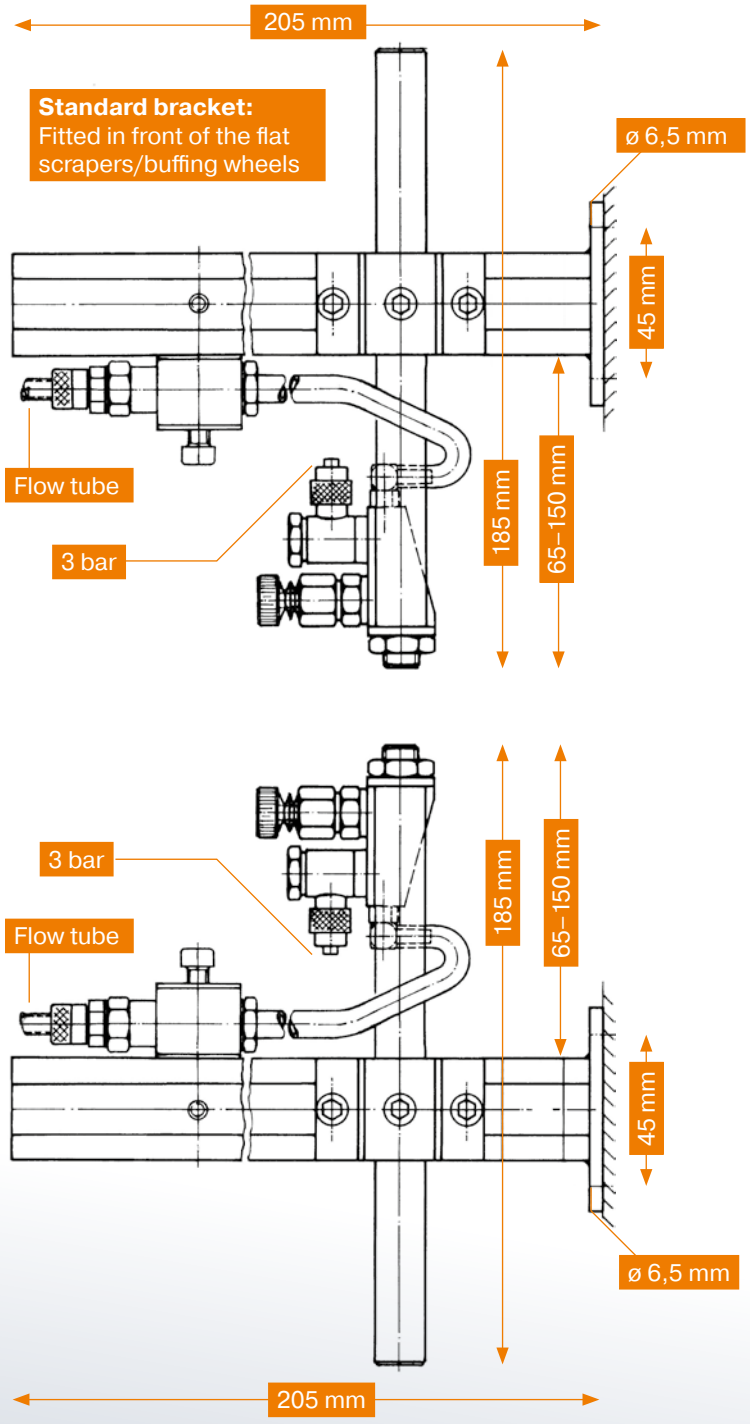
Cleaning agent spraying system before the flat scrapers/buffing wheels

