



Operating Manual

PFT BOARDMASTER XL
Safety - Installation and Startup
Operation - Parts List



Mobile table for cutting boards

Article number of Operating Manual: 00 23 71 30

Article number of Machine Parts List: 00 18 47 18



Read the Operating Manual prior to beginning any task!

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1 Table of Contents

1	Table of Contents.....	3		
2	EC - Conformity Declaration.....	5		
3	General.....	6		
	3.1 Information about the Operating Manual	6		
	3.2 Information on safety notes	6		
	3.3 Explanation of symbols.....	6		
4	Safety Signs in this Manual	7		
5	Fundamental Safety Notes.....	8		
	5.1 Behaviour in the event of emergency..	8		
	5.2 General safety notes	8		
	5.3 Observing the Operating Manual	10		
	5.4 Fundamental safety measures under normal operation.....	11		
	5.5 Fundamental safety measures during maintenance	11		
6	Special Safety Notes for Operation.....	12		
7	Technical Data.....	13		
	7.1 Work machine.....	13		
	7.2 Electrical connection values	13		
	7.3 Operating condition	14		
	7.4 Sound power level LWA	14		
	7.5 Pneumatic unit for elevating system..	14		
	7.6 Workpiece.....	14		
8	Appropriate Use	14		
9	Installation Place.....	15		
10	Dust Extraction Equipment.....	15		
11	Design of the Machine.....	16		
	11.1 Movement Directions.....	16		
	11.2 Working directions	17		
12	Assembly	18		
	12.1 Assembly 1 ALU machine table.....	18		
	12.2 Assembly of 2-equipment head.....	19		
	12.3 Overview of equipment head	20		
	12.4 Assemblies 3 and 4 milling and sawing units	21		
13	Startup	22		
14	Tool Change.....	23		
	14.1 Milling unit 1050 Watt (optional 1800 Watt).....	23		
	14.2 Sawing unit.....	23		
	14.3 Groove sawing unit	24		
15	Operating Elements	25		
	15.1 Main switch and working socket	25		
	15.2 Troubleshooting / remedy	26		
	15.3 Equipment unit plug-and-socket connector.....	26		
	15.4 Equipment switch of the milling, sawing, and groove sawing units	27		
	15.5 Control panel - equipment and braking.....	28		
	15.6 Operation of longitudinal and transverse axis – position display	30		
16	Electrical Equipment.....	31		
	16.1 Brake magnets	31		
17	Pneumatic Unit for Elevating System	32		
	17.1 The pneumatic unit for elevating system on the rear side of the equipment head.	32		
	17.2 Setting the lifting and lowering speed of the units	33		
18	Maintenance and Care	33		
19	Guarantee Regulations	34		
20	Warehouse and Transportation Conditions.....	35		
21	Disposal of the Machine	35		
22	Mounting the Machine Table.....	36		
23	Mounting the Machine Head.....	37		
	23.1 Machine head and its alignment	38		

Table of Contents

24	Mounting the Pressed Chip Boards (on Machine Table)	42	32	Set the Milling Unit's Milling Depth.....	51
25	Assembly of the Stop Limit Strips (MDF)	43	33	Setting the Milling Unit's Stop Limit	54
26	Connect the Dust Extraction Equipment .	45	34	Checklist – Please Tick	56
26.1	Connect the dust extraction equipment with the industrial vacuum cleaner.....	45	35	Spare Parts List	57
26.2	The view of the machine with a connected dust extraction hose	45	36	Accessories.....	61
27	Supplying Voltage to the Machine	45	36.1	Article Number 00207783 Boardmaster's new milling set:.....	61
28	Setting the Sawing Unit's Cutting Depth .	46	36.2	Article Number 00206494 Boardmaster's small tools set	61
29	Setting the Stop Limit of the Transverse Axis.....	47	36.3	Article Number 00206422 Boardmaster's tool set, full equipment No: 46175	62
30	Cutting-off the MDF Stop Limit Strip.....	48	37	Tools	67
31	Laying the Gypsum Board	49	38	Consumables	70



2 EC - Conformity Declaration

Company: Knauf PFT GmbH & Co. KG
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Assumes responsibility by declaring that the following machine:

Machine type: PFT Boardmaster
Device type: Mobile table for cutting boards
Serial number:
Guaranteed sound power level: 95 dB

conforms to the following CE - guidelines:

- Outdoor Guideline (**2000/14/EC**),
- Machine Guideline (**2006/42/EC**),
- Guideline on Electromagnetic Compatibility (**2004/108/EC**)

Applied conformity evaluation process according to Outdoor Guideline 2000/14/EC:
 Internal production control according to Article 14, Section 2 in connection with Annex V

This declaration is based on the state of the machine as launched on the market. Parts and/or subsequently undertaken conversions by the final user are not accounted for. The declaration will be invalid if the product is modified or converted without manufacturer's approval.

Person authorized to compile relevant technical documents:

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Technical documents are deposited by:

Knauf PFT GmbH & Co.KG, Technical Department, Einersheimer Strasse 53, 97346 Iphofen.

Iphofen, _____

Dr. York Falkenberg

Managing Director

Place and date of issue

Name and signature

Details of signatory

3 General

3.1 Information about the Operating Manual

This Operating Manual gives important hints on how to handle the equipment. The prerequisite for working safely is to observe all the specified safety notes and handling instructions.

Moreover, local accident prevention regulations and general safety provisions for the place of application of the equipment must be observed.

Read the Operating Manual thoroughly prior to beginning all tasks! It is a product's component and it must be kept near the equipment, and must be accessible to personnel at all times.

In the event of handing-over the equipment to a third person, hand over the Operating Manual as well.

The diagrams in this Manual are not drawn to scale for the sake of clarity of the subject matter, and they can slightly differ from the actual design of the equipment.

3.2 Information on safety notes

These safety notes give important hints on how to handle the equipment. The prerequisite for working safely is to observe all the specified safety hints and handling instructions.

3.3 Explanation of symbols

Warning Notes

Warning notes in this Operating Manual are typified by symbols. The notes are introduced by signal words that express the scope of danger.

Ensure to observe the notes and act with precaution to avoid accidents, injury to persons and damage to property.



DANGER!

... refers to a directly dangerous situation, which may lead to death or to serious injuries if not avoided.



We congratulate you for purchasing this Mobile Table for Cutting Boards, whose conception is oriented towards efficiency and comfort in going about your daily work.

It was developed by experts - for experts. You therefore own a PFT – brand product that will please you for many years to come.

4 Safety Signs in this Manual

The safety symbols together with the text of the safety note should draw attention to unavoidable rest danger when operating the machine. This rest danger refers to persons, the machine, other objects, and to the environment.

The following safety symbols are used in the present Operating Manual:



DANGER!

This symbol refers to danger to life and health of persons - above all, it also refers to danger to machine, objects, or to the environment.

Should these notes be ignored, severe - and even fatal injuries can occur.



Warning!

This symbol indicates that danger to the machine, objects, and to the environment exists - danger to persons is not expected.

Should these notes be ignored, this can lead to malfunction and damage to the machine, to property, and to the environment.



This symbol draws attention to the fact that particularly danger to health exists.

This danger is posed by sharp, cutting, and rotating tools.



This symbol draws attention to the fact that particularly danger to health exists.

This danger is posed by moving parts with clamping or squeezing effect.



This symbol draws attention to particular danger of electric voltage to life and health of persons.



Note!

This symbol typifies notes that can contribute to better understanding of the machine; the information helps you to use the machine optimally. This symbol does not typify any safety notes.

Please also observe that a safety symbol can never replace the text of a safety note - the text of a safety note must therefore be fully read at all times.

5 Fundamental Safety Notes

5.1 Behaviour in the event of emergency



DANGER!

- In case of a dangerous situation on the equipment (e.g. DANGER due to unexpected malfunction), the equipment must be stopped immediately.
- It is possible to stop the equipment immediately (mains separation) by means of the **EMERGENCY OFF - Main Switch** - at the control panel, or through **separation from the mains supply** (pulling off the plug). This switches Off the power supply immediately.
- Inform a physician and the trade supervisory board in the event of an accident and/or inform the authorities responsible for you.
- Particularly, in cases of high-voltage accidents, immediate first-aid measures must be performed by appropriately trained personnel.

5.2 General safety notes

- Use the machine appropriately. The mobile table for cutting boards may only be used for the intended purpose.
- Keep your machine and accessory in order. A neglected machine or accessory implicates accidental danger.
- Inspect your equipment and the accessory regularly for damage. Check whether movable and safety parts function properly, and ensure that they are neither jammed nor damaged.
- Consider environmental influences. Do not expose electric tools to moisture. Do not use electric tools near flammable liquids or gases.
- Protect yourself against electric shock.
- Keep children away! The mobile table for cutting boards with its accessory is not a toy. Ensure that children do not touch the tool or cable.
- Wear suitable clothing. Do not wear loose clothing or jewellery; they can be caught in moving parts. Wear hair net in case you have long hair.
- CATER FOR SUFFICIENT LIGHTING OF THE WORKING AREA!
- WEAR PROTECTIVE GOGGLES!
- USE THE VACUUM CLEANER SUPPLIED WITH THE MACHNE FOR SAFE AND DUST-FREE WORK!



Fundamental Safety Notes

- USE A RESPIRATORY MASK for tasks producing dust and chips!
- ALWAYS WEAR EAR PROTECTION!
- Secure the workpiece. Use proper clamping equipment to hold the workpiece.
- **ATTENTION!** Prior to changing machine units, the entire equipment must be switched off. This is done using the main switch (see Item 11).
- Pay attention to a safe stand in order to have balance in every working position.
- Avoid inadvertent switch-On. Ensure that the main switch is switched-Off when connecting it to the mains.
- Always remain vigilant. Concentrate on your work. Proceed rationally. Do not use the machine when you are tired.
- This machine may be used only by persons considered suitable by the works manager.
- All persons that carry out tasks on the machine must read the Operating Manual and by signing it, confirm that they have read and understood the Operating Manual.
- Transportation of individual components that are heavier than 25 kg must be undertaken by at least two persons (see Technical Data). (Per person 25 kg).
- Switch off the equipment and wait until the tool has reached the resting position, before you leave the workplace. The mains plug must be pulled out whenever it is out of use, prior to maintenance and during tool change. The main switch must be locked against restart.
- Never touch the units when the machine is running. Never lift the units by means of the tools (saw blades or mills) nor touch under them. When you carry out tasks on the units (e.g. height adjustment on sawing or milling units), switch off the main switch of the machine, and detach the machine by pulling out the mains plug. During normal work, use the pneumatic elevating system for lifting and lowering the units.
- Never leave the tool key stuck on. Prior to switching on, check whether the key and setting tools are removed.
- Use the correct tool. Appropriate usage is described in this Operating Manual. You achieve optimum quality by using the correct tool and ensure your personal safety.

Fundamental Safety Notes

- **WARNING!** Using other tools and accessories or carrying out tasks with an electric tool, which does not conform to appropriate use, can lead to accidental danger.
- Handle the cable with care. Do not use the cable to pull out the plug from the socket. Protect the cable from heat, oil, and sharp edges.
- Look after your tool with care. Keep the tools sharp and clean to be able to work well and safely. Follow the maintenance regulations and notes for tool exchange. Inspect the plug and cable regularly and in case of damage, let the PFT Customer Service renew them. Inspect the extension cable regularly and replace them in the event of damage. Keep the switch dry and free from oil and grease.
- Inspect your mobile cutting table incl. its accessories for damage. Prior to use, the electric tools must be checked for proper and appropriate function. Check whether movable parts are damaged. All parts must be mounted correctly to ensure proper operation of the machine. Damaged parts and protective apparatus must be repaired appropriately or replaced. Do not use the machine when the switches are defective. Damaged switches must be replaced by a PFT - Customer Service.
- Let repairs be carried out by a PFT - customer service. This mobile table for cutting boards conforms to relevant safety provisions. Repairs may only be carried out by a PFT - staff, otherwise accidental danger can occur to the operator.
- This machine is not suitable for operation in EX – areas (explosion threatened areas).
- The operator of the equipment is obliged to observe national rules and regulations.

5.3 Observing the Operating Manual

- This Operating Manual must be kept near the machine. It must be ensured that all persons that have to carry out tasks on the machine can read the Operating Manual at any time. In addition to the Operating Manual, also operating instructions in the sense of working safety and tools usage provisions must be put at disposal.
- In addition, the Operating Manual for the work equipment (milling unit and sawing unit) must be observed. All divergent usage notes (e.g. the tool change) are described in this Operating Manual.



- All safety notes signs and operating note signs on the machine must be kept always in a well readable state. Damaged or illegible signs must be renewed immediately.

5.4 Fundamental safety measures under normal operation

- During the operation of the machine, safety equipment may not be removed nor put out of operation.
- The operating personnel have to ensure that unauthorized persons do not linger in the work area of the machine.
- After switching off the machine, one must wait until all moving parts stand still before acting in the danger zone.



DANGER!

- The following inspection tasks must be carried out once a day prior to each Startup:
 - Check the machine for externally visible damages.
 - Check whether all safety equipment are functioning.

5.5 Fundamental safety measures during maintenance

- The servicing tasks specified in the Operating Manual - setting, cleaning, lubricating, Maintenance, inspection, etc. must be carried out as scheduled.
- Also, observe special details for individual components in this Operating Manual and in the accompanying manual of the manufacturer of the components.
- **Prior to carrying out servicing tasks**, the following items must be observed:
 - Switch off the central power supply using the main switch, close the main switch, and pull out the mains plug.
 - Immediately replace all machine parts that are not in proper condition.
 - Use only original spare parts or spare parts of the same type.
- **After completing the servicing tasks**, and prior to starting the machine, observe the following items:
 - Check all initially detached connections once again.
 - Check whether all initially removed protection apparatus, covers, etc. have been installed properly again.
 - Ensure that all used tools, materials and other equipment were removed from the working area.
 - Clean the work area.
 - Ensure that all safety equipment of the machine function properly

Special Safety Notes for Operation

6 Special Safety Notes for Operation



Warning of cut injuries!



Warning of cut injuries!



Protective goggles:

For the protection of eyes from flying parts and liquid sprays.

