

2.6. Safety measures for the normal operation



Operate the machine only with all the protective devices fully functional!
Before switching on the machine, make sure that its operation can endanger nobody!
At least once a week, the machine should be checked for visible damage and functioning of the safety devices!

2.7. Electric Power Hazards




- Only a qualified electrician may work with the electrical equipment supply!
- Check the electrical equipment of the machine regularly! If any defects are found during the inspection, they must be eliminated immediately!
- The switch cabinet should be normally closed, for its parts are energized! The access is only allowed for authorized personnel with wrenches or another tools!

2.8. Special Hazard Points



Caution!

- Never touch moving parts of the machine, because it can otherwise cause crushing of body parts, cuts and other injuries
 - There is an increased danger of cuts in the area of the cutting mechanism. Never reach into this area!
 - Before operating the machine, install **all** the covers! Otherwise, the injury or death may occur due to the moving and energized machine parts!
 - When working on the mat cutting plant, wear close-fitting clothing and tie long hair up or wear a hairnet. Loose clothes and loose hair can be caught in moving parts of the machine. This may cause the serious injuries.
- 
- Note the warning signs, located on the mat cutting plant. Do not remove them. If they have become illegible or have been lost, replace them immediately!



Hazard Areas:

- Cutter Bar with Circular Blade
- Longitudinal support
- Crossbar
- Braking Mechanism with Pneumatic Cylinders
- Mat Drive with rotating glass fiber mats

2.9. Troubleshooting



- Have every special adjustment, maintenance, and inspection work done timely and by duly qualified personnel!
- In case of any maintenance, inspection and repair:
 - De-energize the machine and the main power switch to prevent unexpected reconnection!
 - Turn off the Main Power Switch!
 - Place a warning sign to prevent machine restarting!
- After completing the maintenance, check the functioning of safety devices!



- During part replacement, fasten large assemblies carefully to a lifting gear and secure!



- Do not use machine parts and components as a stepping or climbing aid!

2.10. Modification of the Machine

- Carry out no machine modifications without an approval from the manufacturer!
- Any machine conversion requires a written approval of the manufacturer!
- **Replace machine parts as soon as they are not in perfect condition!**
- Use only the spare parts and consumables listed by the manufacturer in the respective catalogs! Using other parts can guarantee neither safety nor compatibility!

2.11. Cleaning the Machine and Disposal of Residues



- Clean the Glass Mat Cutting Plant daily!
 - All the materials used are appropriate to handle and dispose of, especially when:
 - Dealing with fiberglass residues!
 - Cleaning with solvents!
- > Section 6.2. See Maintenance!

2.12. Firefighting

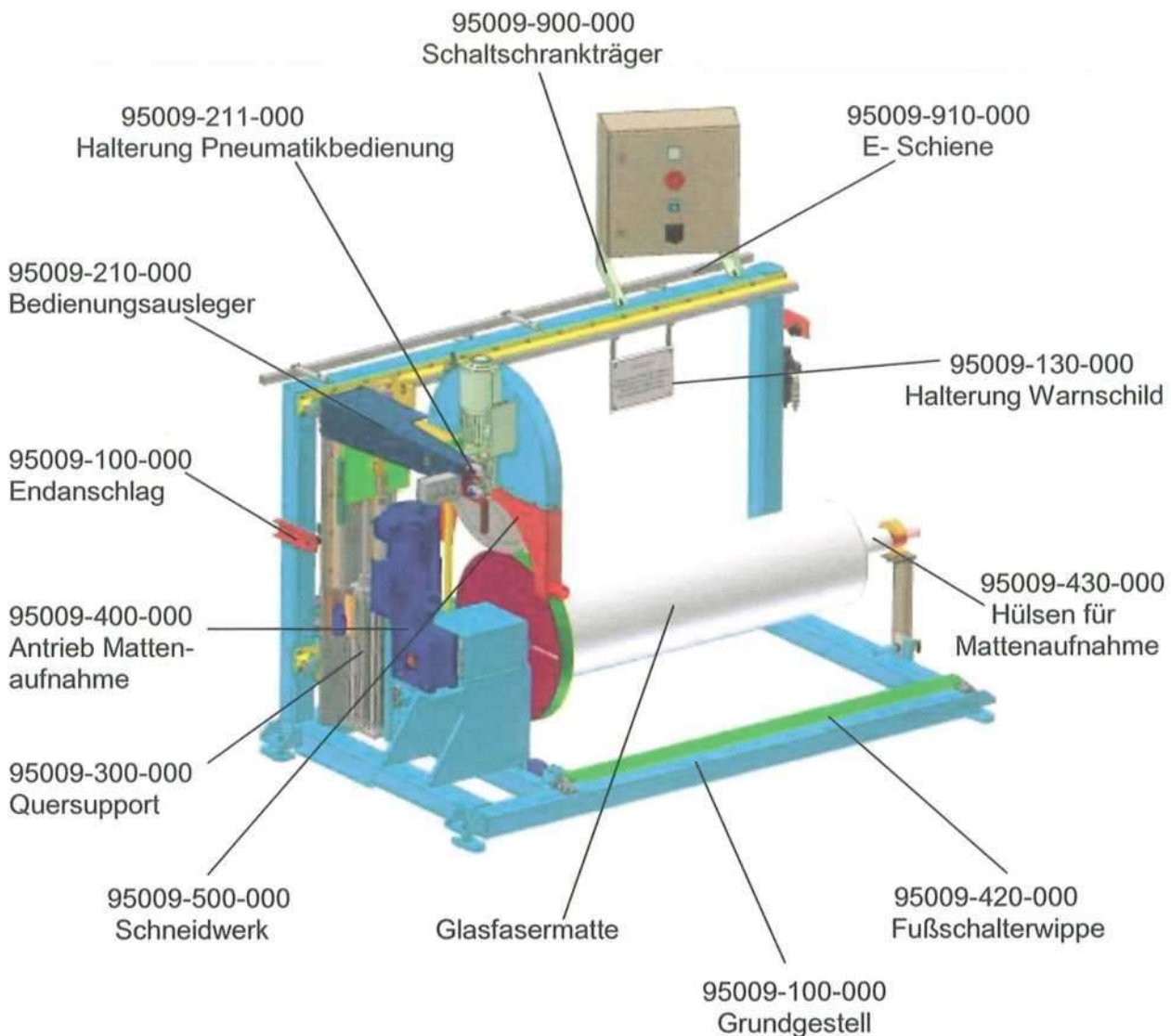


- **Always turn off the machine with the main switch before firefighting!**
- **To fight the fire, use class B CO2 extinguisher!**

1. Description of the Glass Mat Cutting Plant

1.1. Application and Function Description

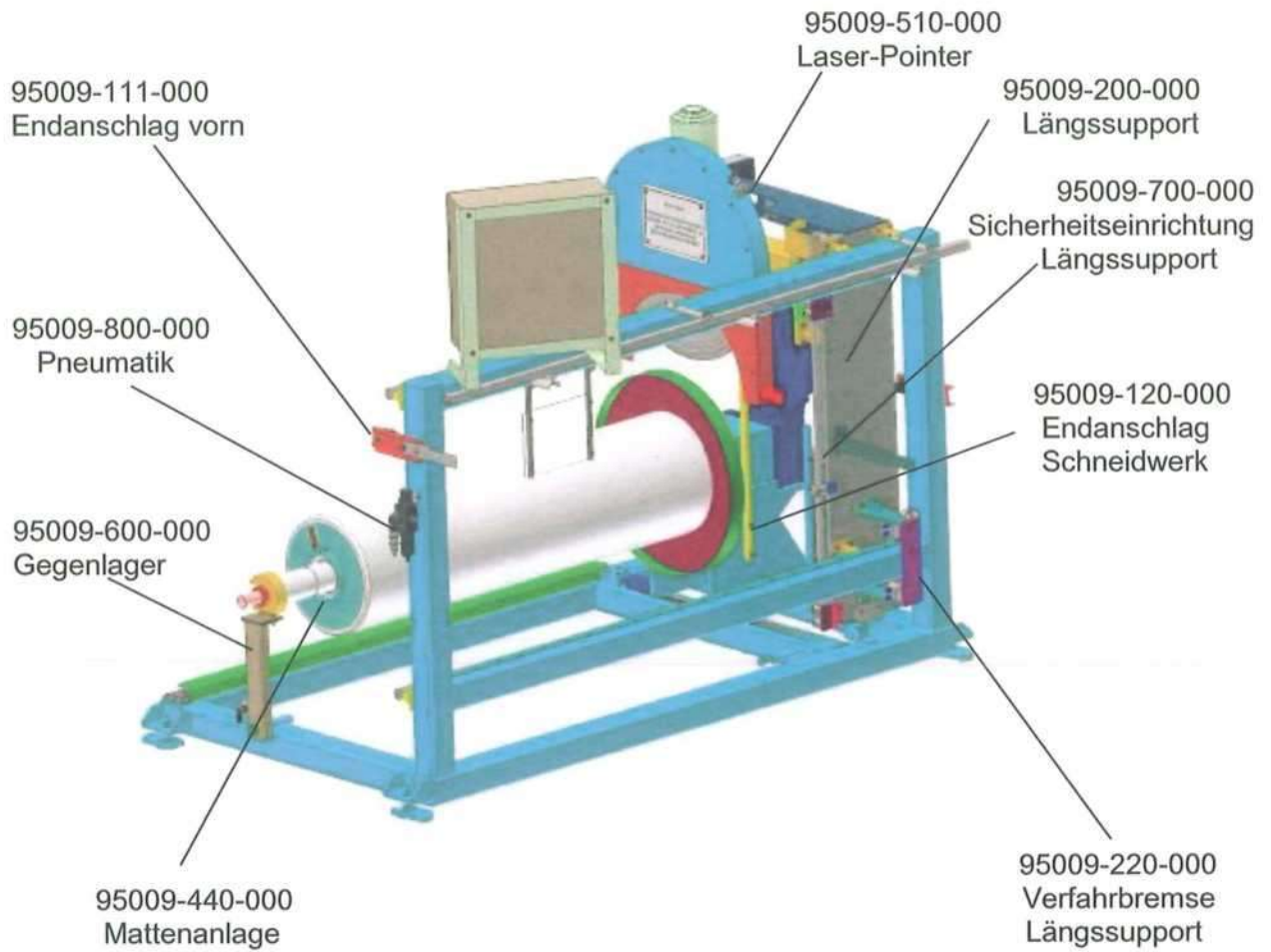
The Glass Mat Cutting Plant is used to cut glass fiber mats into stripes. The glass fiber mat is sliced. Glass Mat Cutting Plant can work with fiberglass mats up to the length of 1740 mm. The diameter of the mat should not exceed 440 mm. The stripe width can be set individually. The machine can hold glass fiber mats with the inner diameters from 60 mm. By default, these are the cardboard bobbins inner diameter of 152 mm, 100 mm, 76 mm and 70 mm. However, special mats can be incorporated with other inner diameters. The adjustment takes place through reduction reels. An operator operates the glass mat cutting plant. Only for loading and unloading of the glass fiber mats an auxiliary force may be needed depending on the weight and dimensions of the mat. The plunge cut speed can be adjusted continuously.