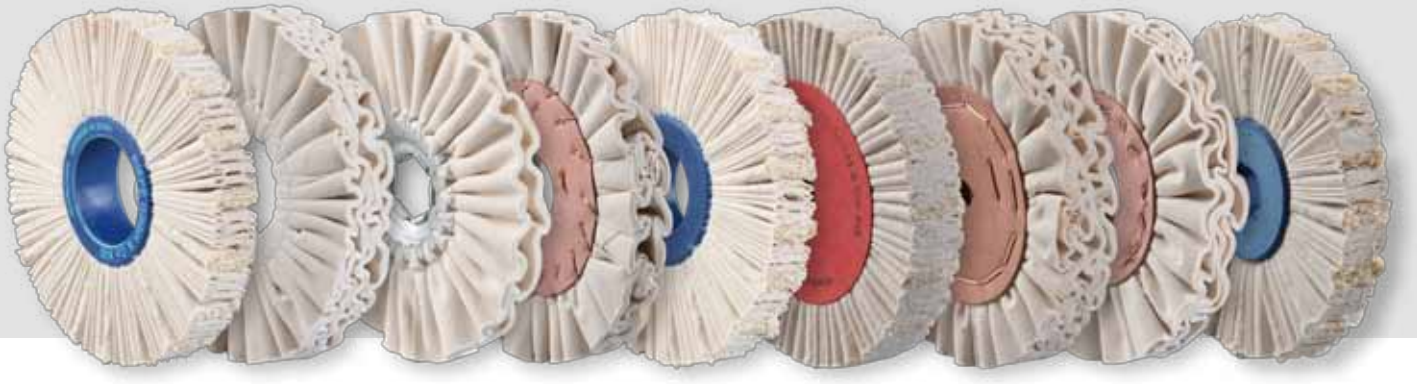
The pictures show a cleaning agent spraying unit fitted in front of the flat scrapers and also in front of the buffing wheels.

The fine nozzles are fitted before the flat scrapers/ buffing wheels using a standard bracket (C-profile). If short of space the angle bracket included can also be used.

With the current flat scrapers and detection shoes the cleaning agent nozzles are positioned directly in front of the flat scrapers (see the picture on the right). As a result glue residues are prevented from adhering to the detection shoes or scrapers.

Through the application of the cleaning agent together with the buffing unit the release agent applied at the in-feed and any loose glue residue is removed.





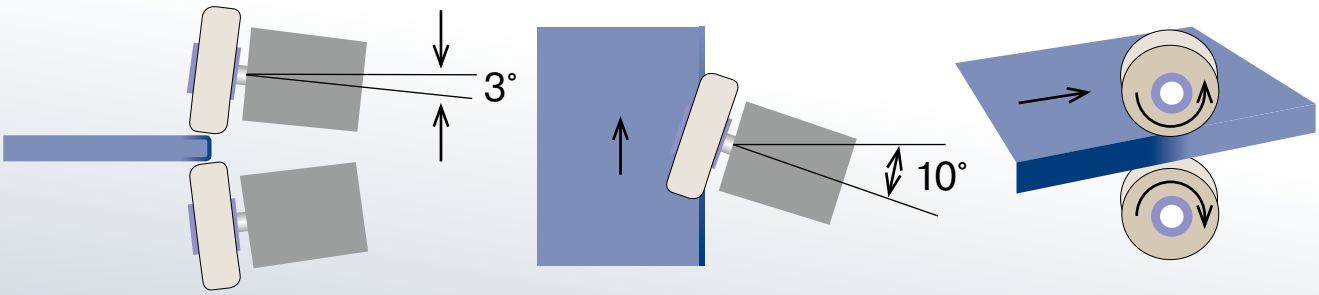
Buffing and lamellar wheels for your edge processing