Ear protection:

For protection against hearing damages



Attention!

For tasks on electrical equipment:

- All tasks on the electrical equipment of the machine may be carried out only by trained electricians.
- Check the electrical equipment regularly:
 - Tighten loose connections again.
 - Replace damaged lines, cables, or defective equipment immediately.
 - Use only original spare parts.
- Pull out the plug prior to carrying out any task on the electrical equipment. The main switch must be locked against restart.
- When carrying out tasks on the system, DANGER of unexpected malfunctions exists as a result of:
 - A failure or interference on the control equipment
 - From external influences on the electrical operating means
- Never clean electrical equipment with water or similar liquids.
- For safety reasons, changes on the electrical equipment may not be made without authorisation.



7 Technical Data

7.1 Work machine

Dimensions of the work machine:

Details	Value	Unit
Length	4005	mm
Width	1899	mm
Height	1195	mm

Weight

Details	Value	Unit
Net weight of entire system:	139	kg

Weight of assemblies

Cutting table, main frame ALU	62	kg
Y-axis incl. equipment head	35	kg
X-axis of profile tube – guide	24	kg
X-axis of angular support	18	kg
Milling unit	4,7	kg
Sawing unit, transverse	6,05	kg
Sawing unit, longitudinal	6	kg
Suction system	13,10	kg
Milling unit 1.4 kW	5,05	kg
Groove sawing unit, longitudinal	8,3	kg

Optional

7.2 Electrical connection values

Electric

Details	Value	Unit
Voltage, 230V, N, PE / 50Hz	230	(V)
Power without external components	1800	W
Max. overall connection power	3000	W
Fuse	16	(A)

The building mains (socket outlet) must be protected with 16-Ampere fuse, and must be provided with a fault current protection switch with 30 mA.

(suitable adapters are available from PFT)

Working socket outlet	Yes (1*)
Remark (1*)	The external overall connection power at the socket outlet is: Max. 200W

7.3 Operating condition

The electrical equipment is only suitable for operation under dry conditions and at ambient temperatures from -10°C to 50°C. Operation under other conditions is not permissible!

7.4 Sound power level LWA

Sawing unit (manufacturer's specification)	97.9	(A)
Milling unit (manufacturer's specification)	99.0	(A)
Groove sawing unit (manufacturer's specification)	92.8	(A)

7.5 Pneumatic unit for elevating system

This machine is supplied with a pneumatic elevating system. A pressure controller is provided in the machine, which limits air pressure at 5 bar. The compressor finding application must develop at least 7 bar of pressure. The pressure hose must withstand pressure of at least 10 bar (tested). (Suitable compressors and pressure hoses are available from PFT).

7.6 Workpiece

Material Gypsum boards, gypsum fibre boards, cement fibre boards and hard gypsum boards, wooden fibre boards, pressed chipboards, soft fibre boards, composite aluminium materials and plastic boards

Maximum operating load	150 kg
Maximum board size	3,000 mm x 1,300 mm
Maximum board thickness 3,000 mm x 1,300 mm	40 mm

8 Appropriate Use



DANGER!

Cutting to size of gypsum boards, gypsum fibreboards, cement fibreboards and hard gypsum boards, wooden fibreboards, pressed chipboards, soft fibreboards.

Manufacture of moulded parts by means of V-groove mills for all above-mentioned materials.

ATTENTION!

Processed materials may not contain any metal parts (e.g. screws and bolts, nails, etc.).

Material application may only take place whilst the machine is switched off, and after the machine head has been pushed back.



9 Installation Place

The mobile table for cutting boards must be erected on a plane and dry place.

It must be ensured that sufficient space is available around the mobile table for cutting boards, so that it is accessible from all sides.

The lighting of the working area must be established in accordance with national safety provisions.

Supply cables and hoses must be laid such that they do not pose a stumbling danger in the working space.

Consider the traverse path of the machine and pay attention to sufficient length of the cable and hoses.

10 Dust Extraction Equipment

The mobile table for cutting boards is equipped with a suction hose. This is use for extracting dust from both machine units. Switching over between the units is not required.

When selecting the dust extraction equipment, pay attention to adequate capacity. The air speed should be 28 m/s, and the delivery capacity 72 m³/h.

The power of the dust extraction equipment is supplied by a 230 V mains (not via the Boardmaster).

During operation of the system, always ensure that the equipment switch on the dust extraction equipment is always set on the Automatic Mode "RA". Separately pressing the ON/OFF - switch is not necessary, since the dust extraction equipment is controlled by the cutting table. (Boardmaster is supplied with power via the dust extraction equipment).

Always use the dust extraction equipment supplied with the machine, for a safe and dust-free working process.



Note!

After switching off the machine unit the dust extraction equipment switches off after a delay time of several seconds. This represents the normal operation and serves for cleaning the entire suction channel.

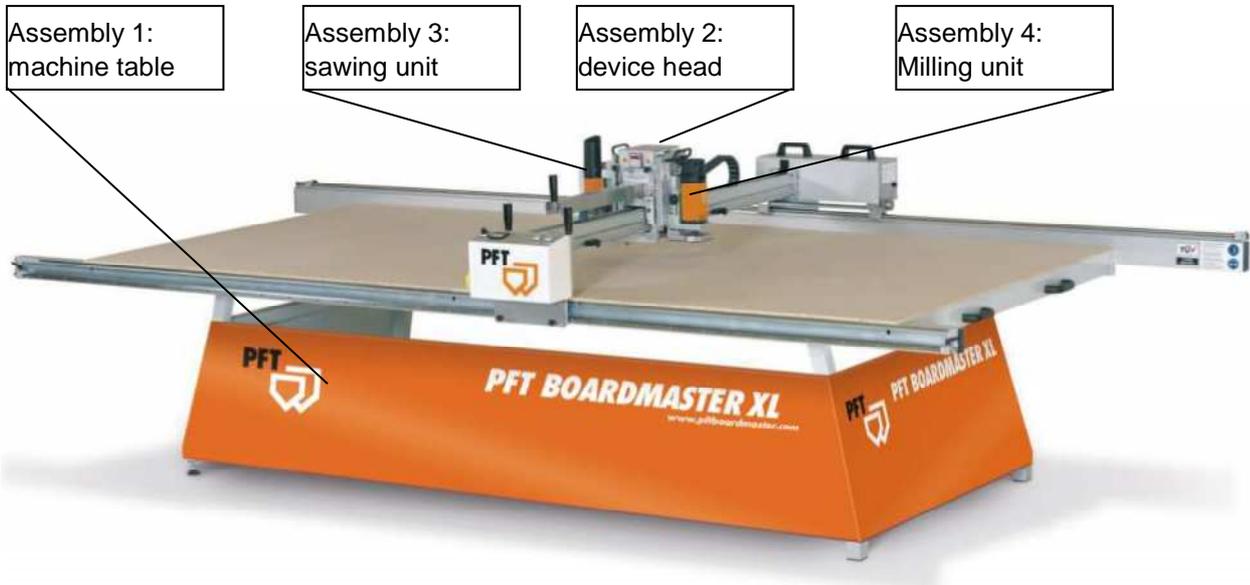


Note!

When using dust extraction equipment that is not recommended by us, injuries to persons and damage to the system can occur. In this case, we do not assume liability for personal or material damage.

11 Design of the Machine

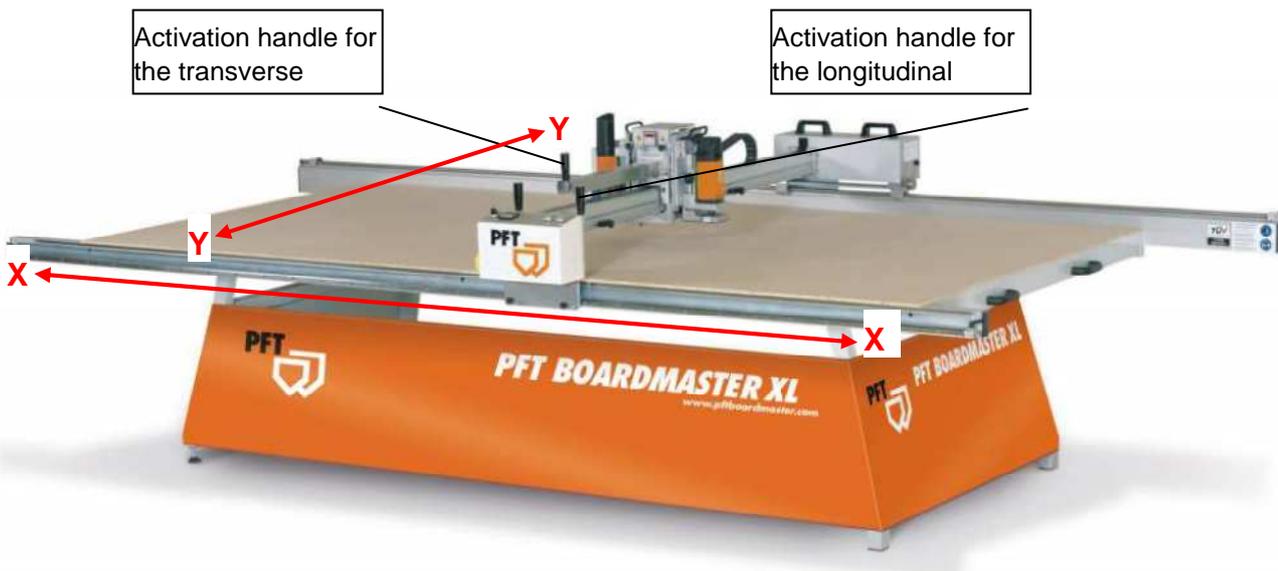
The equipment consists of 4 assemblies:



These assemblies can be accommodated in a delivery vehicle and upon arrival on the site they can be assembled by the user, ready for operation

11.1 Movement Directions

The movement direction is divided into longitudinal direction (X) and transverse direction (Y)



ATTENTION! Never use the Y-activation handle for movements in the X-direction!



11.2 Working directions

Work according to the selected unit mounting towards the left or right based on the unit designated **working direction (red arrow)**.

11.2.1 Milling



Fig. 11.01 Milling unit, right



movement direction in working application



Fig. 11.02 Milling unit, left



11.2.2 Sawing with saw blade in longitudinal alignment



Fig. 11.03 Sawing unit, longitudinal, right



movement direction in the working application



Fig. 11.03 Sawing unit, longitudinal, left



11.2.3 Sawing with saw blade in transverse alignment



Fig. 11.05 Sawing unit, transverse, right



movement direction in the working application

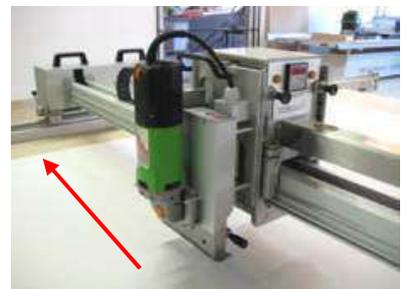


Fig. 11.06 Sawing unit, transverse, left



11.2.4 Milling with groove saw in longitudinal alignment

movement direction in the working application

Use the unit on the left and right side

Always observe the working direction (red arrow on unit)



Fig. 11.07 Groove sawing unit - longitudinal

12 Assembly

12.1 Assembly 1 ALU machine table



Fig. 12.08



Fig. 12.09



Fig. 12.10

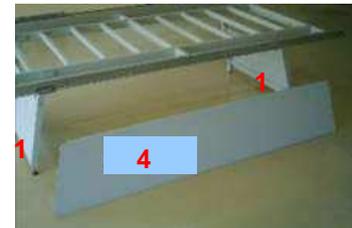


Fig. 12.11



Fig. 12.12



Fig. 12.13



Fig. 12.14

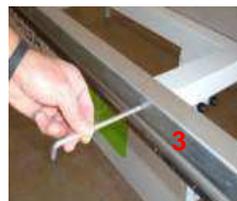


Fig. 12.15



Fig. 12.16

All components of the Assembly 1 are in Fig. (12.08)

First, the folded legs [1] of the cutting table are unlocked (12.09), and folded open (12.10). The unlocking process can occur whilst laid down and occur in a laterally upright state. When putting it laterally upright, attention must be paid so that a piece of wood is laid under it to avoid damages. The table is brought in the working position (12.11) and the connection plate [4] is connected with the feet [1] and pressed downwards until the 6 bolts have snapped in place (12.12, 12.13).



If necessary, a levelling compensation can be provided on the adjusting foot in one of the feet (12.14).

The screw-able guide rails [2] and [3] are mounted ex-works and set and can be dismantled for transport and be mounted again in the reverse order (12.15, 12.16).

The table assembly is dismantled in the reverse order.

12.2 Assembly of 2-equipment head

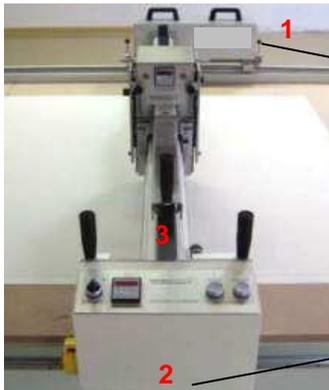


Fig. 13.01



Fig. 13.02

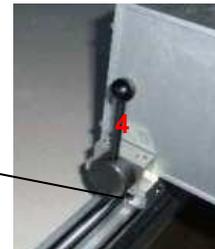


Fig. 13.03

These forms a unit with the guide slide of the X-axis [1 + 2] and the guide rail of the Y-axis [3].

This unit has [1] 2 centring boards on the underside of the guide slide and 2 clamping lever handles (13.03), as well as a guide trolley for supporting the guide rail at the end of the guide rail [2] (13.02).

Prior to placing the unit on the table, it must be ensured that the clamping lever handle is upright in a snapped in position (13.03 – [4]).