Schneidwerk=Cutter Bar, Quersupport=Crossbar, Antrieb Mattenaufnahme=Matt Extraction Drive, Endanschlag=Limit Stop, Bedienungsausleger=Arm with Controls, Halterung Pneumatikbedienung=Pneumatic Control Fixture, Schaltschrankträger=Switch Cabinet Support, E-Schiene=Cable Tray, Halterung Warnschild=Warning Sign Holder, Hülsen für Mattenaufnahme=Bobbins for Mat Extraction, Fußschalterwippe=Footswitch Rocker, Grundgestell=Base Frame, Glasfasermatte=Glass Fiber Mats

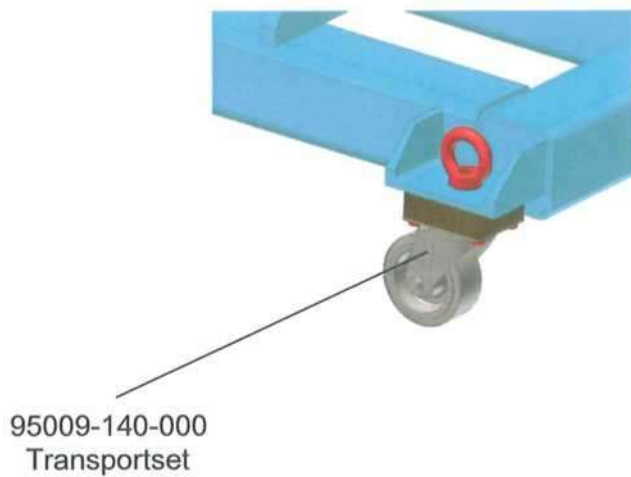
Figure 2: Glass Mat Cutting Plant Assembly (front view)

Glass Mat Cutting Plant Operating instructions



Mattenanlage=Mat Bobbin, Gegenlager=Prop, Pneumatik=Pneumatics, Endanschlag vorn=Front Limit Stop, Laser-Pointer=Laser Pointer, Längssupport=Longitudal Support, Sicherheitseinrichtung Längssupport=Longitudinal Support Safety Device, Verfahrbremse Längssupport=Braking System

Figure 3: Glass Mat Cutting Plant Assembly (rear view)



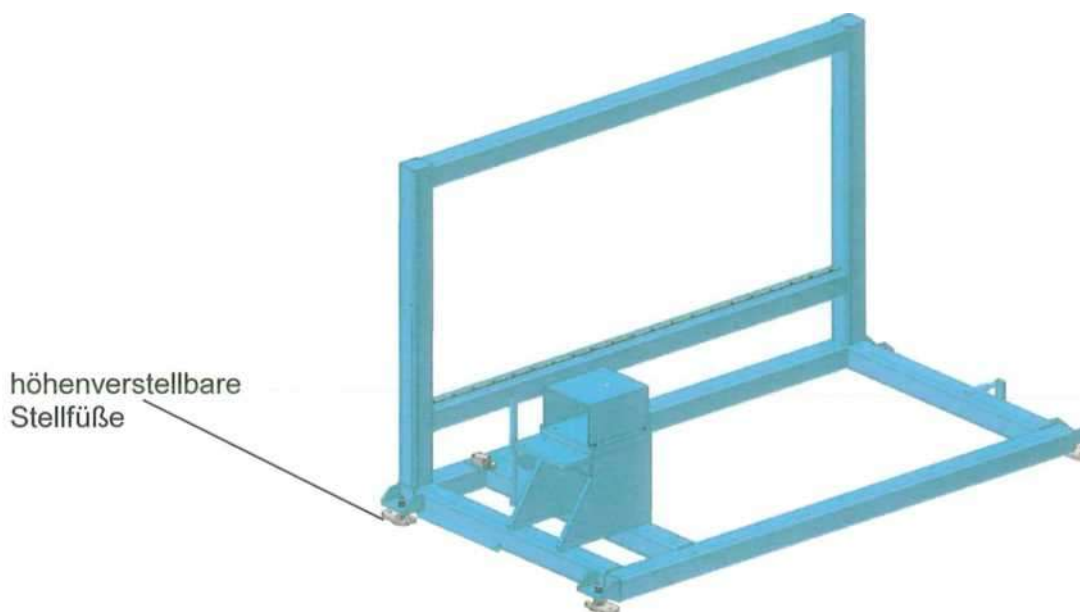
Transportset=Tranport Set

Figure 4: Transport set

3.2. Functional Description of Individual Modules

3.2.1. 95009-100-000 Frame

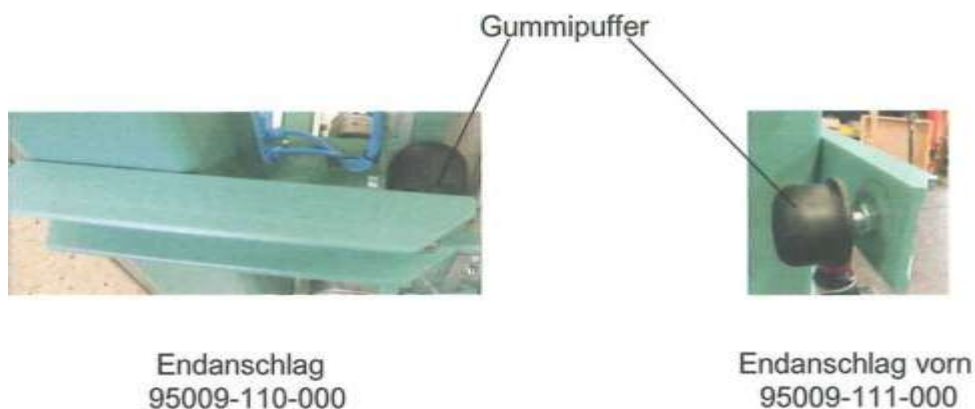
The Frame of the Glass Mat Cutting Plant is designed as a welded construction. It houses all the individual components and assemblies. Adjustable levelling feet provide the support. They can be bolted to the floor after machine orientation is done.



Höhenverstellbare Stellfüße = Height Adjustable Levelling Feet
Figure 5: Frame

3.2.2. 95009-110-000 and 95009-111-000 Limit stops

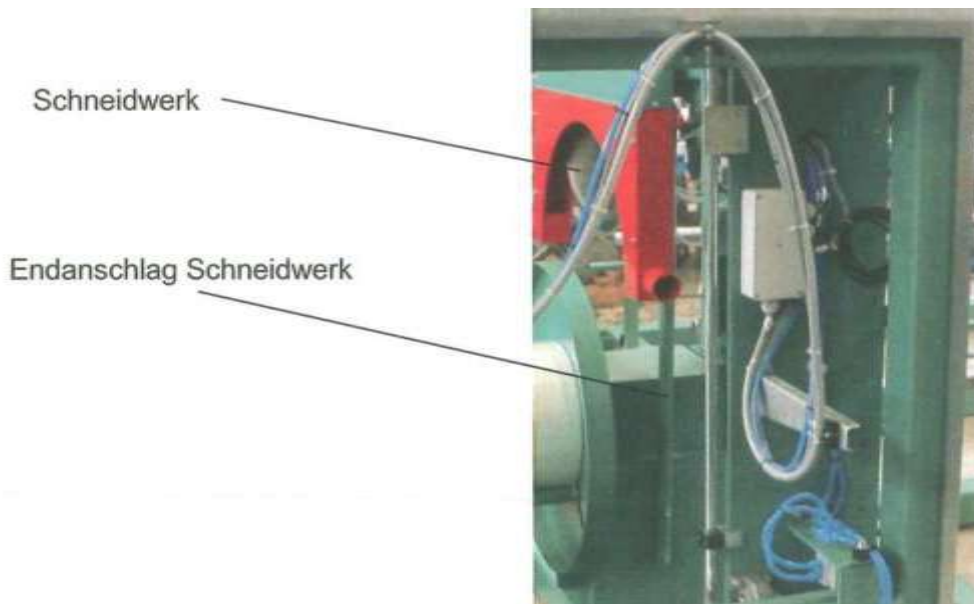
Both limit stops are screwed to the frame and serve as mechanical stops for the longitudinal support sliding rails. The rubber buffers damp impacts. Both modules provide the end positions for the longitudinal support.



Gummipuffer=Rubber Buffer, Endanschlag=Limit Stop, Endanschlag vorn=Limit Stop (front)
Figure 6: Limit Stops

3.2.3. 95009-120-000 Cutter End Stop

The Cutter End Stop is a safety module. It prevents the cutting blade from lowering from the standby position, thereby occurring the risk of crushing or damaging the cutting blade.