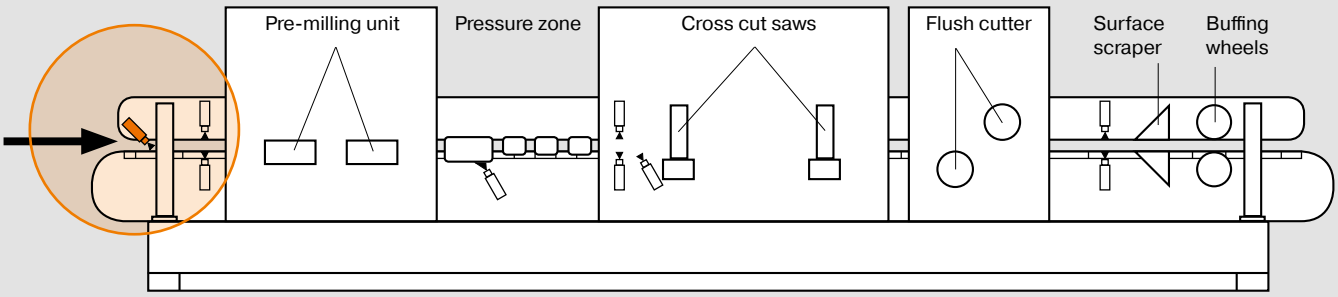
Buffing wheel arrangement in combination with RIEPE® release and cleaning agents:

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

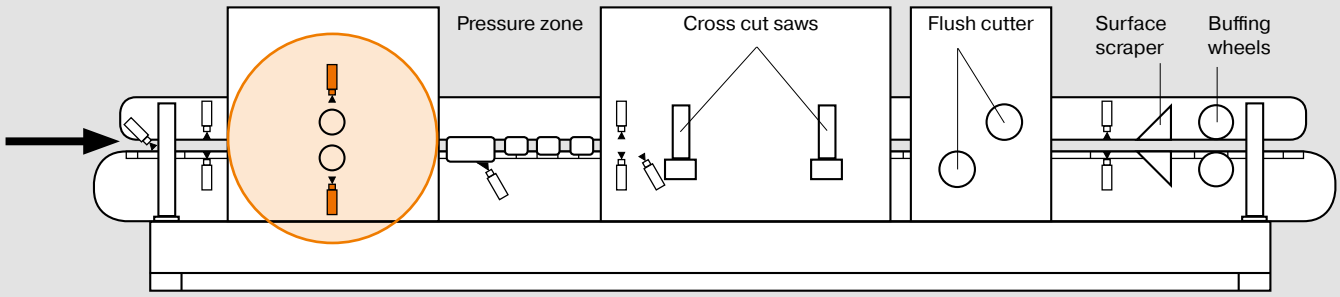




Electronically controlled release agent spraying system for leading and trailing edges

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.

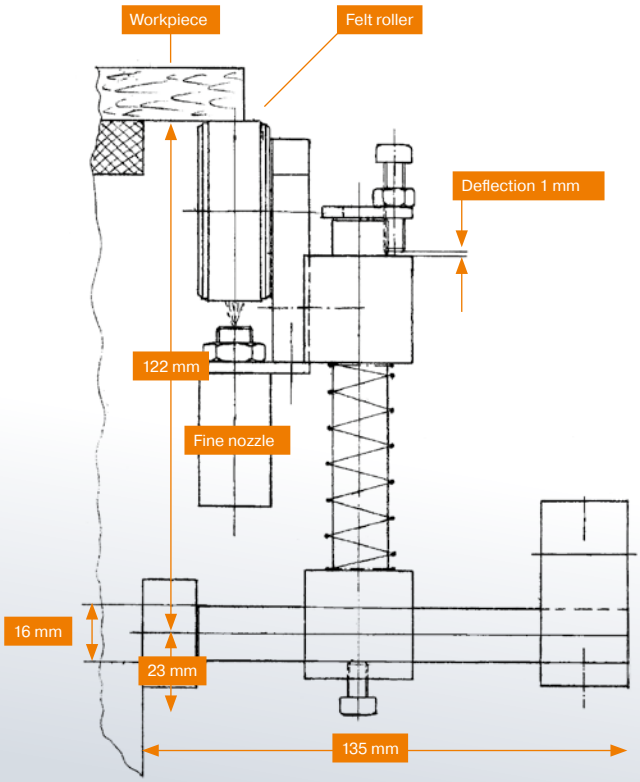
The picture shows a fine nozzle used to spray the Release Agent LP113/03® onto the trailing edge moving in the running direction.