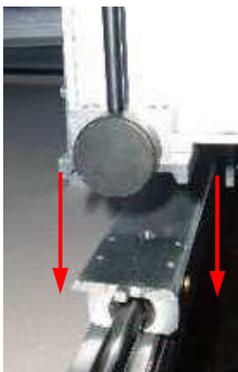


Fig. 13.04

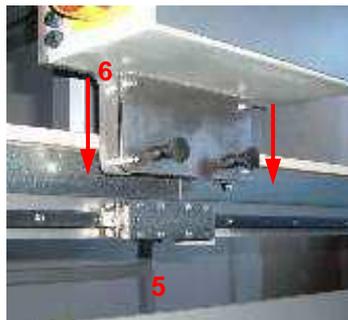


Fig. 13.05



Fig. 13.06

Now the unit is placed on the cutting table such that the two centring boards snap in place on the centring rail of the X-axis guide (13.04). Afterwards the guide carriage [5] is aligned on the recess of the holding plate [6] and lowered so far that the holding plate lies on the guide carriage (13.05 and 13.06). Now the locking bolts are turned by 90° until they snap in place.



Fig. 14.01

Reversing both clamping lever handles in the clamping position (14.01 - [1]).



Fig. 14.02



Fig. 14.03

For individual stroke limitation for the X-axis (14.02) and the Y-axis (14.03) clamping limit stops are provided. **The dismantling process occurs in the reverse order.**

12.3 Overview of equipment head

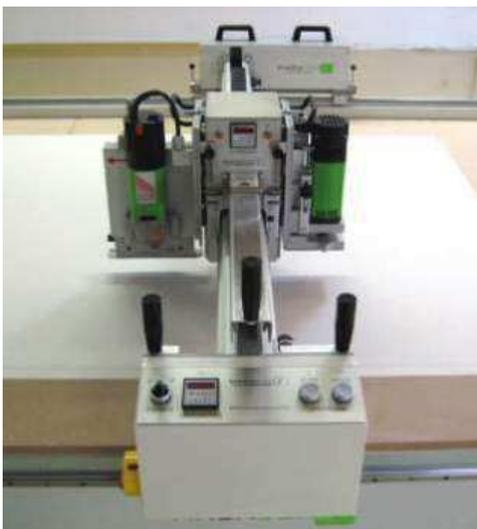


Fig.



12.4 Assemblies 3 and 4 milling and sawing units

Only original PFT units may be used.



Fig. 15.01 Milling unit



Fig. 15.02 sawing unit - longitudinal



Fig. 15.03 sawing unit - transverse



Fig. 15.03N multiple saws



1800 Watt milling unit

These units are stuck on the left and right side of the Y-slide (equipment head – 15.05) stackable as follows:

Adjustable height Boards (1)



Fig. 15.04



Fig. 15.05



Fig. 15.06

On this slide, left and, right adjustable height plates [1] are disposed. 2 Bolts each are attached at the lower edge on these plates, which have a V-cut (15.04). Likewise are electric plugs and the suction opening integrated in the plates (16.01, 16.03).

All three units have 2 long holes in their assembly plates on the bottom side [2] and likewise integrated electric plugs and the suction opening (15.06).

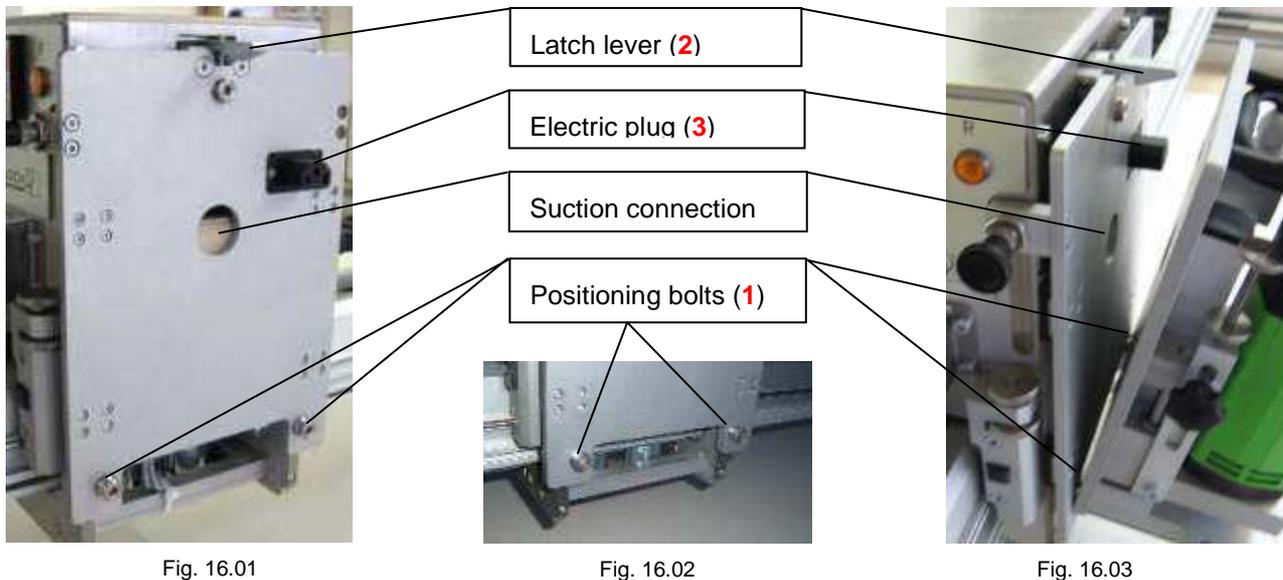


Fig. 16.01

Fig. 16.02

Fig. 16.03

By placing on a plate of the Y-slide (long-hole slots on the bolt with V-cut [1]) and pressing onto this plate, the unit will be fixed automatically by the above located latch lever [2].

The electric connection [3] and the suction connection [4] are thus provided.

The unit can be stuck on selectively in front or at the back as desired.

A unit is removed from the slide by lifting the latch lever [2] – slightly tilting the unit to drive out the E-plug [3] – and lifting out the unit from the bolt with V-cut [1].

13 Startup

- Close the equipment connection cable to the socket outlet of the dust extraction system.
- For Startup of the system, the main cable is attached to the mains and the main switch is turned to position 1.
- Switching on the main switch.
- Switching on the units (left – OFF - right) with the unit – selecting switch.
- After ending the work the units selecting switch is again turned to OFF.
- **Putting the unit out of operation** takes place by switching off and locking the main switch and subsequently pulling out the plug.



14 Tool Change

14.1 Milling unit 1050 Watt (optional 1800 Watt)

- ATTENTION! Prior to a tool exchange the units must first be switched off by means of a control panel button, then the mobile table for cutting boards is deactivated by means of the main switch, and afterwards the unit switch is turned to position ZERO.
- Remove the milling unit from the equipment head (refer to Item 9.4).
- To exchange the tool and/or the collets, manufacturer's Operating Manual (of the units) must be followed.



1050 Watt



1800 Watt

14.2 Sawing unit

- ATTENTION! Prior to a tool exchange the units must first be switched off by means of a control panel button, then the mobile table for cutting boards is deactivated by means of the main switch, and afterwards the unit switch is turned to position ZERO.
- Remove the sawing unit from the equipment head (refer to [Item 9.4](#)).
- Exchanging the tool:



Fig. 17.01



Fig. 17.02

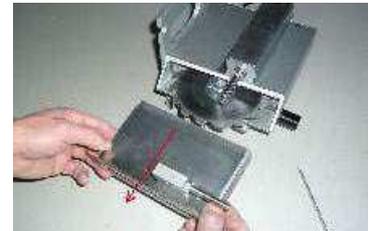


Fig. 17.03



Fig. 17.04



Fig. 17.05

14.3 Groove sawing unit

- **ATTENTION!** Prior to a tool exchange the units must first be switched off by means of a control panel button, then the mobile table for cutting boards is deactivated by means of the main switch, and afterwards the unit switch is turned to position ZERO.
- Remove the groove-sawing unit from the equipment head (refer to [Item 9.4](#)).
- Exchanging the tool:



Fig. 18.01



Fig. 18.02



Fig. 18.03



Fig. 18.04



Fig. 18.05



Fig. 18.06

Exchanging the cutting tool (sawing blades) takes place just as the longitudinal and/or transverse saws.

The assembly process occurs in the reverse order.

ATTENTION! During the installation of the saw blade, observe the rotation direction indicator on the groove-sawing unit and on the saw blade (18.06)



15 Operating Elements

15.1 Main switch and working socket



Main switch 0-1 with undervoltage trigger.

Applies also as emergency Off switch.

Electrical connection box



Socket outlet for working aids – an machine's backside max. 200 Watt

After plugging in the equipment connection cable on the dust-extraction equipment socket (230V / 50Hz) the equipment can be switched on with the **main switch**.

In order not to trigger dangerous movement after a voltage failure, during voltage return, a **main switch with undervoltage trigger** is used.

It switches the system off immediately in case of undervoltage.

The main switch prevents the system from being switched on when there is no power supply.

For the operation or working light, an unconnected **socket outlet** is at disposal.



Note!

Observe a **maximum overall connection power of 3.000 W**.

The **equipment own power consumption is max. 1.800 W**. (according to the **dust extraction equipment**).

The maximum connected power at the additional socket outlet is 200 Watt!

15.2 Troubleshooting / remedy

Observe the safety notes!

These tasks may generally only be carried out by specialist trained in the art!



In case of overload or in the event of fault in the system, a fuse **F1 to F4** in the connection box is triggered.

The main and/or emergency switch off can be switched only ON when the 230 Volt is present at the control unit.

To replace the defective fuse:

- **Pull off the mains plug of the system and remove the attached loads!**
- Turn the fuse screw connection F1 to F4 by means of a screwdriver and pull out the fuse. Replace each defective fuse only with an equivalent one. (Values are found further below in the manual.)
- **Check cables for visible damages.**
- **Let a defective cable be replaced immediately by a new suitable one.**

If the fault persists, consult the manufacturer of the system.

Fuses **F1 to F4**

Fuse **F1** control fuse 2A T 230Volt

Fuse **F2** socket outlet working aid 1A T 230 Volt

Fuse **F3** display for Y-transverse axis 400mA 24Volt

Fuse **F4** display for X-longitudinal axis 400mA 24Volt

Fuses: Standard glass tube fuses 230Volt 5x20 mm



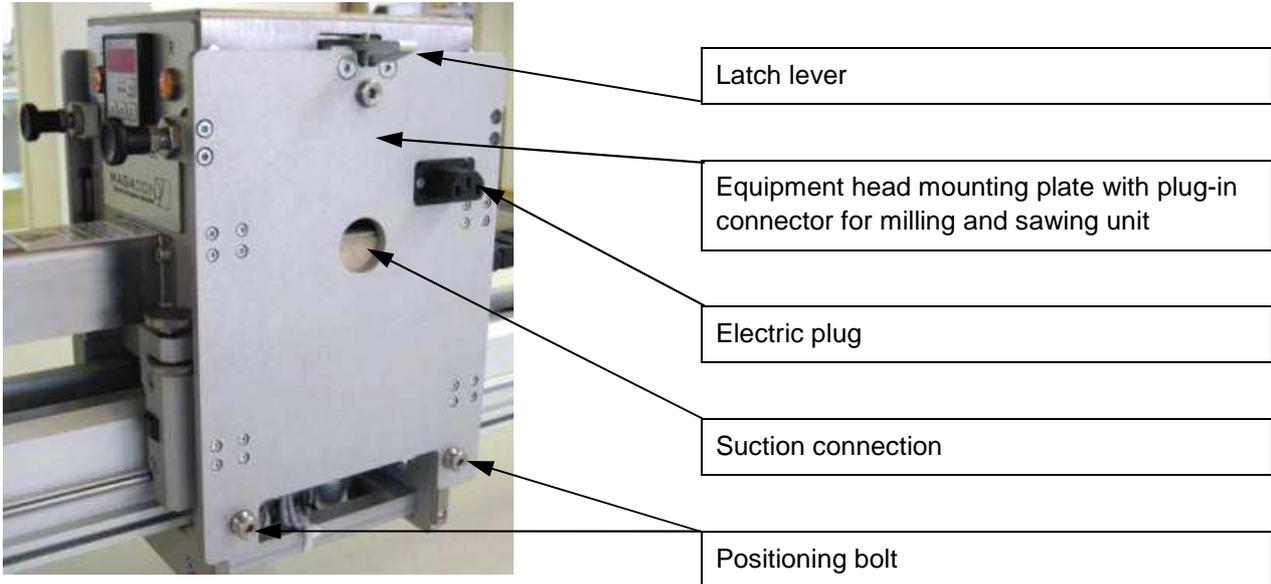
15.3 Equipment unit plug-and-socket connector

To be able to operate the equipment units on the equipment head, they are connected directly with the electrical plug-and-socket connector during mechanical attachment.

These plates and/or plug-and-socket connectors are executed in the same manner on both sides, so that usage of the units is possible on both the right and left side.



Operating Elements



15.4 Equipment switch of the milling, sawing, and groove sawing units

The 1400-Watt milling and sawing units have independent equipment switch. To operate the equipment via the control panel these switches must be activated. (The 1050 and 1800 Watt milling units are not provided with an independent equipment switch.)

15.4.1 Milling unit 1050 Watt



Milling unit 1800 Watt



Speed selector of the milling units

15.4.2 Sawing unit



Sawing unit switch 0 – 1

Speed selector of the sawing units 1 – 6

Operating Elements

15.4.3 Groove sawing unit



Groove sawing unit switch 0 – 1



ATTENTION

Prior to switching on the equipment switches of the units, the unit selector on the control panel must be set on "0" or "Off" in order to prevent inadvertent start of the units.

For the selection of the right speed, observe manufacturer's specification of the used cutting tool corresponding to the material to be machined.



NOTE!

If possible, always use the maximum speed (Stage 5)!



ATTENTION!