Schneidwerk Cutter bar, Endanschlag Schneidwerk=Cutter Stop
Figure 6: Cutter End Stop

3.2.4. 95009-130-000 Sign Holder

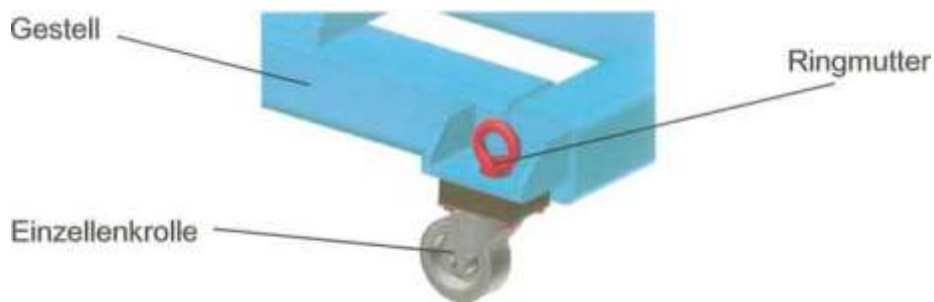
The warning sign holder fixes on one of the two signs. This sign points out that only one operator may work with the Glass Mat Cutting Plant. Other people should stay in a sufficiently large safety distance to the Glass Mat Cutting Plant. A holder means, in general, any object to fix two things together.



Warnschild=Warning Sign
Figure 7: Sign Holder

3.2.5. 95009-140-000 Transport set

This module is used for machine transportation. For this use, it is assembled only onto the frame. The transport set is not left permanently on the machine. If the machine is installed, the default levelling feet are removed and replaced by the transport set. Thus, the method of Glass Mat Cutting Plant is possible. After the transport has been completed, the transport set is dismantled and the ball feet come to its original position. The transport set consists of four single castors, they are screwed to the frame. The assurance provided by four ring nuts, which simultaneously serves as a crane attachment points..

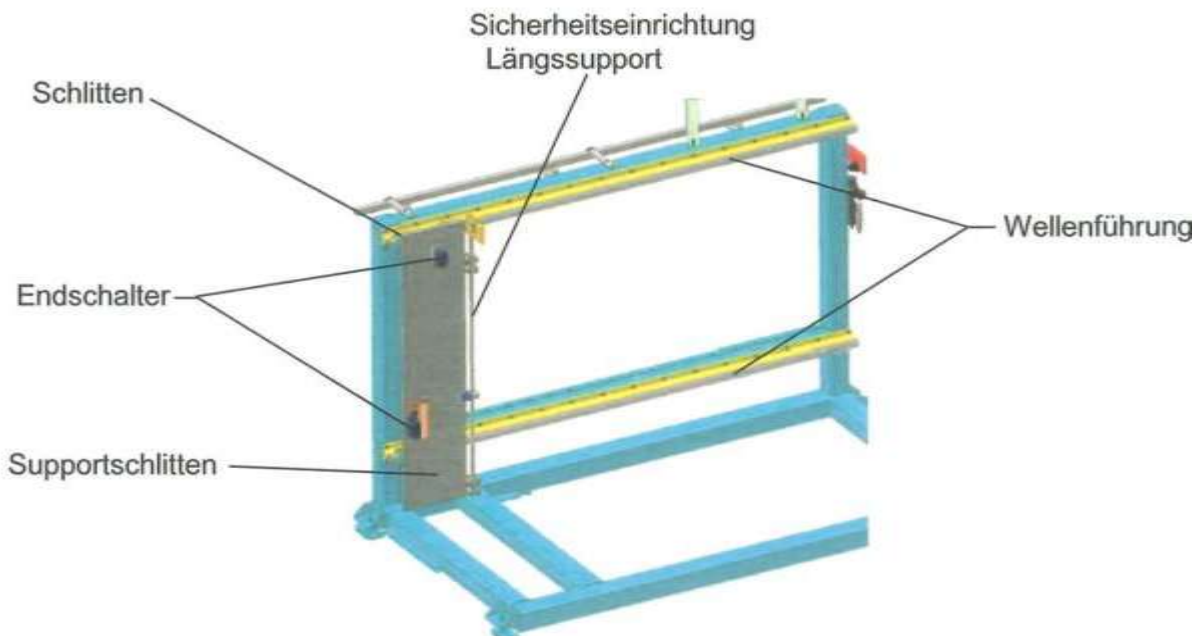


Einzelnkrolle=Single Castor, Gestell=Frame, Ringmutter=Ring Nut

Figure 8: Transport set

3.2.6. 95009-200-000 Longitudinal Support

The longitudinal support of the glass mat cutting plant ensures that cutting process is laterally aligned. Two shaft guides help to ensure it. Two rails per shaft guide are mounted on the actual sliding rail. Modules and the cutter bar will be fixed on this sliding rail and thus can move. The sliding rail on the bottom of the crossbar also provides a mechanical and electrical stop. In addition, the electric limit switch is attached to the sliding rail of the longitudinal support from the top.

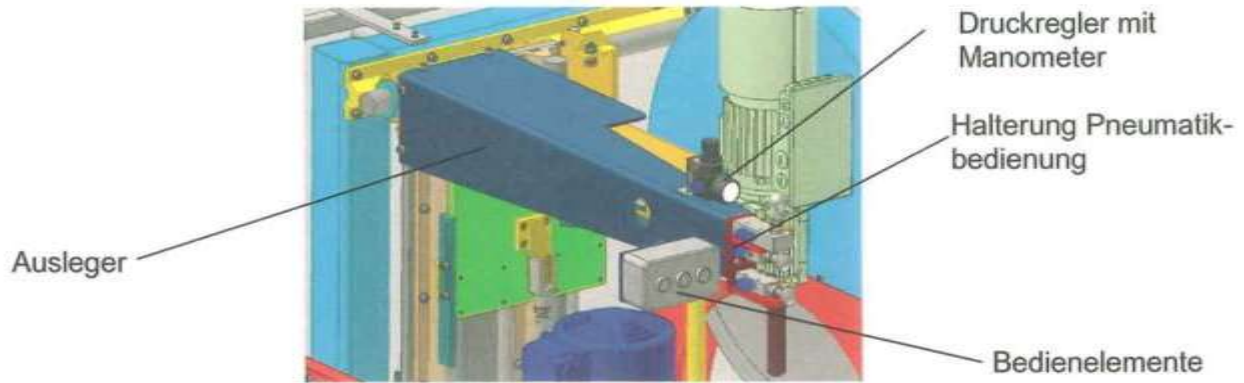


Supportschlitten=Support Slide, Endschalter=Limit Switch, Schlitten=Sliding Rail, Sicherheitseinrichtung=Safety Device, Wellenführung=Shaft Guide

Figure 9: Longitudinal Support

3.2.7. 95009-210-000 Arm

The arm contains the controls of the pneumatic and electrical components. This ensures the easy reach and safe operation of these components. The arm is thereby screwed to the sliding rail of the transverse support. In addition, it has a fixed separate pressure regulator with pressure gauge for an additional cylinder.



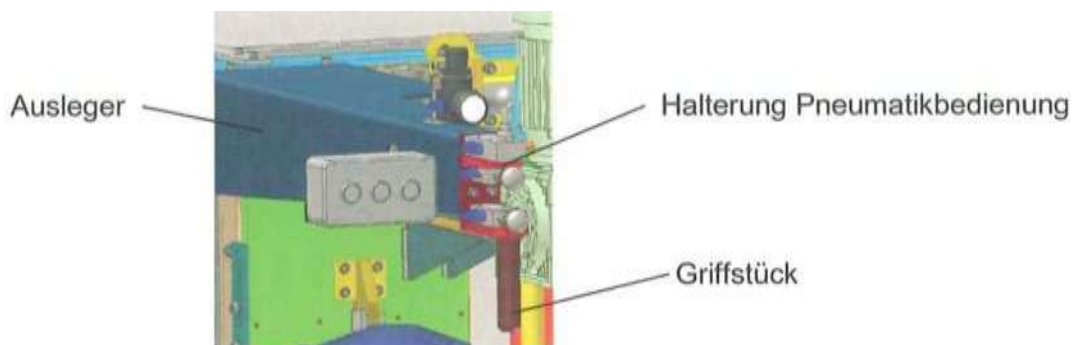
Ausleger=Arm, Druckregler mit Manometer= Pressure Regulator with Gauge, Halterung Pneumatic Bedienung= Pneumatic Fixture, Bedienelemente=Controls
Figure 10: Arm



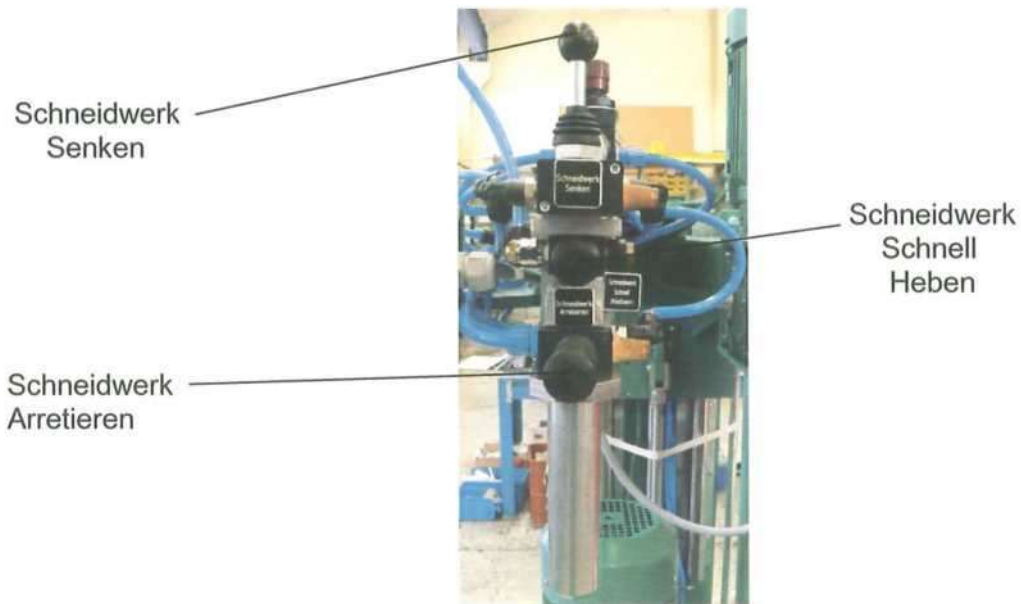
Figure 11: Arm Controls

3.2.8. 95009-211-000 Pneumatic Fixture

Pneumatic Fixture is characterized by the complete layout of the controls to enable the pneumatic components with. The operator can trigger all pneumatic components centrally with three actuators. An operator can use the handle when pressing the corresponding control valve to complete longitudinal support at any position. Furthermore, the operator can raise or lower the cutter bar and has the option of quick lifting by pressing the appropriate switch valve.