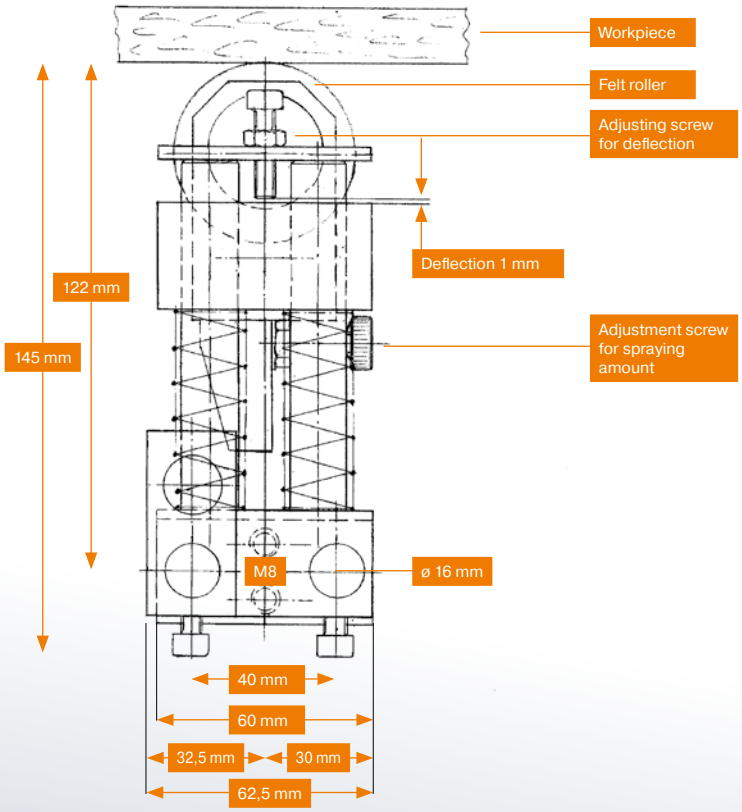


Electronically controlled release agent application system (application via roller)