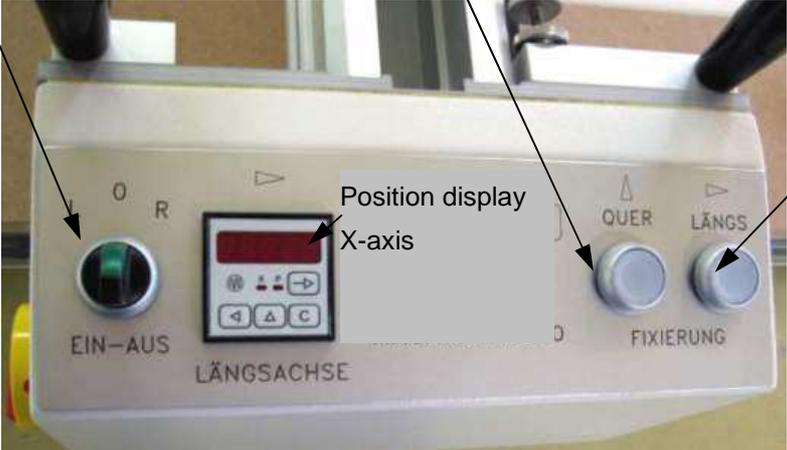
For the exchange of the units from and to the unit head, the control buttons and unit's switch must be switched off. Switch the main switch Off. Pull out the mains plug.

An inadvertent start of the units is thus prevented. For restart, the reverse sequence must be observed.

15.5 Control panel - equipment and braking

Units selector L – 0 – R	Locking button for brake in Y-direction On/Off	Locking button for brake in X-direction On/Off
--------------------------	--	--

Main and/or emergency Off switch





Operating Elements

Brake X 0 – 1:

This locking button is used to lock the brake in X-axis. After the button is pressed the signal lamp for the locking brake lights up. Displacement in Y-direction remains possible when it is not switched on at the same time. The X-direction is blocked. To release the brake the button is pressed anew, the signal lamp goes off.

Brake Y 0 – 1:

This locking button is used to lock the brake in Y-axis. After the button is pressed the signal lamp for the locking brake lights up. Displacement in X-direction remains possible when it is not switched on at the same time. The Y-direction is blocked. To release the brake the button is pressed anew, the signal lamp goes off.

Unit L - 0 - R:

This rotary switch is used to switch on the unit. Either the left (unit "L") or the right (unit "R") can be switched on (it is also marked on the equipment head by a signal lamp).



DANGER!

For a **Unit - or Tool Exchange**, the **Unit Switch must be set on OFF or "0"**. At the same time, **the Main Switch must be Off**. The system is then deactivated - without voltage. This prevents inadvertent start during exchange of the units.



NOTE!

In order for the units to be in operation, the units switch must be switched on (see units switch of the sawing and milling units). The operation then occurs via the control panel.



Main Switch

To be able to switch off the system quickly in emergencies, a yellow-red main switch (emergency Off switch) is installed laterally in the control panel; this de-energizes the system immediately.

To restart the system after pressing the main switches the red switch must be turned again to Position 1. This is only possible when the system is plugged in.



DANGER!

For every unit or tool change, the main switch must be switched Off, in order to prevent a dangerous start of the equipment.

Operating Elements

15.6 Operation of longitudinal and transverse axis – position display

The 2 position displays (Y and X-axis) are used for setting the cutting dimensions accurately.

The dimension is displayed in mm.



Transverse axis display (Y)



Longitudinal axis display (X)

C" Button: To the zero positions of the display (possible in each position)

The arrow buttons are required only for programming.

LED X lights up: Display shows the current counter state.

LED P lights up: Pre-selection value is displayed. (Function is blocked!)

LED X and P light up: Scaling factor is displayed. (Function is blocked!)

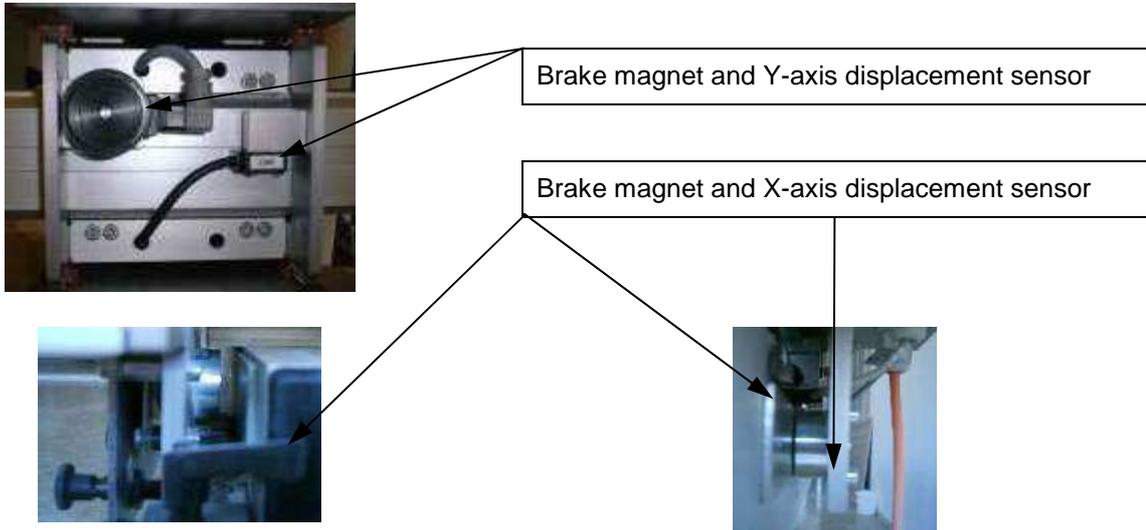
These values apply to both displays!



16 Electrical Equipment

16.1 Brake magnets

After setting the desired position in X- or Y-direction, the brake for X- and/or Y direction can be switched on by means of the locking button at the control panel.



Connection box and/or control panel / electrical

In this terminal box, there are only units that may only be serviced by trained electricians. The box is removable (plug-in connector to the equipment head).

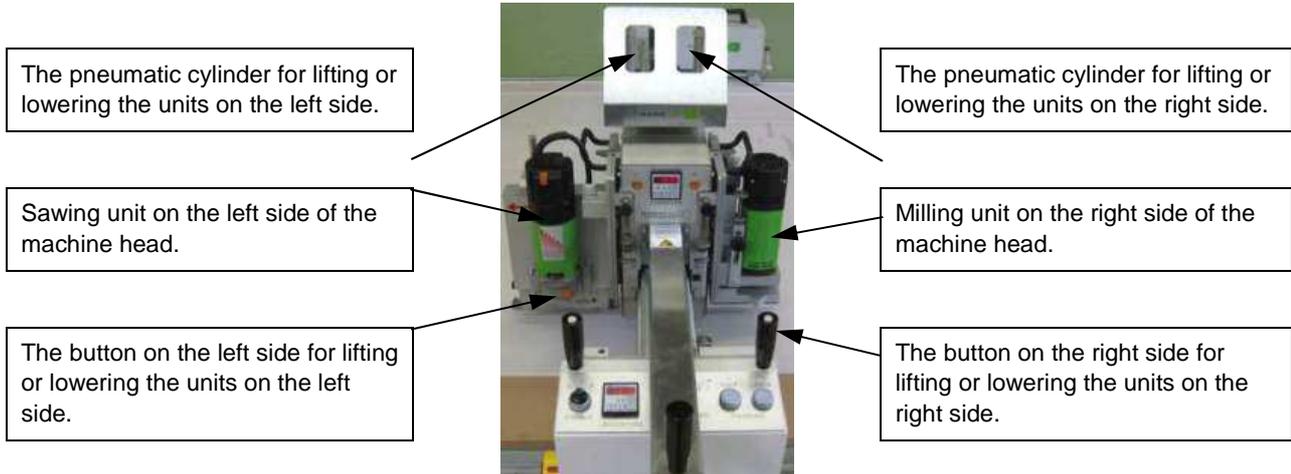
To eliminate a defect or a defective fuse F1 to F4 please go to Chapter 14 main switch and working socket outlets -troubleshooting / remedy



Pneumatic Unit for Elevating System

17 Pneumatic Unit for Elevating System

For automatic lifting and lowering of the units to the workpiece to be machined. This elevating system is an essential work facilitation, particularly in the rear section of the table as well as in the heavier units. By dispensing with manual lifting and lowering of the units, the milling and cutting performance of the machine is increased.



On both activation handles for the longitudinal direction (X – axis), there is the button for lifting and lowering the units.

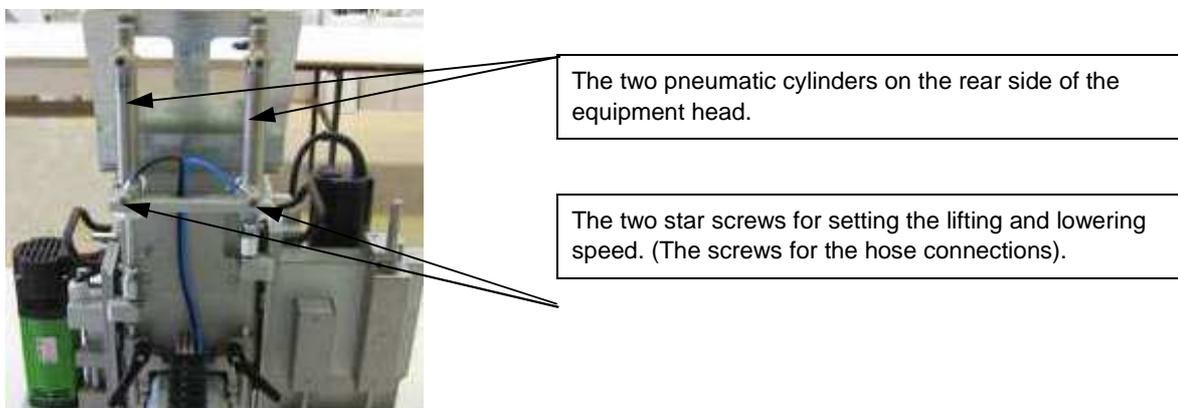
The button on the left activation handle lifts and lowers the units on the left side and the button on the right activation handle lifts and lowers the units on the right side.

By pressing the button once, the unit will be lifted or lowered, depending on where the unit was located prior to pressing the button.

Pressing the button once whilst the unit is lowered. – The unit is lifted.

Pressing the button once whilst the unit is lifted. – The unit is lowered.

17.1 The pneumatic unit for elevating system on the rear side of the equipment head.





Maintenance and Care



ATTENTION!

Prior to lowering the units (milling and sawing units) attention must be paid so that the workpiece was fixed and the hands are not in the lowering section of the units.



After completing the milling or sawing process, prior to lifting the units, the unit must be switched off with the units switch on the switching panel (0-Position).



Prior to lifting the units, the units switch must be switched off on the switching panel. (On – Off switch in "0" Position)



17.2 Setting the lifting and lowering speed of the units

On the underside of the two pneumatic cylinders, there are slotted screws in the hose connection, by what means the lifting and lowering speed can be set.



ATTENTION!

Should you change the lifting and lowering speed, proceed carefully, and check the lifting speed of the units for every small change.

The pressure is already set correctly ex-works.

(Too high velocity (= higher air pressure) can damage the mechanism.)

18 Maintenance and Care

All maintenance and servicing work may only be carried out when the main switch is off and mains plug detached.

To be able to increase the service life and precision, we recommend cleaning the stop limits and guiding surfaces from dust and dirt.

To be achieve he capacity of the dust extraction equipment it is necessary to clean the suction channels, lines and housing daily, or for work with heavy dust development also several times daily.

Never clean the system with compressed air, but rather only with the help of brush and/or vacuum cleaner!

Ensure that during the operation the channels for cable drag chain and suction hose in front and behind the equipment head is free of dirt and objects in order to ensure perfect function. Openly laid cables should be inspected for damage and replaced if necessary prior to every Startup.

Guarantee Regulations



For longer standstill periods or higher humidity it is certainly necessary to service the guide rails with a suitable rail oil (spray).

In that way you keep the machine in a good state.

For proper maintenance, the machine must be inspected by professional staff every 6 months.

19 Guarantee Regulations

Improper operation and maintenance based on this Operating Manual and Interventions and setting work that was not agreed upon by both parties lead to loss of guarantee.

The accuracy of the machine can only be ensured under the setup in this Operating Manual.

The guarantee does not apply to wear parts as well as to bearing brushes and carbon rods for the units as well as for inappropriate tasks and overloaded units.

For technical information, our Hotline (+49 9323 31 18 18) is at your disposal.

Incurred transport, packaging and consignment costs, as well as maintenance and setting tasks are not included in the guarantee claims and are billed as required.



Warehouse and Transportation Conditions

Complaints and guarantee claims can only be accepted and processed based on machine number on the type plate.

20 Warehouse and Transportation Conditions

- The head of the machine and the associated units should be packed in the provided transport boxes.
- The machine table has to be folded together (see Erection); the feet should be secured with rotary bolts and laid flat on the loading surface.
- The machine may not be exposed to the weather during the transport e.g. rain or snow.
- The machine and its parts must be loaded, secured, and transported according to valid loading and transport regulations.
- Always wear warning vests and suitable clothing when loading on public roads and places. (The protective clothing must always be used during loading tasks.)
- Transportation of individual components that are heavier than 25 kg must be undertaken by at least two persons (see Technical Data).
- The machine may be store only in dry rooms with temperature ranging from 10 to +50 °C.
- For longer storage, all blank steel parts of the machine must be oiled with grease.
- For storage in humid rooms or for overseas transport the machine must be tightly packaged and be protected against corrosion with a drying agent.

21 Disposal of the Machine

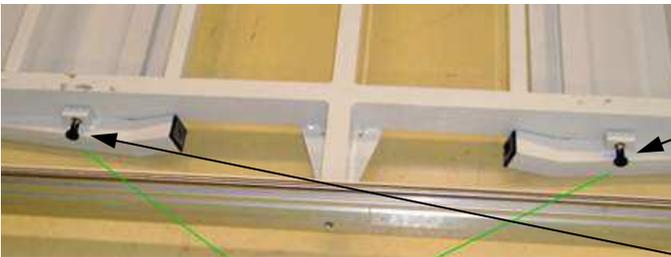
Bring the machine to your local or nearest waste disposal company.