Ausleger=Arm, Halterung Pneumatikbedienung= Pneumatic Fixture, Griffstück=Handle
Figure 12: Pneumatic Fixture

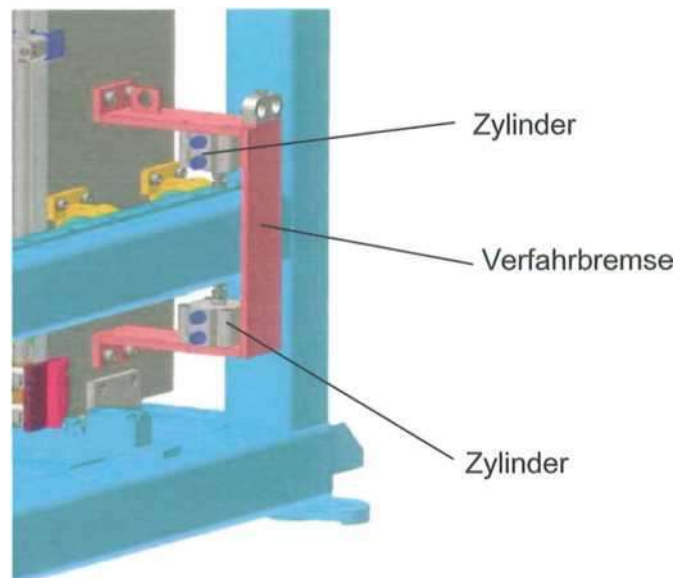


Schneidwerk Senken=Cutter Down (Schneidwerk Senken), Schneidwerk Arretieren=Cutter Lock (Schneidwerk Arretieren), Schneidwerk Schnell Heben=Quick cutter up (Schneidwerk Schnell Heben)

Figure 13: Bedienelemente

3.2.9. 95009-220-000 Braking Assembly

The braking assembly consists of two oppositely directed pneumatic cylinders. They share a common carrier plate and are pressed in their idle state with their piston rods to a profile of the frame. Thus, in the idle state, the longitudinal support operation is not possible. This has both safety and technical reasons. On the one hand, it prevents the cutting mechanism from inadvertent activation and crushing. On the other hand, it prevents the passing the cutter bar through the longitudinal support on the mat when cutting the mat. To move the longitudinal support, it is necessary to press the lever on the pneumatics fixture.

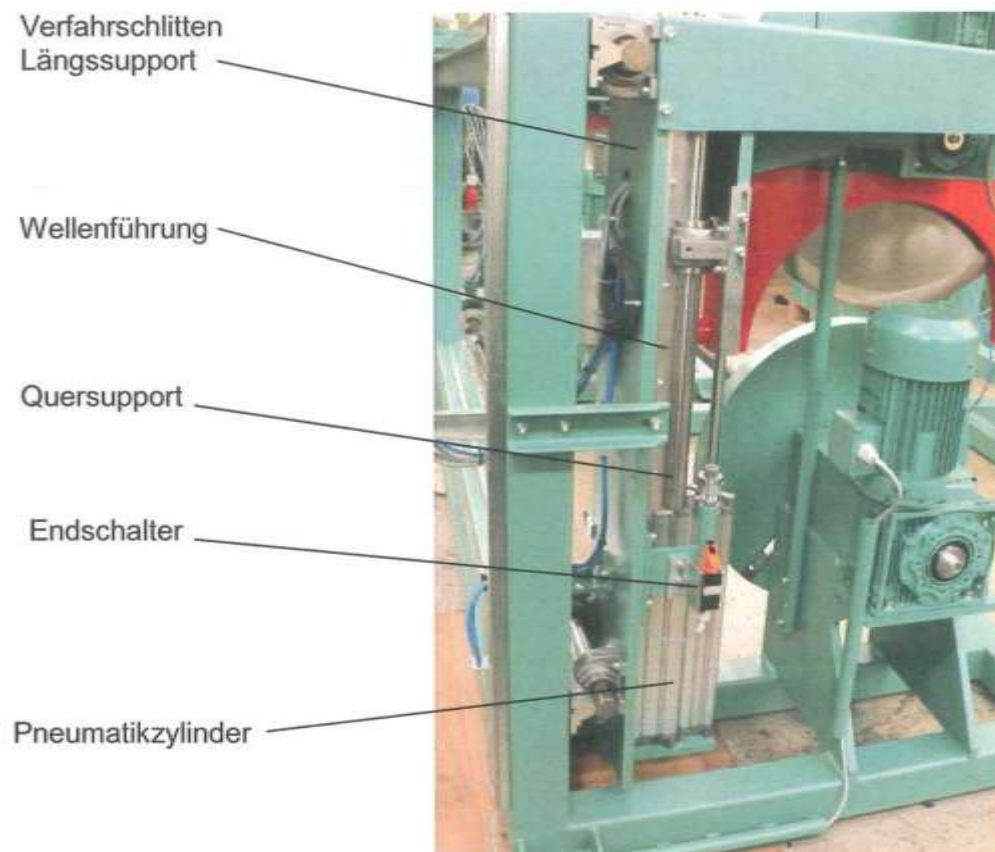


Zylinder=Drum, Verfahrbremse=Braking Assembly, Zylinder=Cylinder

Figure 14: Braking Assembly

3.2.10. 95009-300-000 Crossbar

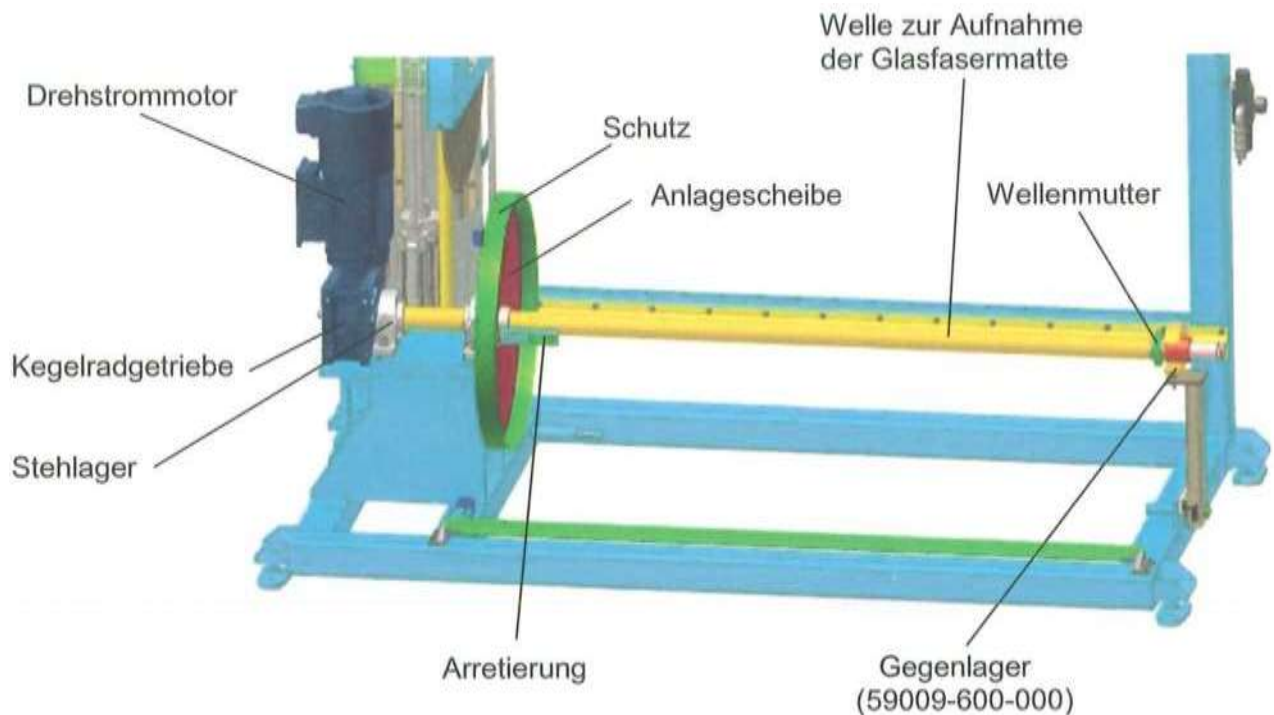
The crossbar allows lifting and lowering of the cutting mechanism and therefore is largely responsible for the cutting of glass fiber mat. For this purpose, an additional shaft guide is mounted onto the sliding rail of the longitudinal support. It consists of two ground shafts with shaft support and four sliding rails. Rails to the welded arm for mat extraction connect them. Two pneumatic cylinders realize lifting or lowering. They are secured to the longitudinal support and the piston rod side is attached to the crossbar. The upper end position is realized through the mechanical stop, which rests directly on the ground shaft. On the crossbar sliding rails, the limit switch buttons are located - low position.