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



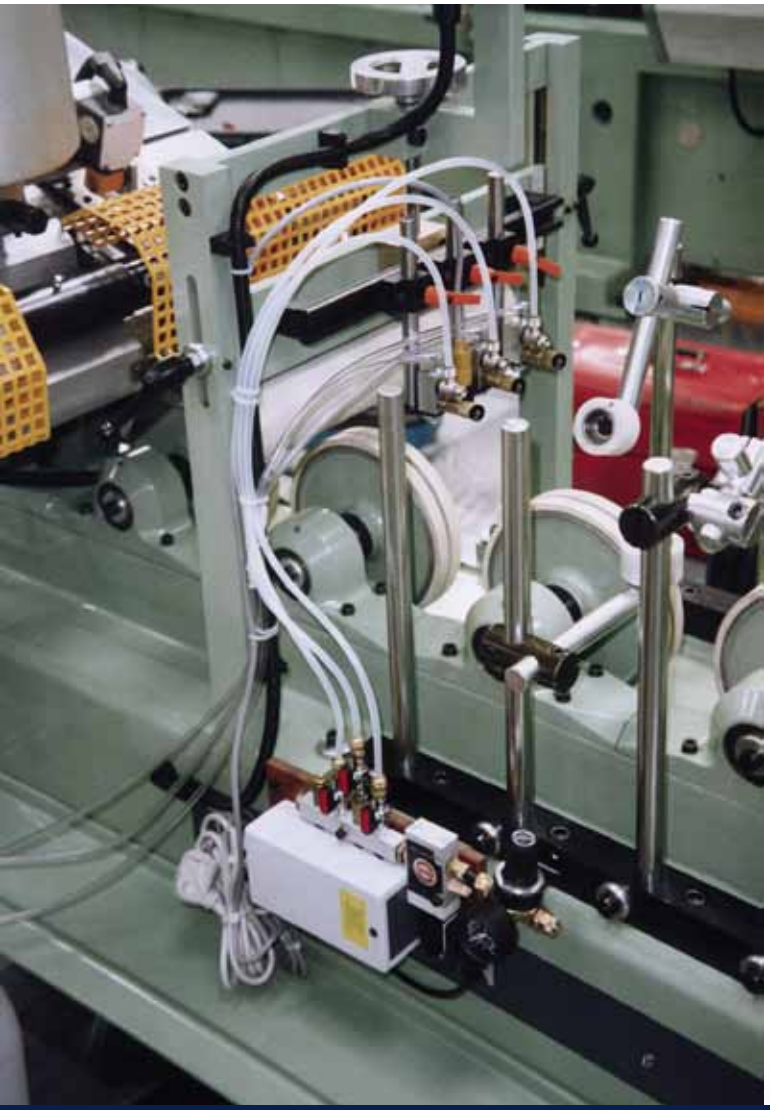


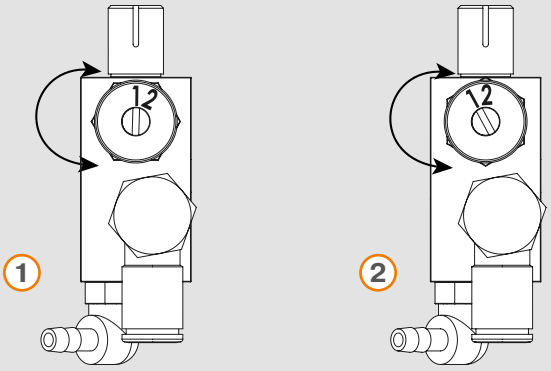
Electronically controlled veneer moistening spraying system

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 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





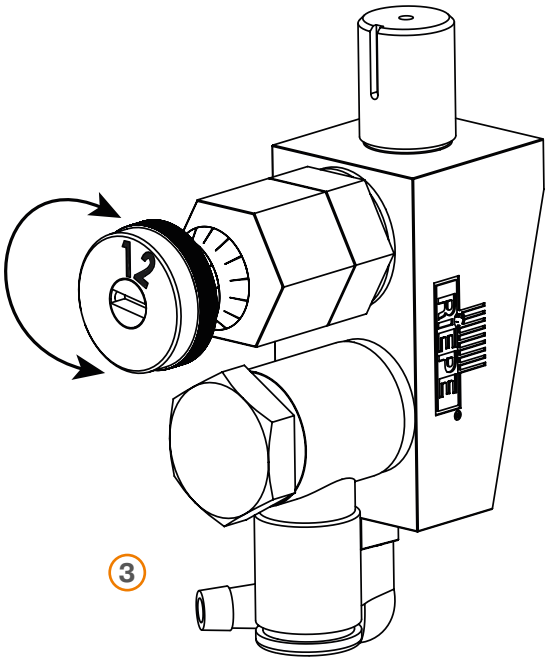
Adjustment of the RIEPE® fine nozzle

Each RIEPE® fine nozzle is pre-calibrated.
Position 1 (Figure 1) is the optimum preset for:
- Release Agent LPZ/II®
  (infeed, before pre-milling units)
- Cleaning Agent LP163/93®
  (prior to surface scrapers)

Position 2 (Figure 2) is the optimum preset for:
- Release Agent NFLY®
- Antistatic Coolant LP289/99®
- Further RIEPE® products for spraying systems

Restoring factory settings
To retrospectively reset the fine nozzle please proceed as follows:

1. Turn the dosing screw clockwise until the precision nozzle is closed.
2. Turn the dosing screw anti-clockwise on to position 1 or 2.



Original RIEPE® products are available worldwide

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