Mounting the Machine Table

22 Mounting the Machine Table

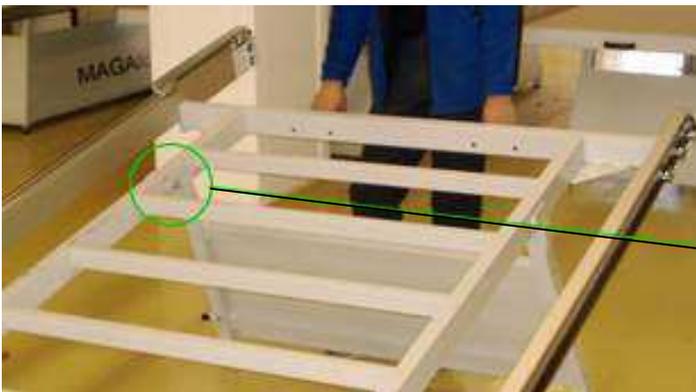


The machine table is laid flat on the floor at the place of installation.



The lock are pulled to fold the feet open and turned through $\frac{1}{4}$ rotation.

Unlock the locks by pulling and turning them about $\frac{1}{4}$ rotation. Afterwards the locks are fixed in the opened state.



Now the machine table is lifted with the lateral handles on one side and the machine foot folded fully backwards.

The safety flap is located here



Feet are open; please never forget to close them!



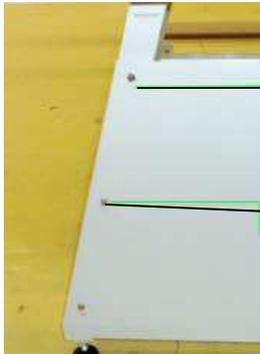
Here the feet were closed correctly.

On the opposite side, once again fold the machine's foot open. (Do not forget the safety gadgets.)



Mounting the Machine Head

Assembling the bottom cover or safety plate. In this case ensure that the six safety bolts (three for each foot) for the safety plate fully snap in place (and/or the safety plate was fully pressed to the bottom).



The plate is pushed in through the large holes and then uniformly pushed downwards on both sides.

The plate must fully slide downwards into the mounting.

The ready mounted cover or safety plate.



View of the machine with ready mounted cover or safety plate.

23 Mounting the Machine Head

As next step, the machine head is placed on the machine. The machine head is mounted on the far right, viewed from the front (Front is the side with the cover or safety plate). (This work can only be performed by two people.)



The machine head is mounted on the far right.



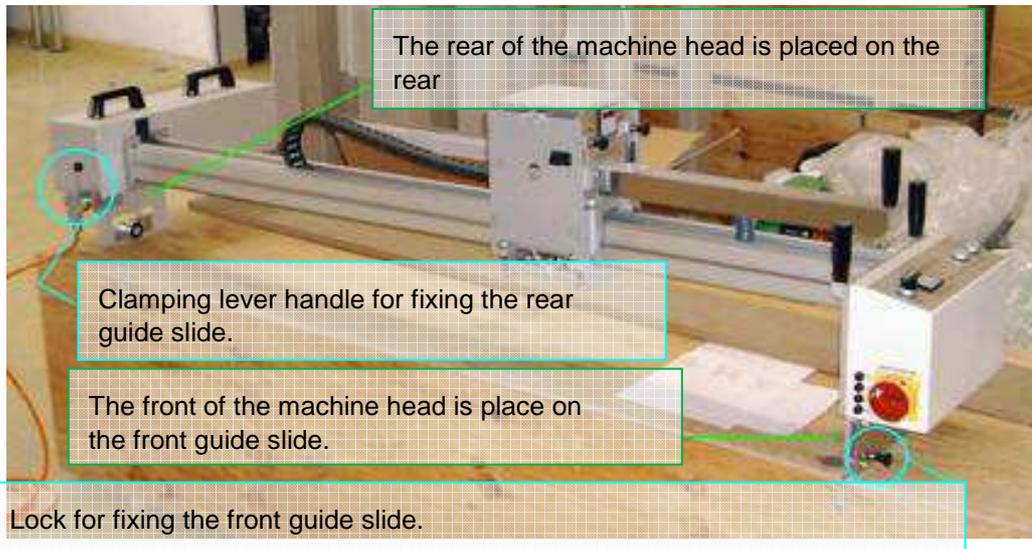
The rear guide slide.

The rear guide slide.

Push the two guide slides for the machine head far right.

Mounting the Machine Head

23.1 Machine head and its alignment

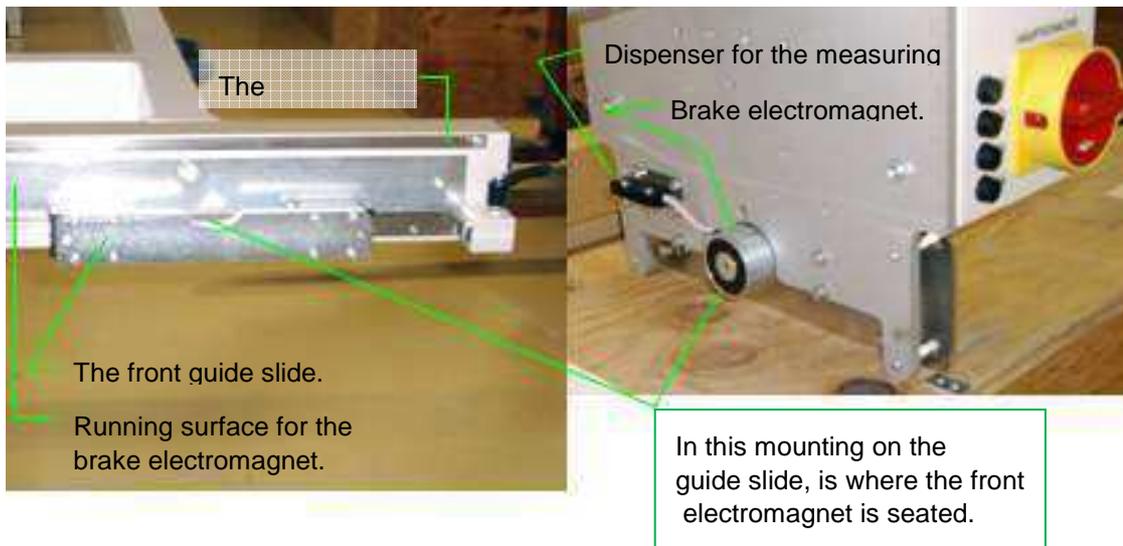


Before continuing to the actual placing of the machine head, we want to explain to you the function of the brake. Brake magnets are on both side of the head (electromagnets) which are responsible for fixing the "X" axis. Like wise on the front side of the machine head is a Dispenser for the measuring tape, which is responsible for measurements of the "X" axis. The measuring tape itself is located in front laterally on the machine table.

The magnets slide with approx. 1 mm air gap above the machine table and the Dispenser approx. 0.3 mm above the measuring tape on the machine table.

In case of non-uniform or hasty placement of the machine head, damages can occur on the mounting of the electromagnets of the Dispenser or measuring tape.

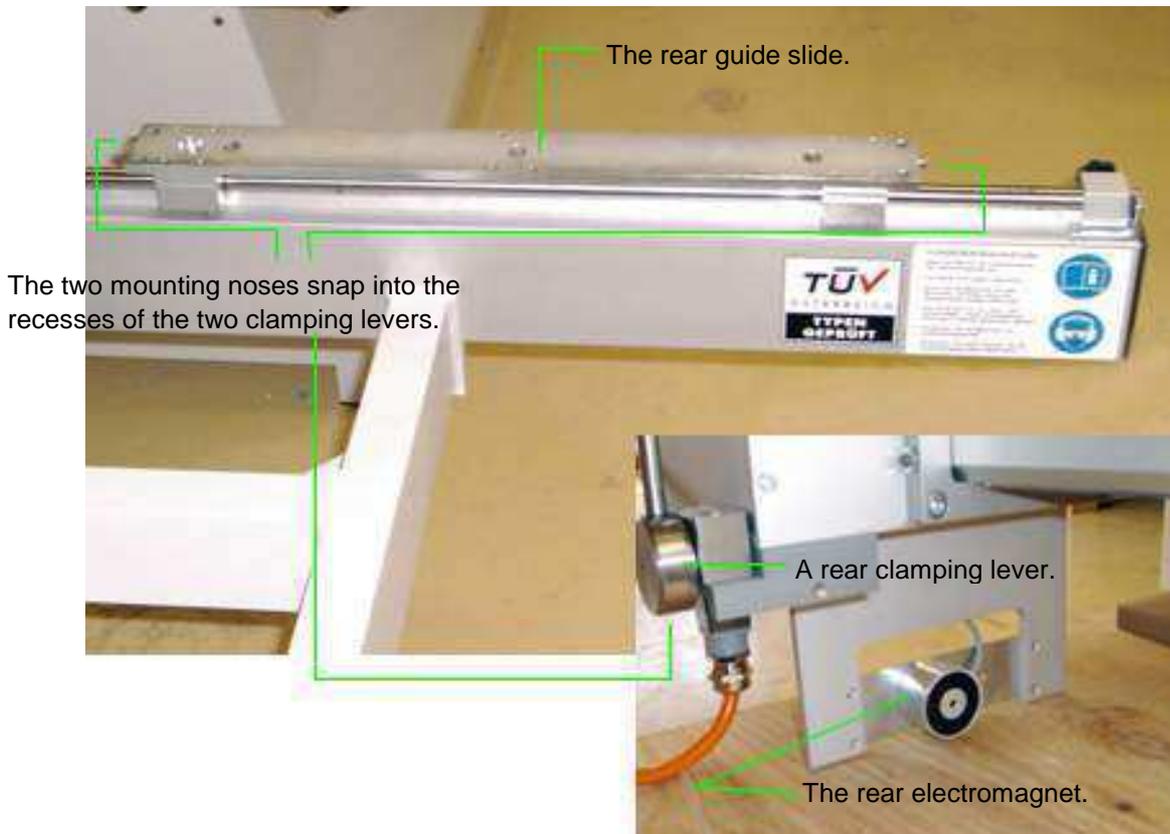
First, we deal with the technology of the front guide slide and of the front part of the equipment head.





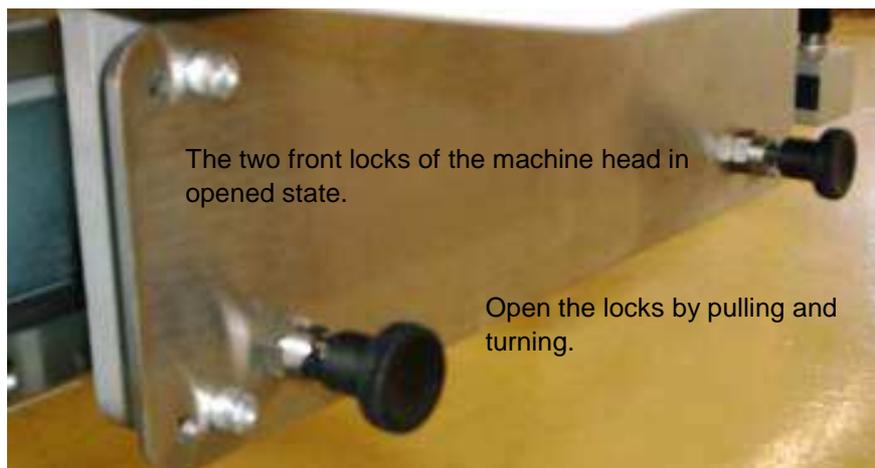
Mounting the Machine Head

The rear guide slide and the backward sides of the equipment head



Placing the machine head

First, the two locks on the front side of the machine head are opened by pulling and turning by $\frac{1}{4}$ rotation. Afterwards the locks are fixed in the opened state.



Mounting the Machine Head

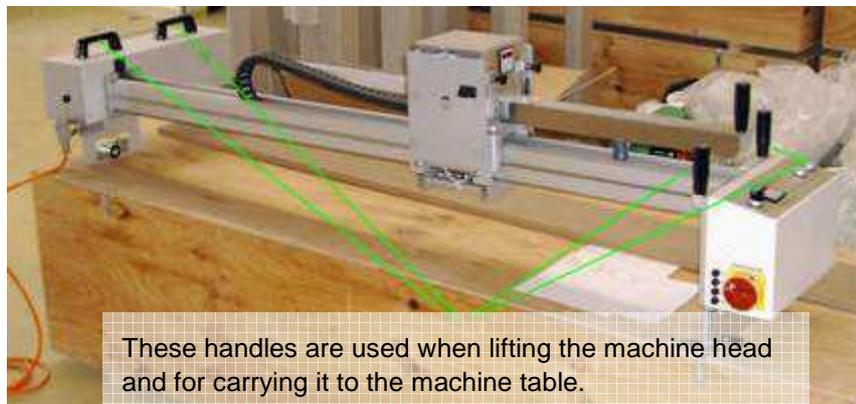
Now the two rear clamping levers of the machine head are opened. Both clamping levers must point upwards. Afterwards the clamping levers are fixed in the opened state.



A clamping lever in the opened state. (points upwards.) The clamping lever is fixed in the opened state. Also the clamping lever on the other side must be opened.

Now the machine head has to be lifted by two people and carefully placed on both guide slides on the machine table. (straight and at the same time.)

Pay attention during assembly particularly to the magnets, the sensor for digital indicator, receiver, displacement transducer, and the measuring tape.



Now pay attention that the machine head lies perfectly on the two guide slides and the machine head can be moved easily in the "X" axis.

If everything is OK, then the two front locks on the machine head are locked by rotating through $\frac{1}{4}$ rotation and simultaneous release.



Mounting the Machine Head



Now the two rear clamping levers are locked by lightly pressing them backwards. (Sensitively, push them backwards!)

A clamping lever in a closed state. Do not forget to close the clamping lever on the other side likewise.



Now it should be checked once more whether everything is moving easily and no magnetic mounting is bent or the measuring tape was damaged.