Pneumatikzylinder=Pneumatic Cylinder, Endschalter=Limit Switch, Quersupport=Crossbar, Wellenführung=Shaft Guide, Verfahrslitten Längssupport=Sliding Rail Support
Figure 15: Crossbar

3.2.11. 95009-400-000 Material Extraction Mechanism

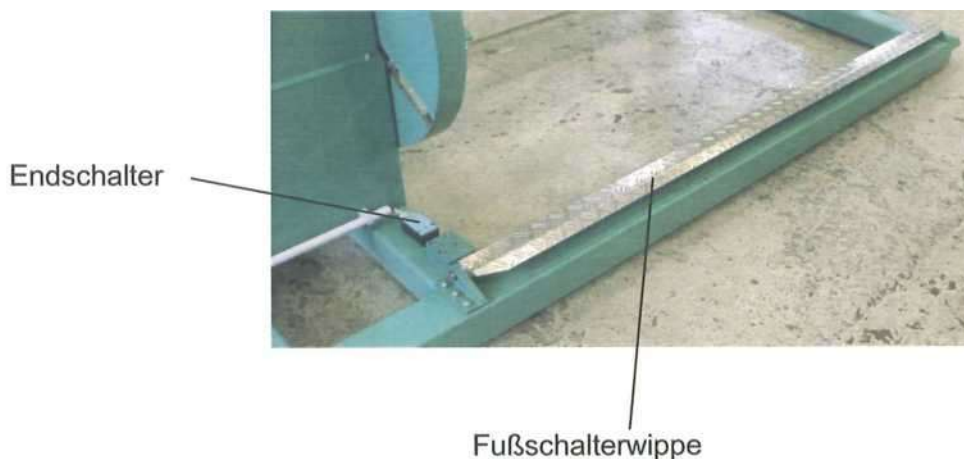
The mat extraction mechanism is mounted on the corresponding motor console of the frame. 3-phase AC motor with shaft-mounted bevel gearing enables the glass mat rotation. The gearing picks up the mats from the shaft. Two pedestal bearings support the shaft the from the drive side. The bearing on the right side of the machine takes over a prop. During the machine loading, the fiberglass comes to the thrust washer and stays fixed on the shaft with locking mechanism by means of the strap. This prevents the mat on the shaft from slippage. The thrust washer with safety guard protects an operator from injuries.



Stehlager=Pedestal Bearing, Kegelaradgetriebe=Bevel Gearing, Drehstrommotor=3-phase motor, Schutz=Safety Guard, Anlagescheibe=Thrust Washer, Welle zur Aufnahme der Glasfasermatte=Mat Extraction Shaft, Wellenmutter=Shaft Nut, Arretierung=Locking Mechanism, Gegenlager=Prop
Figure 15: Material Extraction Mechanism

3.2.12. 95009-420-000 Foot Switch Rocker

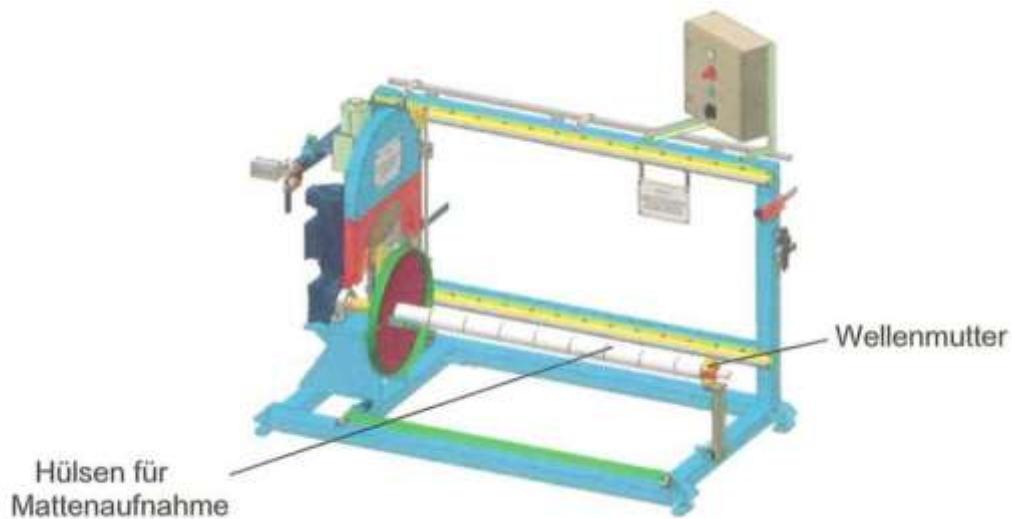
The foot switch rocker starts rotating the glass fiber mat. This is necessary to bring located on the mat cut marks into the visual range of the laser pointer. Pressing the foot switch rotates only mat - the cutter is not put into operation. It is relevant for safety.



Fußschalterwippe =Footswitch Rocker, Endschalter=Limit Switch
Figure 16: Footswitch Rocker

3.2.13. 95009-430-000 Mat Extraction Reels

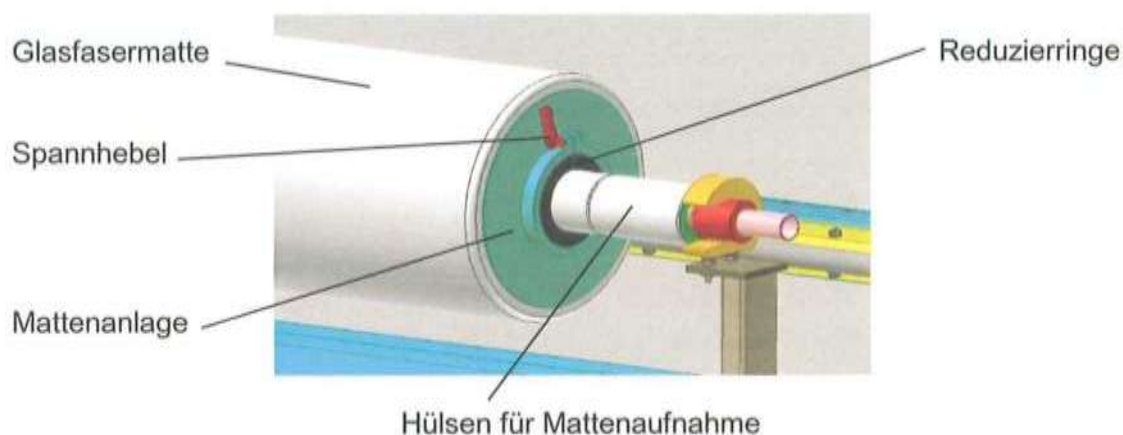
The extraction reels are custom designed. They extract glass fiber mats onto the drive shaft of the chain drive. The diameter of an individual reel may vary depending upon the internal diameter of the cardboard bobbins on which the actual glass fiber mat was wound. Default diameters of cardboard bobbins are 152 mm, 100 mm, 76 mm and 70 mm. The shaft nut fixes them on the shaft. If the limit switches are not correctly adjusted, the blade can cut into the bobbins. Therefore, the plastic has a bulge that and the troubles may be solved by excess glass fiber removal if necessary. In this case, the bobbins should be lathe-turned or filed.



Hülsen für Mattenaufnahme=Mat Extraction Reels, Wellenmutter=Shaft Nut
Figure 17: Mat Extraction Reels

3.2.14. 95009-440-000 Material Processing Unit with Reduction

This assembly is used to prevent the deflection of the cut stripes. The mat plant shifts in front of the actual cut at a defined distance to the mat, and the tensioning lever clamps it. By using the single-edged blade, the cut band is then moved to the focusing system and prevents the "tilting". To adapt to different core diameters, the machine has reducing rings.



Mattenanlage= Mat Processing Unit, Spannhebel=Clamping Lever, Glasfasermatte=Glass Fiber Mats, Reduzierringe=Reduction Ring
Figure 18: Mat Processing Unit

3.2.15. 95009-500-000 Cutter bar

The cutting unit includes a drive motor, a flanged bevel gearing and a circular blade. The blade with the diameter of 700 mm is enclosed in the biggest possible safety guard to minimize the risk of injury. The guard may be opened from one side for quick blade replacement. In addition, the safety guard has two ports for additional suction, to suck in the fluff in the operation. The cutter bar is bolted to the bevel gearing of the crossbar.

Circular blades of the glass mat cutting system are considered as a wearing part. It should be regularly inspected for wear and, if necessary, be reground or newly purchased from the machine manufacturer.

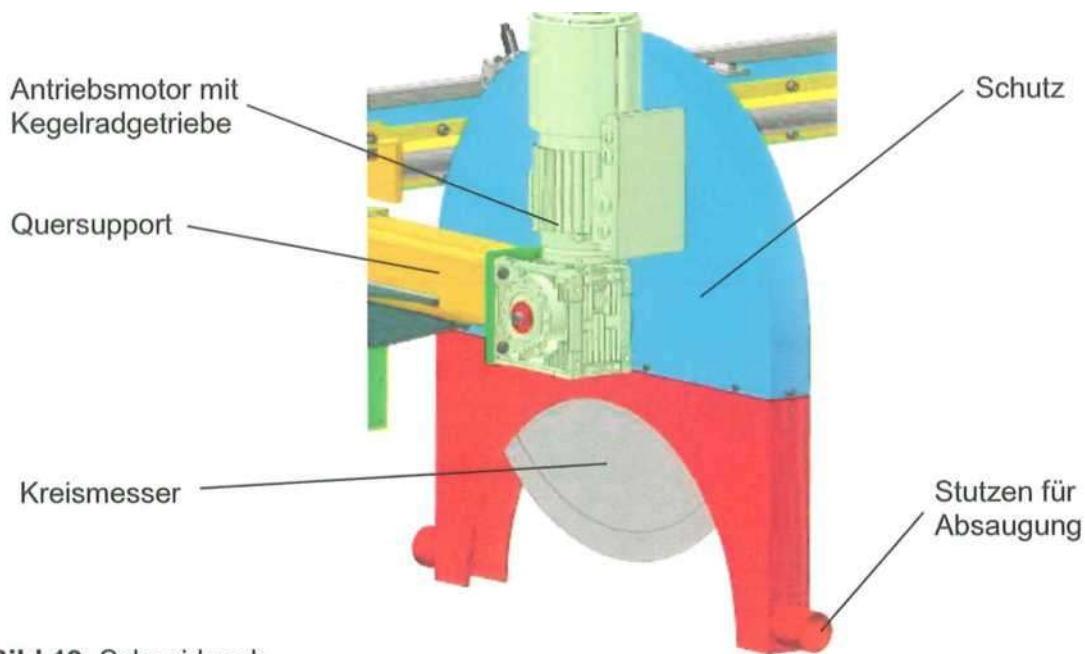
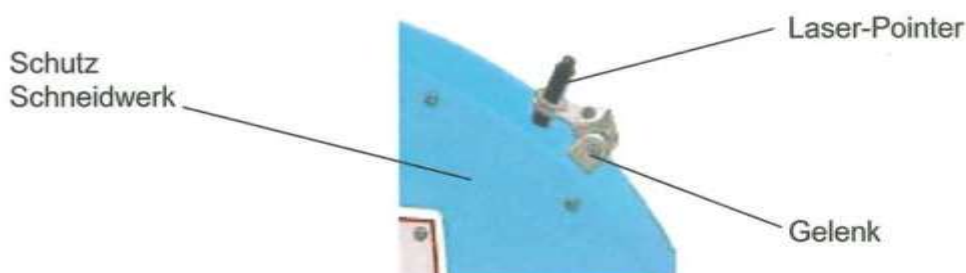


Bild 19: Schneidwerk

Kreismesser=Rotary Blade, Quersupport= Crossbar, Kegelaradgetriebe=Bevel Gear Unit, Schutz=Safety Guard, Stützen für Absaugung=Suction Points
Figure 19: Cutter Bar.

3.2.16. 95009-510-000 Laser Pointer

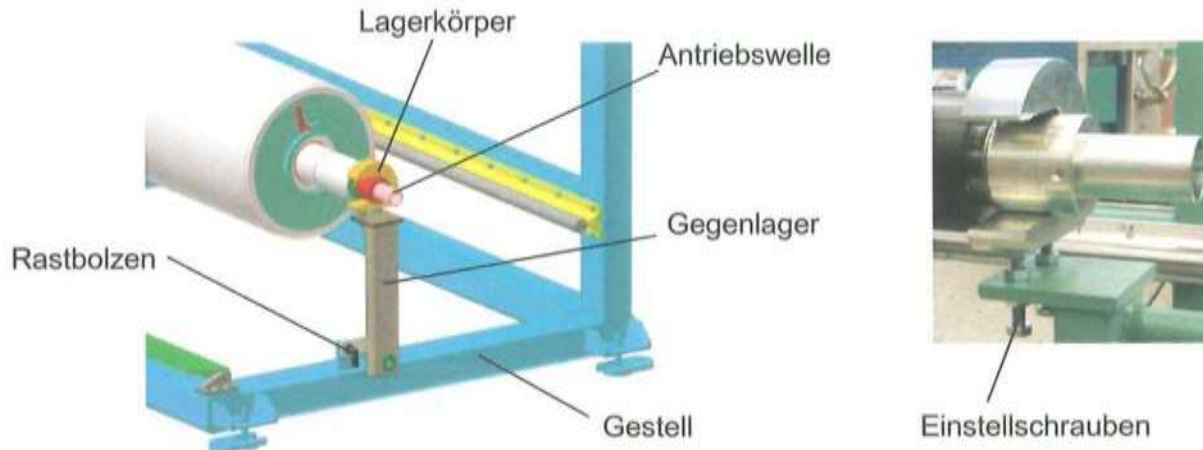
The laser pointer is mounted onto the safety guard of the cutter bar. It is used for the precise cut of the glass fiber mat. It ensures that the circular blade always keeps previously marked position when cutting the mat. The laser pointer can set different material diameters. As a result, the laser pointer points centrally onto the mat.



Gelenk=Hinge, Schutz Schneidwerk=Cutter Bar Safety Guard, Laser-Pointer= Laser Pointer
Figure 20: Laser Pointer

3.2.17. 95009-600-000 Prop

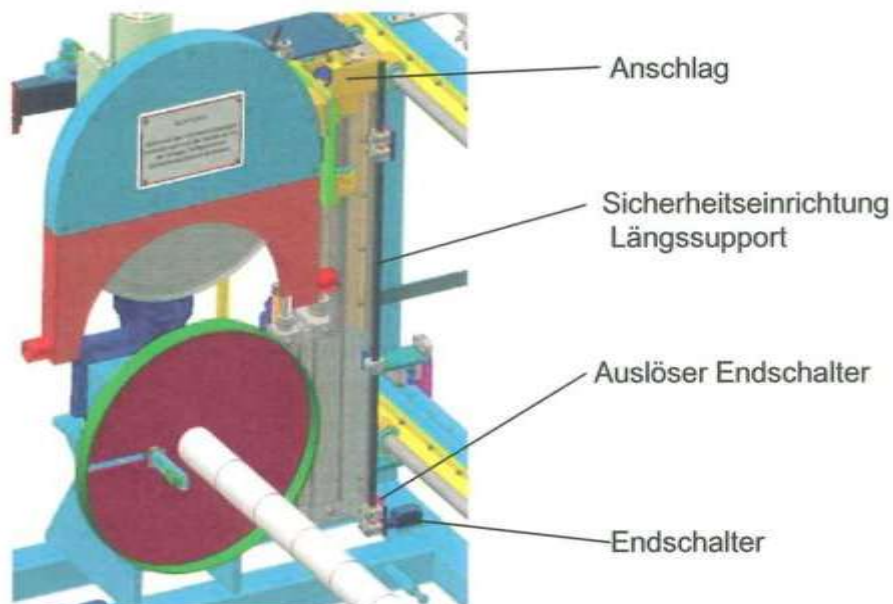
The prop serves as a support of the drive shaft for glass fiber mats. It is hinged to the frame and can be swung away for loading or unloading the mats. If the thrust bearing is in the working position, it takes the bearing bush of the drive shaft - on glass fiber mat, thus ensuring the correct mounting of the shaft. To secure the working position, the prop is equipped with a locking bolt. The bolt-bearing body can adjust the alignment with the shaft by set screws.



Rastbolzen=Locking Bolts, Lagerkörper=Thrust Bearing Body, Antriebswelle=Driving Shaft, Gegenlager=Prop, Gestell=Frame, Einstellschrauben=Adjustment Screws
Figure 21: Prop

3.2.18. 95009-700-000 Securing longitudinal support

This module is a security element to discontinue the longitudinal support when lowering the cutter bar. This way, the circular blade cannot collide with the safety guard of the drive shaft and be damaged. This involves a purely mechanical safety device that is triggered immediately when the transverse support lowers. In other words, the cutter bar in the uppermost position shift only into the left end position.



Anschlag=Stopper, Sicherheitseinrichtung Längssupport=Safety Support, Auslöser Endschalter=Triggering Limit Switch, Endschalter= Limit Switch
Figure 22: Securing longitudinal support

3.2.19. 95009-800-000 Pneumatics

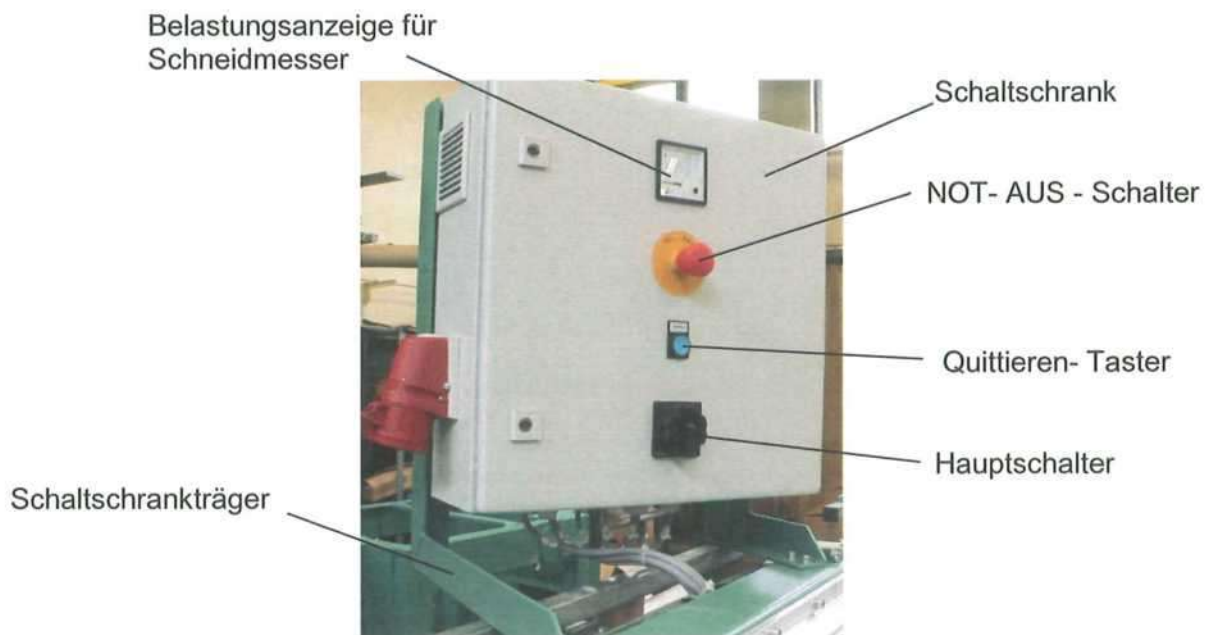
This module includes the pneumatic maintenance unit. All the pneumatic components of the machine are fed through the main connection to the local compressed air supply. The connection of the machine to the existing compressed air supply is provided through the standard quick connector coupling. The module is fixed to the frame on the right side of the machine. See the pneumatic diagram in the Annex 1.



(Wartungseinheit = Maintenance Unit)
Figure 23: Pneumatics

3.2.20. 95009-900-000 Switch Cabinet

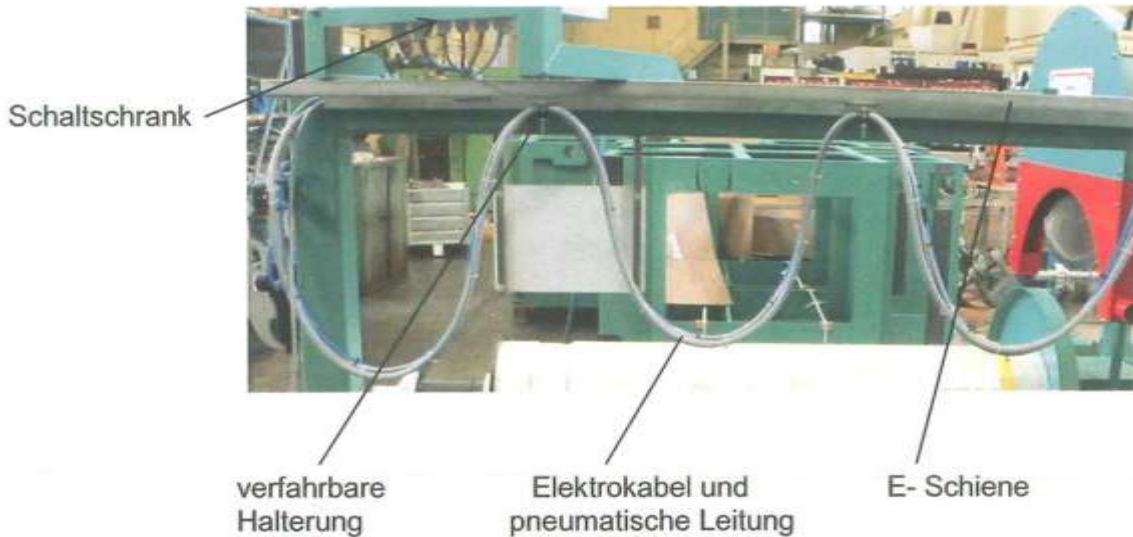
The switch cabinet comprises the entire control engineering. Through the switch cabinet, the Glass Mat Cutting Plant is connected to the electrical network and thus it is activated. In addition to the bracket module 95009-210-000 is also the switch cabinet an emergency OFF switch. The main power switch of the machine and the reference switch are also located there.