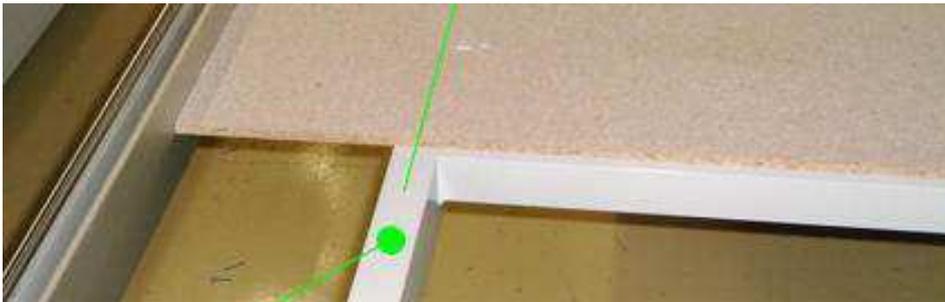
Mounting the Pressed Chip Boards (on Machine Table)

24 Mounting the Pressed Chip Boards (on Machine Table)

As the next step, the three pieces of 10 mm thick pressed chip boards are laid on the machine table and screwed together in the aluminium cross members at the rear, with 25 mm long, self-cutting screws. (2 Screws per board.) The chipboards are laid from the side on the machine table in order not to damage the measuring tape.



The aluminium cross member of the machine table, in which the pressed chipboards are screwed.



The machine with the laid and screwed pressed chipboards.



Assembly of the Stop Limit Strips (MDF)

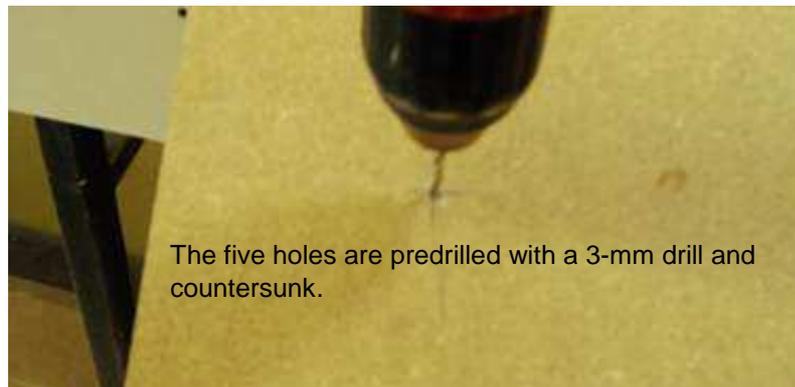
25 Assembly of the Stop Limit Strips (MDF)

The next step involves laying the stop limit strips made of MDF. (MDF strips Article Number 00 20 80 86)



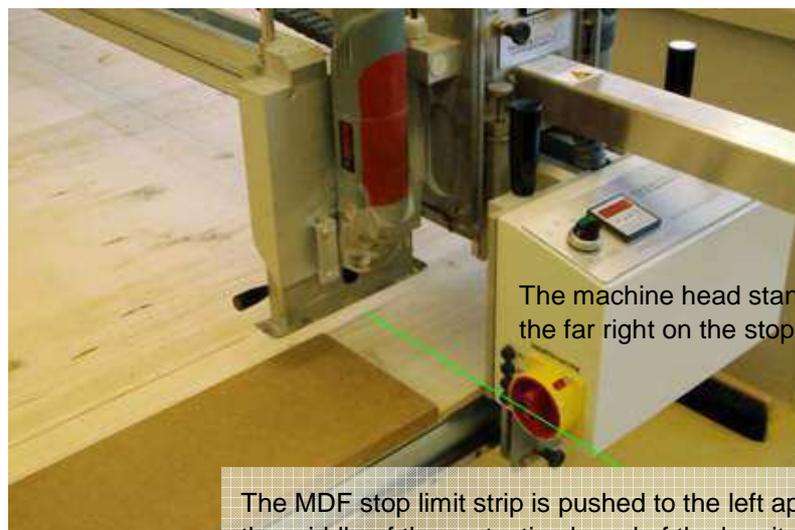
The stop limit strips made of MDF. (2500 x 170 x 20mm)

The MDF stop limit strip is screwed five times with the pressed chipboards using 35 mm long screws. (Do not screw them together with the aluminium frame!). The holes for the screw connection are predrilled with a 3-mm drill and countersunk.



The five holes are predrilled with a 3-mm drill and countersunk.

Now the longitudinal sawing unit is placed on the left side of the machine head and the machine head is traverse to the far right. The MDF stop limit strip is positioned on the machine table such that it can be cut with the longitudinal sawing unit.

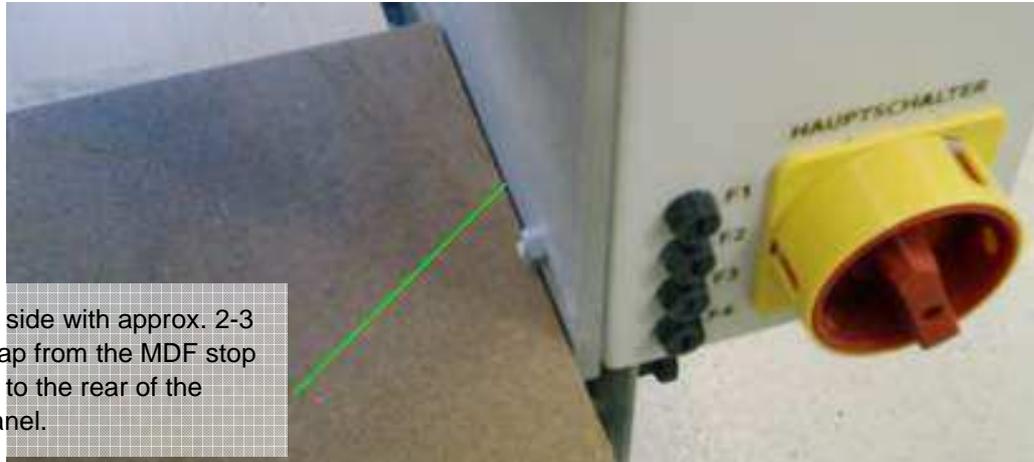


The machine head stands to the far right on the stop limit.

The MDF stop limit strip is pushed to the left approx. 3-4cm from the middle of the protective board of the longitudinal sawing unit.

Assembly of the Stop Limit Strips (MDF)

Still align the MDF stop limit strip on the rear of the switch panel. (Approx. 2-3 mm air gap to the switch panel). First the right side.



The right side with approx. 2-3 mm air gap from the MDF stop limit strip to the rear of the switch panel.

Align the MDF - stop limit strip on the left side.



The left side with approx. 2-3mm 2-3 mm air gap from the MDF stop limit strip to the rear side of

After ascertaining by moving the machine head to-an-fro that the machine head is running freely and the gap from the switch panel is 2-3 mm, the MDF - stop limit strips can be screwed with the pressed chipboards on the machine table. The screws used should be 35 mm long.



NOTE!

Do not screw the MDF stop limit strips with the aluminium frame of the machine table.



Connect the Dust Extraction Equipment

26 Connect the Dust Extraction Equipment

26.1 Connect the dust extraction equipment with the industrial vacuum cleaner

First the dust extraction hose is fastened with the bayonet connector on the vacuum cleaner and afterwards firmly pushed on the sleeve of the machine head.



26.2 The view of the machine with a connected dust extraction hose



Always use the supplied dust extraction equipment for a safe and dust-free working process.

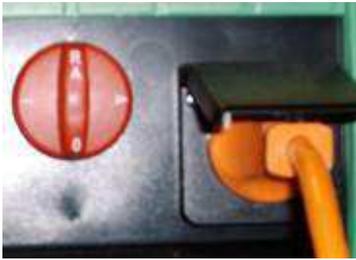
27 Supplying Voltage to the Machine

Connect the vacuum cleaner to the mains and afterwards plug in the machine with the orange cable to the socket outlet of the vacuum cleaner.

The plug of the industrial vacuum cleaner is connected to the mains.



Setting the Sawing Unit's Cutting Depth



The vacuum cleaner switch must be set on the automatic mode "RA" to work with the machine.



The main switch on the switch panel of the machine head is on "On".

The machine is ready for operation.

Regular inspection of the filling level of the industrial vacuum cleaner.

28 Setting the Sawing Unit's Cutting Depth

In the next step, the saw blade of the longitudinal sawing unit must be set to the level of the pressed chipboard minus 1 mm in order to cut the MDF stop limit strip to the desired length. To do this you move the longitudinal sawing unit to a well accessible point of the machine table and fix the transverse axis.

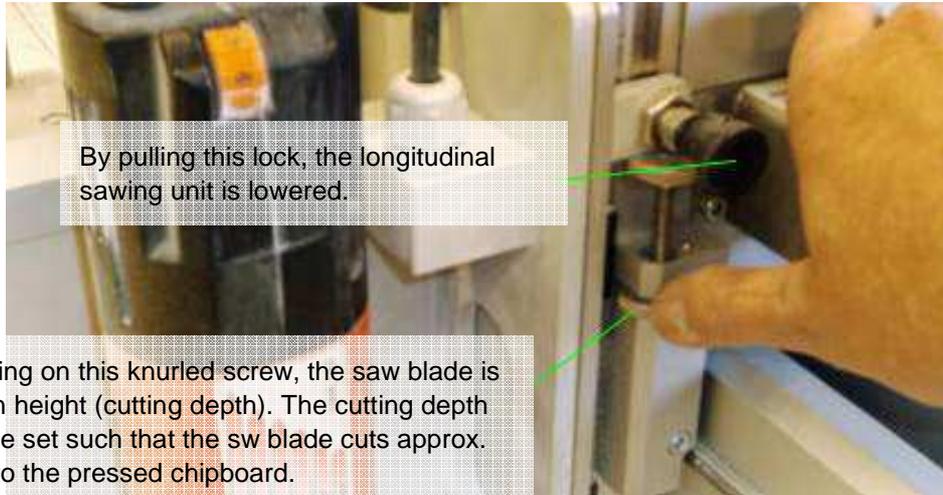


By pressing the button "Transverse" the transverse axis is fixed.

Afterwards the longitudinal sawing unit is lowered by pulling the lock. The protection board of the longitudinal sawing unit is raised and by means of the knurled screw, the saw blade is lowered such that the saw blade cuts approx. 1 mm into the pressed chipboards.

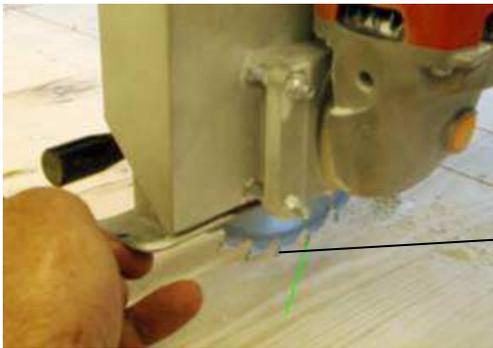


Setting the Stop Limit of the Transverse Axis



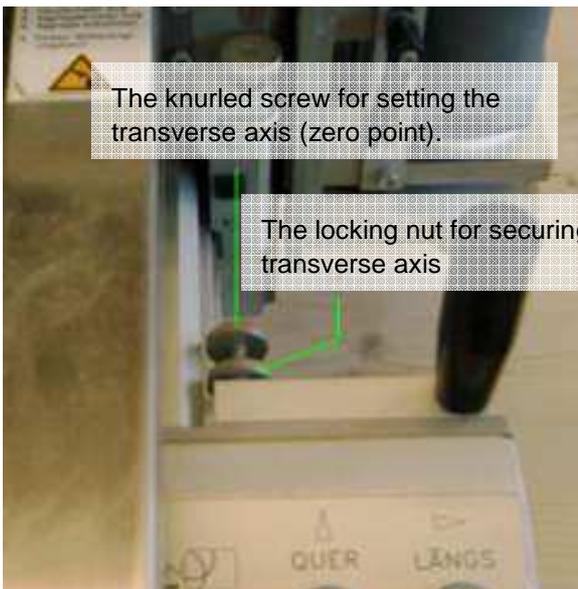
By pulling this lock, the longitudinal sawing unit is lowered.

By rotating on this knurled screw, the saw blade is varied in height (cutting depth). The cutting depth has to be set such that the saw blade cuts approx. 1mm into the pressed chipboard.



Raise the protection board and set the saw blade height (cutting depth).

29 Setting the Stop Limit of the Transverse Axis



The knurled screw for setting the transverse axis (zero point).

The locking nut for securing the transverse axis

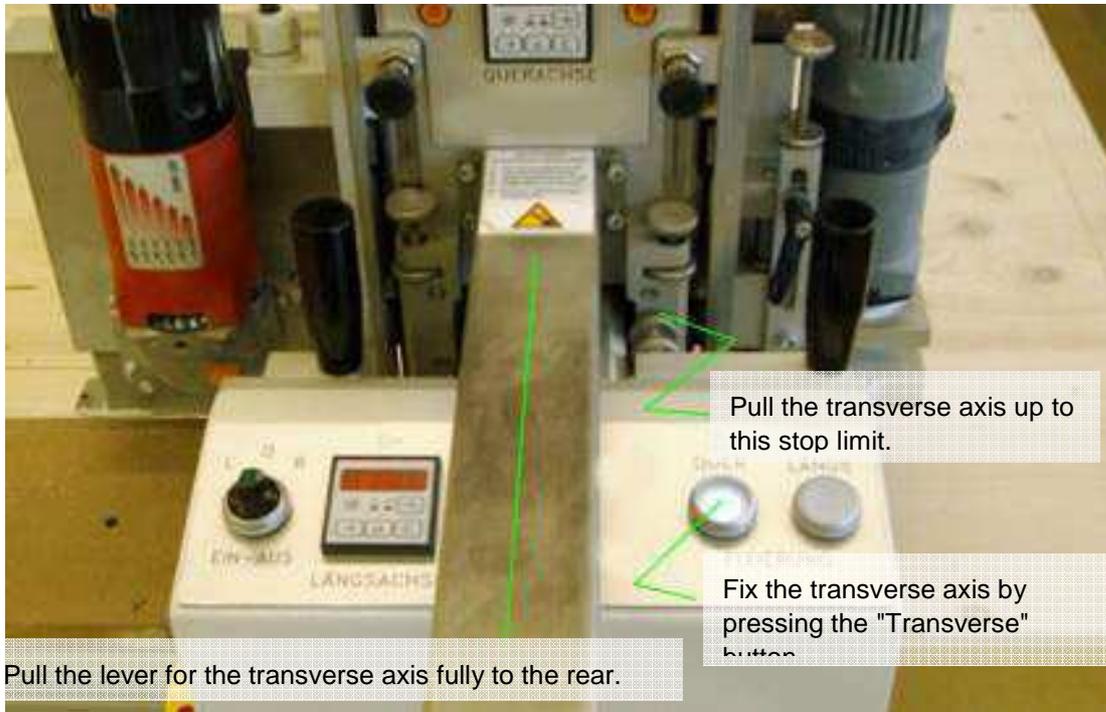
Set the stop of the transverse axis by means of the knurled screw on the rear of the switch panel (zero point).

The knurled screw is unscrewed as far as possible and secured with the locking screw.

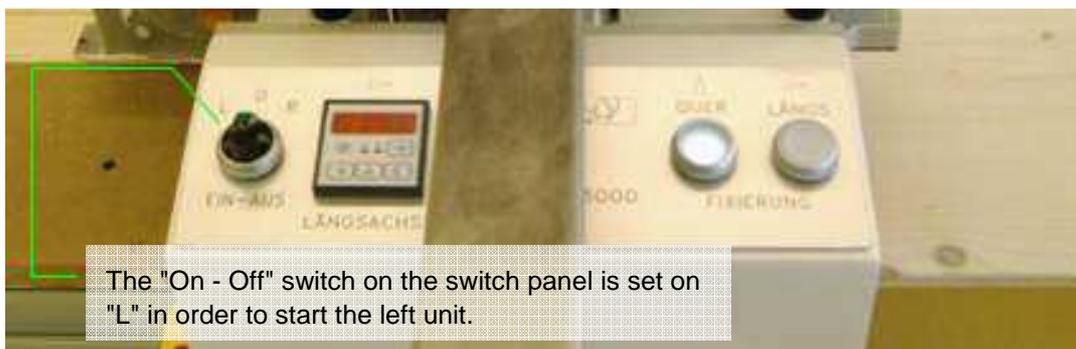
Cutting-off the MDF Stop Limit Strip

30 Cutting-off the MDF Stop Limit Strip

Pull the lever of the transverse axis entirely to the rear (up to the stop limit of the knurled screw of the transverse axis) and fix the transverse axis in this position by pressing the transverse button.



Now the equipment head is moved fully to the right and the "On-Off" switch on the switch panel is set to "L" in order to start the left longitudinal sawing unit.





Laying the Gypsum Board

Now the longitudinal sawing unit is lowered by pulling the lock and the MDF stop limit strip is cut off by pulling the handle depending on the length.

Pull this handle for cuts with the longitudinal sawing unit.



The cut-off MDF stop limit strip.

31 Laying the Gypsum Board

Now lay the entire machine table with 12.5 mm thick gypsum boards. First a gypsum board is laid and with the same depth setting of the longitudinal sawing unit the constrictions of the gypsum board are cut-off (Do not forget to fix the transverse axis.)



Laying the Gypsum Board

You can also use the transverse sawing unit with the same depth setting of the saw blade if you also plug it in on the left side.

When you cut with the transverse sawing unit, you must fix the longitudinal axis at the switch panel.

The cutting direction for transverse sawing units on the left side is from the front to the rear.

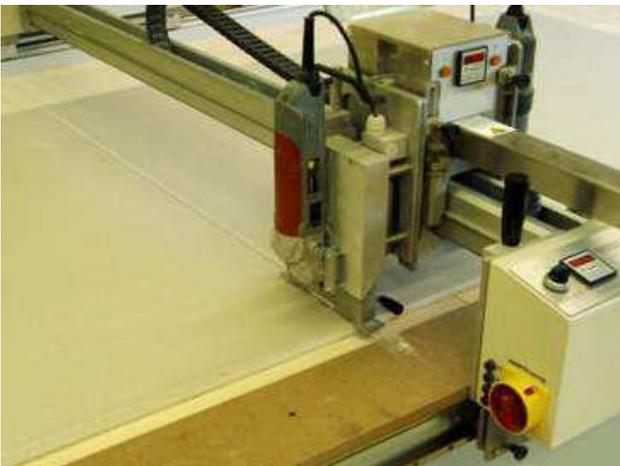
It is common to use the sawing unit on the left side, since they are set once with the knurled screw and they can always use with this setting.

The milling units are mounted on the right side.

With the milling units, the milling depth is limited with the unit foot and with the sawing units; the cutting depth is set with the knurled screw.

The gypsum boards that are now laid on the machine table are the work boards on which cutting and milling take place. (These gypsum boards are only laid in place and are never screwed with the pressed chipboards below them!)

These work boards must be exchanged now and then. (Based on usage of the machine.)



The transverse sawing unit on pressed chip board level.



The machine with the ready, laid work- and gypsum boards.

Now set the sawing unit on the left side at the new working height by means of knurled screw.



Set the Milling Unit's Milling Depth

32 Set the Milling Unit's Milling Depth

Now the milling unit is set to the stop limit of the machine. For this, a milling unit with a 90° V-mill is used, which must still be set for this purpose.



ATTENTION!

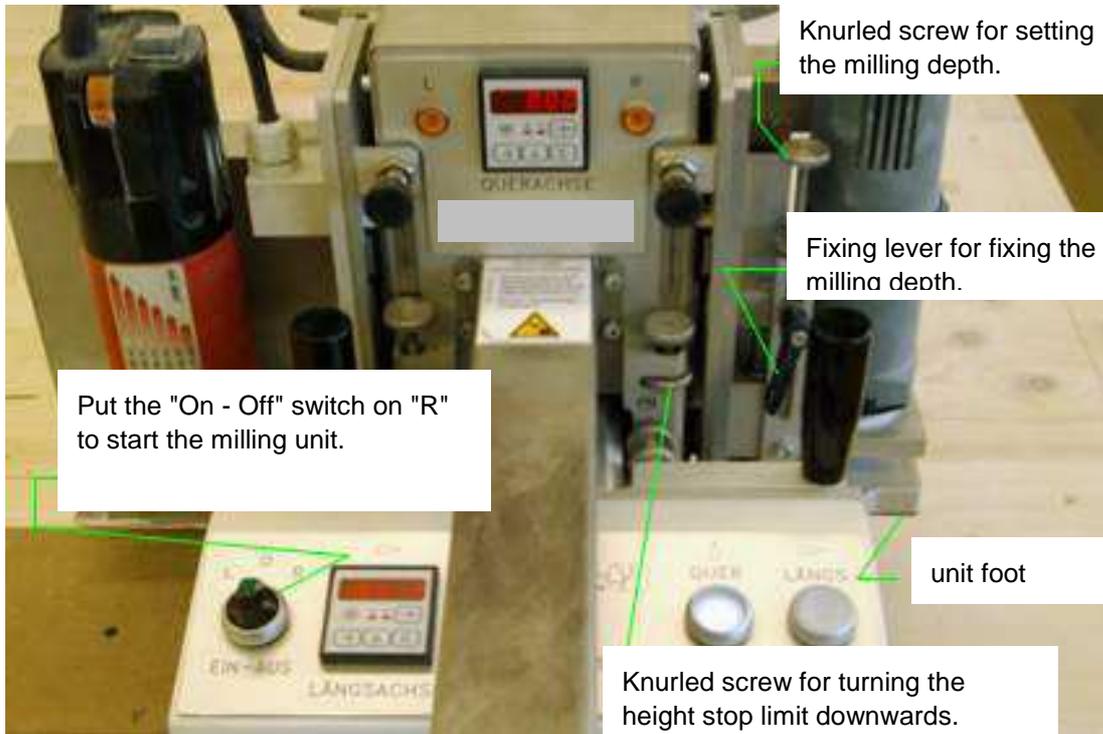
When you perform tasks on the units (e.g. height adjustment for sawing and milling units), switch off the main switch of the machine, and detach the machine by pulling off the mains plug.

Never lift the units by the tools (saw blades or mills) nor touch under them.

After ending the work on the units, connect the machine again with the current mains and switch on the main switch of the machine.

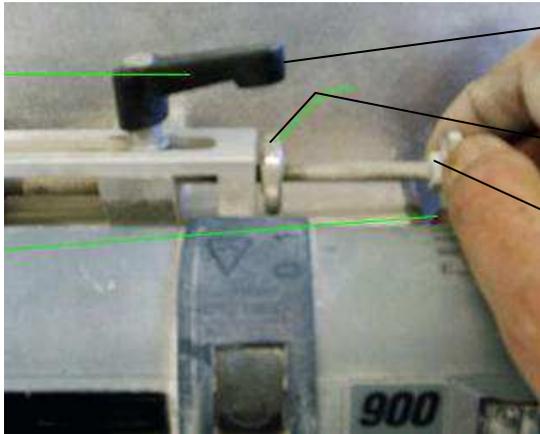
First, the stop limit on the right side of the machine head is turned entirely by rotating the knurled screw downwards, since height stop limit is not needed for milling units. (The thickness of the workpiece is measured with the unit feet)

On the next photo, you will see the level difference of both stops (left sawing unit with height stop limit and, right milling unit).



Set the Milling Unit's Milling Depth

For rough setting of the milling unit with the 90° V-mill, the milling unit is removed from the machine head.



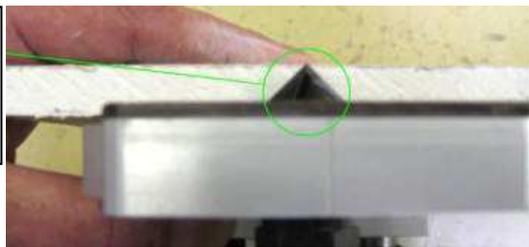
To set the milling depth, the fixing lever must be opened and afterwards be closed again.

Loosen the locking screw.

The milling depth is set with this knurled screw. By unscrewing the knurled screw the milling gets deeper. By screwing the knurled screw the milling gets shallower.

For rough setting, use a rest piece of a gypsum board. The milling depth should be set such that the mill does not cut through the gypsum board.

The milling tip should not cut through the gypsum board.



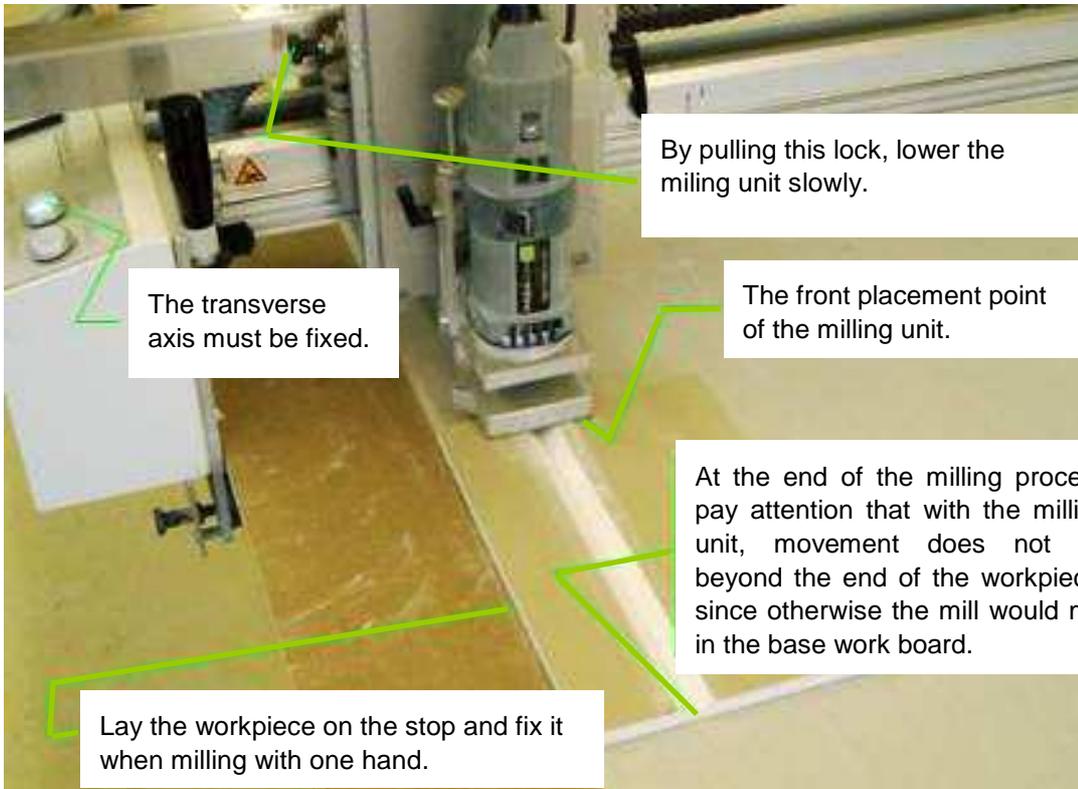
Now the milling unit is again lowered on the machine head. Finally, lay a small gypsum board (approx. 30x30 cm) on the machine table and align the board to the stop limit. A trial milling can now be performed. To start the milling unit on the right side, the "On - Off" switch on the switch panel is set to "R".

When milling, the Milling unit is also always used in return (once forth and again back).

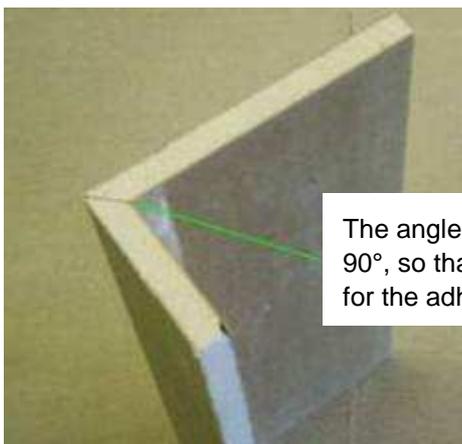


Set the Milling Unit's Milling Depth

Pay attention to the unit foot on the gypsum board is placed in front. At the end of the gypsum board, milling should not go far beyond the edge.