Schaltschrankträger=switch cabinet support Schneidmesser=cutting blade Schaltschrank=Switch Cabinet
NOT-AUS-Schalter=Emergency OFF Button Quittieren-taster=confirm button Hauptschalter=main power switch
Figure 24: Switch Cabinet

3.2.21. 95009-910-000 Cable Tray

The cable tray is an element to hold the cable stretched from the cabinet to the electric components. Since most of the electrical components are mounted in a movable way, the cable tray holds the cable and the pneumatic line. This trouble-free design increases the operational safety for it prevents cables and lines from damage.



Schaltschrank=Switch Cabinet Verfahrbare Halterung=Movable Fixing Point
 Elektrokabel und Pneumatische leitung=Electric Cable and Air Line E-Schiene=Cable Tray
Figure 25: Cable Tray

3.3. Technical Data

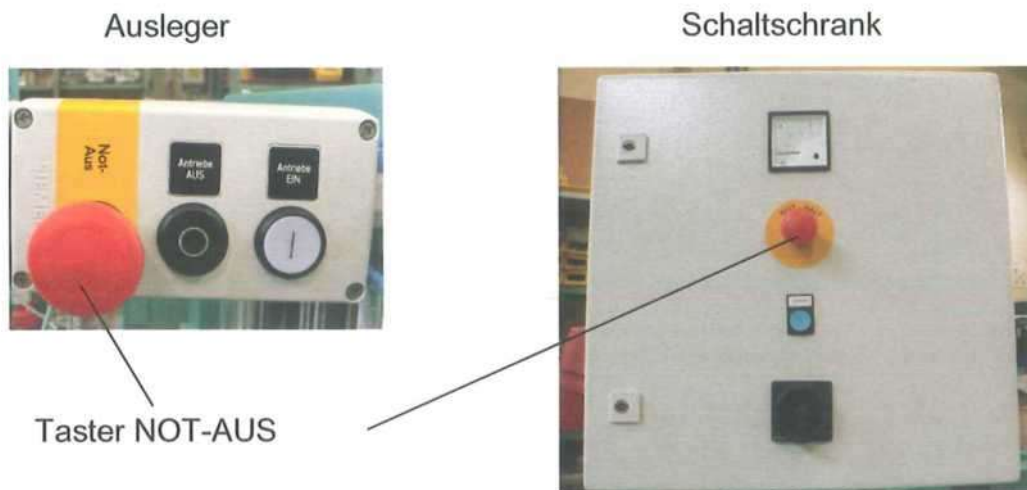
Length	2560 mm
Width	1660 mm
Height	2125 mm
Weight	750 kg
Operating Voltage	400 V / 50 Hz
Nominal Current	7,2 A
Control Voltage	24 V DC
Operating Pressure (Pneumatics)	6 bar

4. Band Cutting plant Operation

4.1. Safety Instructions

The information from the Chapter 2 „General Safety Precautions“ must be learnt before operating the glass cutting plant.

In case of danger, press the Emergency OFF (NOT-AUS) Button.



Ausleger=Arm, Schaltschrank=Switch Cabinet, Taster NOT-AUS=Emergency OFF (NOT-AUS) Buttons
Figure 26: Emergency OFF Buttons

In addition, the following conditions should be checked before each start of the system:

- All protective coverings are in place and secured
- No risk to people through the operation of the facility exists
- Linear bearings are clean
- The Emergency OFF Button operates

4.2. Emergency Switch Off (Emergency OFF)

If hazards due to the Glass Mat Cutting Plant operation occurs, press the Emergency OFF Button immediately.

The Emergency OFF Buttons bring the entire machine to the safe state. After verifying the proper condition of the installation, must ensure that Emergency OFF and Confirm buttons operate normally.

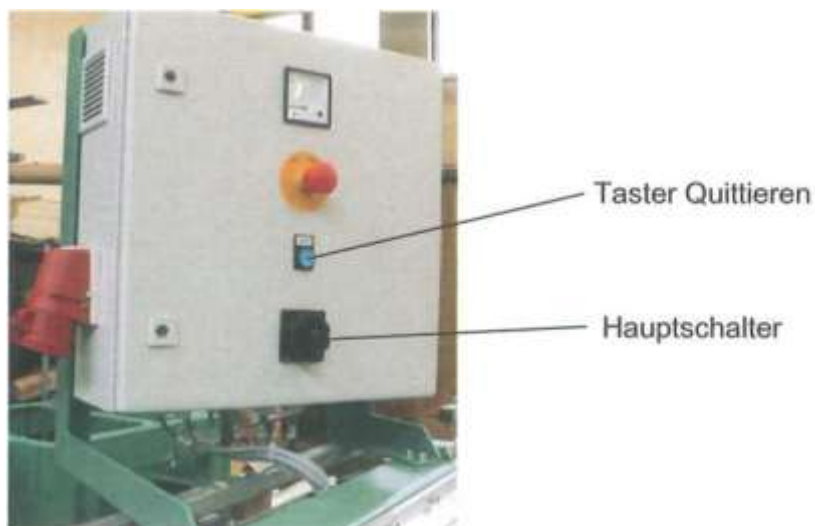
The Emergency OFF Button function should be checked daily before the operation (see Section 6.2.1).

4.3. Applying the fiber glass mat

- Unlock and swing down the thrust bearing (Figure 21)
- Scroll the fiber glass mats onto the shaft till the thrust washer, then slide back the mechanism
- Swing up and lock the thrust bearing
- Lock the glass mats and fasten them by means of straps
- Move the mat to the desired distance in the cutting plant with reduction ring if necessary and clamp it with the clamping lever.

4.4. Switching on the Glass Mat Cutting Plant

- Turn on the Main Switch
- Switch on the system by pressing the Confirm key



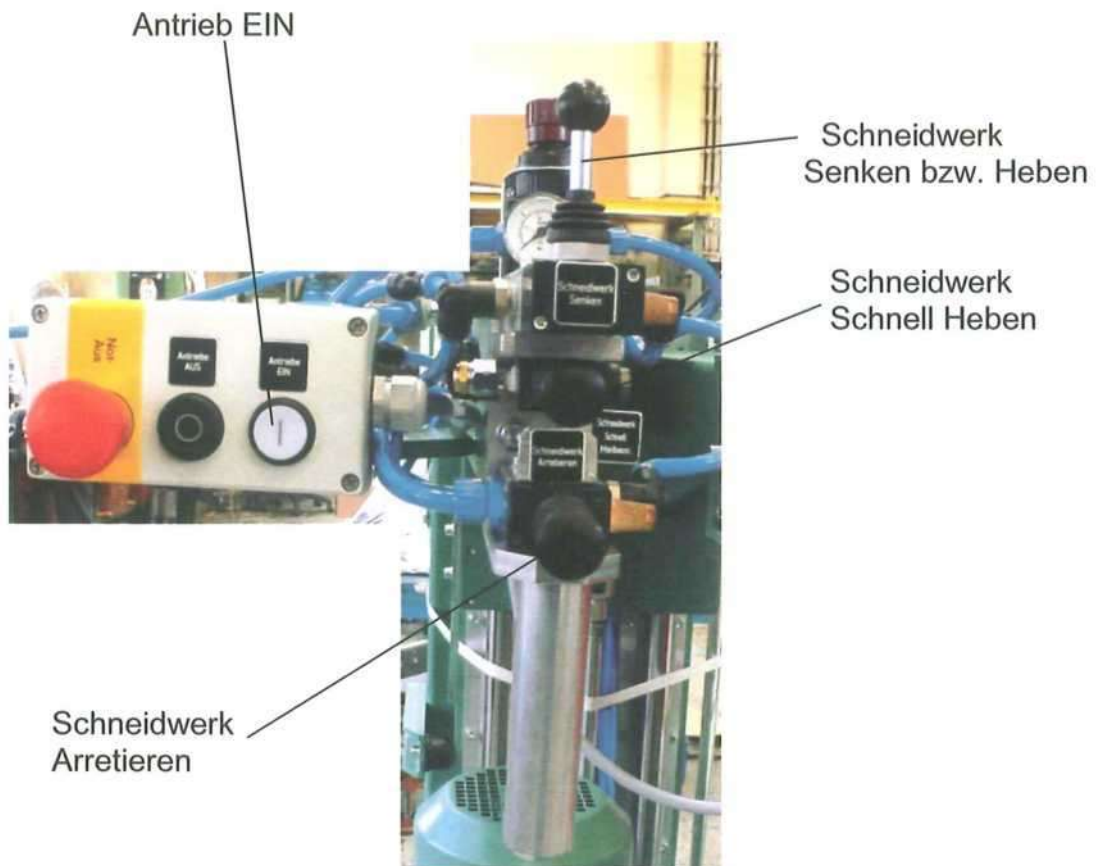
Taster Quittieren =Confirm button (Quittieren) Hauptschalter=Main Power Switch
Figure 27: Switch Cabinet

4.5. Setting the band width for cutting

- Mark the desired cut, the Foot Switch in the jog mode can rotate mats.
- Loose the braking mechanism by pushing the button Cutter bar Locking (Schneidwerk Arretieren) and slide the entire cutter bar into the top end position using the laser pointer over the marked signs.
- Cutter bar Lowering (Schneidwerk Senken) level lowers the Cutter bar 5-10 cm above the glass fiber mat.

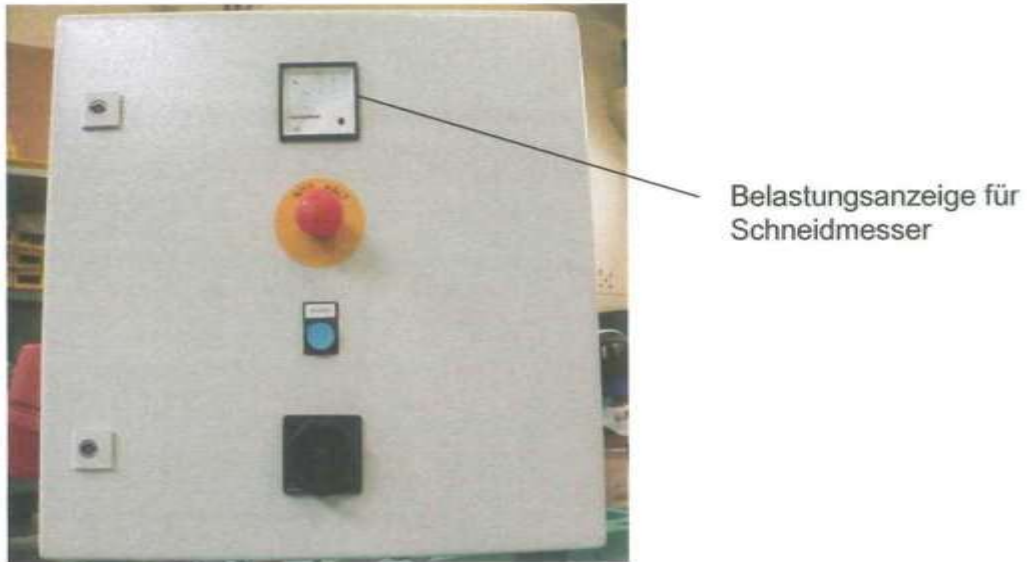
4.6. Stating the Cutting Process

- With the button "Drives ON" ("Antrieb EIN"), a glass fiber material is rotated
- Simultaneously pressing Drives ON ("Antrieb EIN") and "Cutter Down" ("Schneidwerk Senken"), move the cutter down and run the circular blade
- The "Load Indicator" ("Belastungsanzeige") value should not exceed 90% when cutting. Circular blade should be sharpened otherwise.
- After the circular blade has cut through the cardboard roll of glass fiber mat, the motors are switched off automatically.
- With the lever "Cutter Up" ("Schneidwerk Heben") enabled, the cutter moves up. While pressing "Quick cutter up" ("Schneidwerk Schnell Heben"), it will move to the upper position at high speed.
- Make the following cuts similarly to the first cut.
- After all the required cuts are made, stop the glass mat by pressing the "Cutter Lock" ("Schneidwerk Arretieren"), release the brake and bring the cutter to the safe position (far left position).



Antriebe EIN=Drives ON(Antriebe EIN), Schneidwerk Senken bzw. Heben =Cutter Down or Up (Schneidwerk Senken), Schneidwerk Arretieren=Cutter Lock (Schneidwerk Arretieren), Schneidwerk Schnell Heben=Quick cutter up (Schneidwerk Schnell Heben)

Figure 28: Arm with Controls



Belastungsanzeige für Schneidmesser = Cutting Blade Load Indicator
Figure 29: Load Indicator in the Switch Cabinet

- Release and swing down the prop
- Loosen the material fixture and remove it from the shaft.
- Loosen the strap and take the cut bands off the shaft
- Prepare the next glass fiber mats
(steps to be done are according to the sections 4.3., 4.4., 4.5., 4.6.)

2. Troubleshooting

Procedure for troubleshooting on the Glass Mat Cutting Plant according to the Troubleshooting Table below. If this does not help, contact the machine manufacturer. Often, interference from incorrect operation or maintenance are sufficient. The information contained in this chapter shall be observed.

Fault	(Possible) reason	Troubleshooting
Bands cutting system cannot be unlocked (Confirm)	<ul style="list-style-type: none"> • Emergency OFF is not reset • Motor Protection Switch has triggered 	<ul style="list-style-type: none"> • Reset the Emergency OFF • Eliminate the causes of the motor overload, switch on the Motor Protection Switch (Switch Cabinet)
The Cutter bar stops without pushing «Cutter bar Lock» («Schneidwerk Arretieren») button	<ul style="list-style-type: none"> • Absent or insufficient pneumatic pressure 	<ul style="list-style-type: none"> • Check the pneumatic pressure and adjust if necessary
Roller Motor fails to start	<ul style="list-style-type: none"> • Electrical defect 	<ul style="list-style-type: none"> • Notify an electrical engineering specialist
Blade Motor fails to start	<ul style="list-style-type: none"> • Electrical defect • Read error at the pneumatic pressure sensor (pressure difference) 	<ul style="list-style-type: none"> • Notify an electrical engineering specialist • Eliminate the error by reediting the Pressure Sensor (blue button on the sensor)

3. Maintenance

Attention! Before performing any maintenance, the Glass Mat Cutting Plant must be disconnected from the circuit: unplug the machine and make sure that no unauthorized person can restore the connection to the circuit. When restoring the connection to the circuit has to be ensured that nobody must be endangered.

The information contained in chapter 2 "General Safety Precautions" must be known for the maintenance of the Glass Mat Cutting Plant.

3.1. Maintenance Schedule

In the maintenance schedule to regularly amount of work we have, more detailed activity description are in the following sections, if they are necessary. These activities are marked with an asterisk (*).

The work carried out should be documented so that it is traceable this way.

Activity	Frequency/Time
General cleaning	Daily or when necessary
Checking the unit for damage or wear (including movable cables and hoses)	Daily before starting to work
Checking the linear bearings for dirt and cleaning if necessary	Daily before starting to work
Checking the Emergency OFF*	Daily before starting to work
Checking the limit switch for correct operation	Monthly
Checking the pneumatic hoses for cracks and leaks	Monthly
Checking the pneumatic fittings and cylinders for leaks	Monthly

3.2. Maintenance operations

3.2.1. Checking the Emergency OFF

- Turn on the Glass Mat Cutting Plant (Chapter 4.4.)
- Start cutting (Chapter 4.5.)
- Enable the Emergency STOP button
- The entire system turns off

If the system does not respond as described above, the operation is halted immediately and repairing is to be initiated.

For more information, see the chapter 4.2.

4. Control – Program Description

Program Description for Glass Material Cutting Plant

Release Details:

When the Emergency stop relay and motor protection switch are in normal position, all the controls are active. To activate the emergency stop relay after operation or voltage recovery, close the emergency stop circuit (all emergency stop switches are unlocked) and then press the reset button on the switch)

If the release attracts the main contactor of the belt drives. Once emergency stop is activated or the motor protection triggers, the release is removed and the main contactor drops out.

Thus, any roll or blade movement is no longer possible.

Drive roller:

The roller drive has 2 operation modes.

1. Jog Mode

The cutter head is in the upper end position, the roller drive by means of the foot switch can be turned on.

The drive remains on until the operator takes his foot off the switch.

2. Continuous operation

The cutter head is not in the left end position, the roller drive with the button "Antriebe EIN" ("Drives ON") can be switched on permanently. The Drives operate until the button "Antriebe AUS"("Drives OFF") is pressed.

Blade drive

The blade drive can only be switched on when the cutter head is not in the left end position, the button "Drives ON" („Antriebe EIN“) is pressed and the cutter head is in downward movement. Message of the pneumatic lever is „Messerkopf Senken“ ("Cutter Head Down") in position stands. If one of the two button / lever is released, the blade drive stops.

The activation of the pneumatic lever takes the control over the pressure switch. It is therefore essential to make sure when reconnecting the machine and changing the operating pressure, that the pressure switch is teached properly!!! The teaching of the pressure switch is as follows:

1. Switch on the compressed air
2. Bling the blade to the upper end
3. Bring the lever to the "Cutter Head Down" („Messerkopf Senken“) position
4. **During** the sinking of the blue Teach-IN switch, the pressure sensor blinks with orange color
5. Release Teach-IN switch
6. Terminate the sinking

The pressure switch is properly adjusted when it is lit in orange during the downward moving.

Laser pointer

The laser pointer represents the point on the roll, wherein the blade enters. It is activated when the cutter head is not located in the left end position, but in the upper end position. When the cutter bar is in the standby position or is in the motion, the laser spot is not visible.

The schematics for glass mat cutting plant are shown in Annex 1.

EC Declaration of Conformity

Annex II A1 of EC Engineering guideline (2006/42/EG)

The Manufacturer	P-D Glasseiden Oschatz GmbH BS Glasmaschinenbau Ilmenau Langwiesener Str.16 D-98693 Ilmenau
declares that the machine described hereinafter	Glass Mat Cutting Plant Drawing No.: 95009-000-000
the health and safety requirements of the following EC directives:	
<ul style="list-style-type: none"> • Machinery Directive 2006/42 / EC • Low Voltage Directive 73/23 / EEC (latest amended by Guidelines 93/68 / EEC) • the Electromagnetic Compatibility Directive 89/336 / EEC (last amended by Directive 93/97 / EEC) 	
<i>Harmonized standards applied:</i>	
EN - ISO 12100 Part1 Part 2	Safety of machinery General principles for design; Technical principles and specifications
DIN EN 294/349/811	Safety distances to prevent danger zones being reached by upper limbs, minimum clearances to avoid damaging parts of the body.
DIN EN 60204-1	Safety of machinery - Electrical Equipment for Machinery – Part 1: Common Requirements for the electrical equipment of machines"

Constructional changes, which affect the technical data and the intended use, are specified in this manual. Therefore, changing the machine substantially, makes this Declaration of Conformity null and void!

Ilmenau, the 01.12.2010

Schwiering
Managing Director