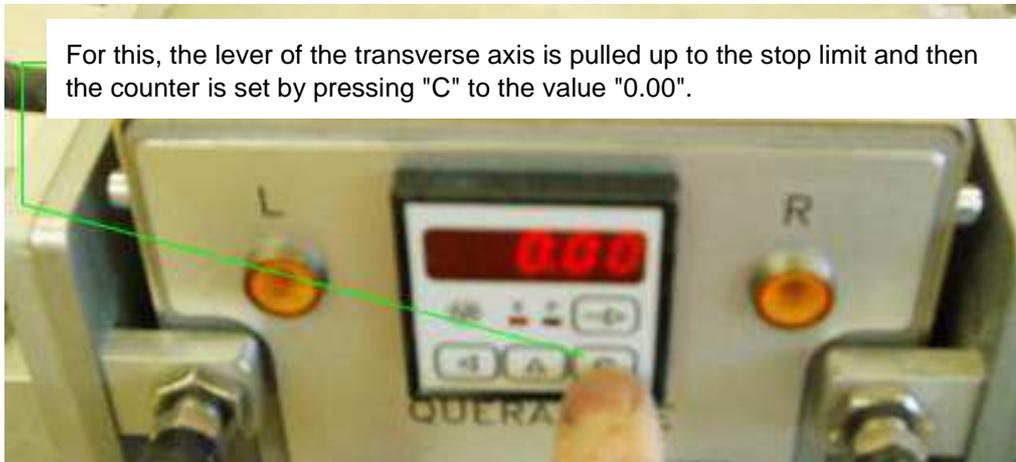
Should the milled groove be too deep or too shallow, readjustment must proceed with the knurled screw. The readjustment takes place with a setup, milling unit on the machine head. With a board that is folded together, the angle should be somewhat more than 90°.



Setting the Milling Unit's Stop Limit

33 Setting the Milling Unit's Stop Limit

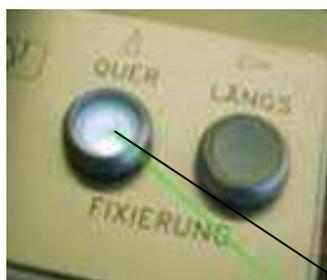
When the milling is carried out correctly then the machine will be set on the milling unit. For this, the lever of the transverse axis is pulled up to the stop limit and then the counter is set by pressing "C" to the value "0.00".



For this, the lever of the transverse axis is pulled up to the stop limit and then the counter is set by pressing "C" to the value "0.00".

Now the lever of the transverse axis is pushed forward until the counter shows the value "10.00" and for this value, the transverse axis is fixed.

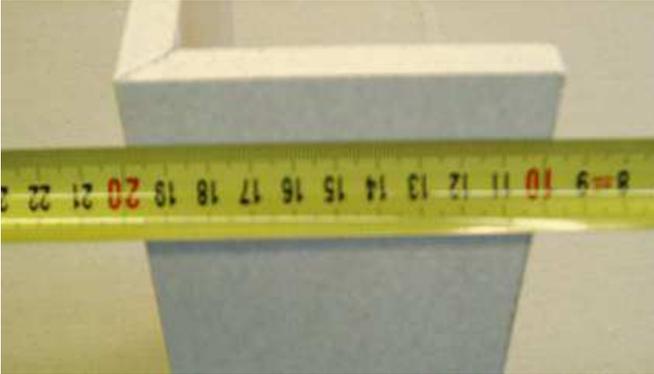
Push the lever of the transverse axis so far forward until the counter displays the value "10.00".



When the counter displays the value "10.00" the transverse axis must be fixed.

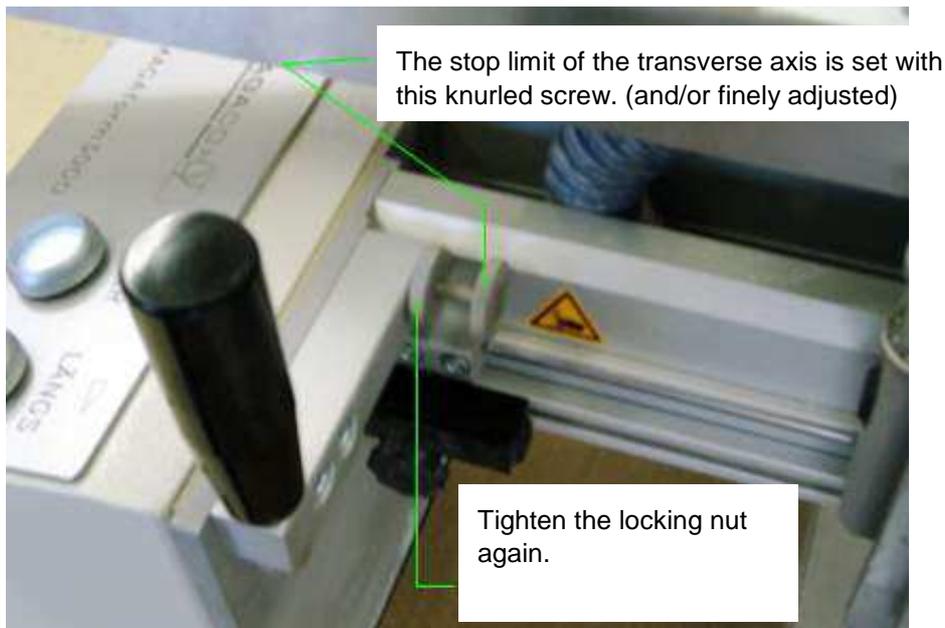


Setting the Milling Unit's Stop Limit



Now the 90° V milling unit is lowered and a test board is milled. After milling, the board is folded together and checked to find the amount by which the value deviates from the 10cm, which the leg of the board would have to have.

Depending upon the value of the trial board, the stop limit of the transverse axis, which is located at the rear of the switch-panel, must be readjusted (mostly only 1-2 windings). After readjusting, also the safety screw of the stop limit must be retightened.



Prior to series production, we recommend the milling of a trial board again and to check whether the limb has now attained the desired weight. In case this is not yet the case, please correct the settings, until the result is satisfactory.

34 Checklist – Please Tick

1: Erecting the machine table

The fuse flaps were properly closed in the machine feet

The cover of the fuse plate is properly closed

2: Mounting the machine head

The two front locks on the machine head were properly closed

The two rear locks on the machine head were properly closed

Neither the magnetic tape nor the magnet mounts were damaged (visual check)

The running properties of the machine head were checked for smoothness

3: Mounting the pressed boards (on the machine table)

The pressed boards were screwed together with the machine table

4: Mounting the stop limit strips (MDF)

The MDF stop limit boards were mounted on the machine table

5: Connecting the dust extraction equipment

The suction hose of the dust extraction equipment was connected with the machine head

6: Supplying power to the machine

The plug of the dust extraction equipment was connected to the local mains

The orange machine cable was connected to the dust extraction equipment

The dust-extraction-equipment switch was set on Automatic "RA"

The main machine switch was put On

The function of the brake and digital display were checked

7: Setting the cutting depth of the sawing unit

The cutting depth of the sawing unit was set to the pressed board's level

8: Setting the stop limit of the transverse axis

The stop limit of the transverse axis or zero point was set

9: Cutting off the MDF stop limit strip

The MDF stop limit board was cut

10: Placing the work table

The work boards was placed on the machine table

The cutting depth of the sawing unit was set to the work board level

11: Setting the milling depth of the milling unit

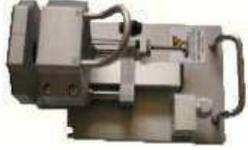
The milling depth of the milling unit was set and a trial board was cut

12: Setting the machine's stop limit on the milling unit

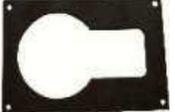
The stop limit of the machine was set on the milling unit

The locking screw of the stop limit was tightened once again

**35 Spare Parts List**

Pos	Fig.	Article - No.	Designation
1		00 20 81 59	Housing for milling unit 1400 Watt BO No: 047 50252
2		00 20 81 61	Carbon brushes for milling motor 1400 Watt BO L/R No: 047 50167
3		00 20 81 63	Carbon brushes for milling motor 1400 W 120V L/R No: 047 50167U
4		00 20 81 66	Housing for Milling motor 1050 Watt SUH No: 071 50128
5		00 20 81 69	MA Milling motor 1050 Watt SUH No: 047 50155R
6		00 20 81 73	Carbon brushes for milling motor 1050W SUH L/R No: 047 50166
7		00 20 81 78	MA milling motor 1050 Watt SUH 120 Volt No: 047 50155UR
8		00 20 81 80	Carbon brushes for milling motor 1050W 120V SUH L/R No: 047 50166
9		00 20 81 81	Housing for milling unit 1800 Watt SUH No: 047 50352
10		00 20 82 14	MA milling motor 1800 Watt SUH No: 047 50353
11		00 20 82 17	Carbon brushes for milling motor 1800W SUH L/R No: 047 50168

Spare Parts List

12		00 20 82 19	Saw housing for longitudinal SUH Universal No: 005 44318A
13		00 20 82 21	Saw housing for transverse SUH Universal No: 005 44318B
14		00 20 82 22	Saw housing 5-fold longitudinal SUH Universal No: 005 44319
15		00 20 82 23	Saw housing for 5-fold transverse SUH Universal No: 005 44320
16		00 20 82 34	MA saw motor L/Q/5-fold / SUH Universal No: 005 44424R
17		00 20 82 35	Carbon brushes for saw motor 1450 W 120V L/R Set No: 047 50169
18		00 20 82 37	MA saw motor L/Q/5-fold/ SUH Universal 120V No: 005 44424UR
19		00 20 82 41	Carbon brushes for saw motor 1450 Watt 120 Volt SUH L / R Set No: 047 50169U
20		00 20 82 42	Locking wheel for the height stop limit for the milling units No: 005 55521
21		00 20 82 48	FEY Petinax slide board 900W KR No: 50136
22		00 20 82 51	FEY Petinax slide board 1050W KR/HIT/SUH No: 50135



Spare Parts List

23		00 20 82 54	FEY Petinax slide board 1400W / 1800W BO / SUH No: 50134
24		00 20 82 56	FEY Felt seal for suction on the equipment head VPE: 2 pcs. No: 005 36601
25		00 20 82 63	O-Ring seal for suction on the equipment head VPE: 2 pcs. No: 005 46231
26		00 20 82 67	Connection adapter for dust extraction equipment No: 061 50126
27		00 20 82 70	Suction hose 25 mm in the equipment head No: 061 50122
28		00 20 82 72	Suction hose 25 mm in the incl. adapter for the dust extraction equipment Dm: 38 mm length 3m No: 061 50125
29		00 20 82 74	Suction hose Dm: 38 mm, length: 3m No: 061 50124
30		00 20 82 86	FEY slide board 1400W/1800W for reveal mill, internal BO/SUH No: 50173
31		00 20 82 76	FEY slide board 1400W/1800W for reveal mill, internal BO/SUH No: 50174
34		00 20 82 98	Table base board in Span (for MF 3000)No: 005 44218

Spare Parts List

35		00 20 83 02	Stop limit board made of MDF (for MDF3000) No: 005 44219
36		00 20 83 06	Fastening screws of length 45 mm VPE100 No: 005 5524
37		00 20 83 09	Fastening screws of length 35 mm VPE100 No: 50190
38		00 20 83 10	Suction adapter for cleaning the system, without hose No: 005 46216
39		00 20 83 11	Suction brush for cleaning the system No: 005 46216A
40		00 20 83 12	FEY stop limit set - longitudinal axis - front L+R No: 005 50117
41		00 20 83 15	FEY stop limit set - longitudinal axis - rear L+R No: 005 50119
42		00 20 83 20	FEY stop limit set for the transverse axis L+R No: 005 50118
43		00 20 83 24	FEY locking lever for stop limits, front No: 005 44222
44		00 20 83 25	FEY locking screw incl. slot nuts for the stop limits on the transverse and/or Y-axis No: 005 44221
45		00 20 83 45	Security set for the switch box 4 St No: 071 40118



46		00 20 83 46	PFTfix nozzle attachment, straight No: 005 46210
47		00 20 83 47	PFTfix nozzle attachment, bent No: 005 46211

36 Accessories

36.1 Article Number 00207783 Boardmaster's new milling set:

Comprises: Art. Nr. 00207784, 00207785, 00207786, 00207787, 00207788, 00207789

1		00 20 77 84	V-Groove mill 90°, Pd to 15 mm No: 011 46172. (for making edges with an angle of 90° - up to a board thickness of 15 mm)
2		00 20 77 85	PFTstrong - flat edge mill 1.5 mm No: 011 46171.
3		00 20 77 86	V-Groove mill 90°, Pd to 25 mm No: 011 50157. (for making edges with an angle of 90° - up to a board thickness of 25 mm)
4		00 20 77 87	VV.V-Groove mill 90°, Pd to 15 mm No: 011 50164. (for making edges with an angle of 90° - up to a board thickness of 15 mm).
5		00 20 77 88	PFTstrong - round edge mill Dm 4.0 up to 12.5 mm No: 069 50162
6		00 20 77 89	Copying and cutting mill 16 mm No: 083 46169. (for machining boards up to thickness of 15 mm)

36.2 Article Number 00206494 Boardmaster's small tools set

Comprises: Art. No. 00207792, 00207793, 00207795, 00207789, 00207796, 00207797, 00207799, 00207784, 00207800, 00207790, 00207801

1		00 20 77 92	FEY milling set box, empty No: 005 44216.
2		00 20 77 93	Copying and cutting mill 7 mm No: 083 46167. (for machining boards up to thickness of 6 mm)
3		00 20 77 95	Copying and cutting mill 13 mm No: 083 46168. (for machining boards up to thickness of 12.5 mm)12.5 mm)

Accessories

4		00 20 77 89	Copying and cutting mill 16 mm No: 083 46169. (for machining boards up to thickness of 15 mm)
5		00 20 77 96	Copying and cutting mill 26 mm No: 083 46170. (for machining boards up to thickness of 25 mm)
6		00 20 77 97	Shaft mill 8 mm for wood No: 011 46175. (cutting cylinder - Dm 8 x 20 mm)
7		00 20 77 99	V-Groove mill 45°, Pd to 15 mm No: 011 46171. (for making edges with an angle of 45° - up to a board thickness of 15 mm)
8		00 20 77 84	V-Groove mill 90°, Pd to 15 mm No: 011 46172. (for making edges with an angle of 90° - up to a board thickness of 15 mm)
9		00 20 78 00	Fluting mill 20 mm No: 011 46176. (for making flutes with a diameter of 20 mm, shaft 8 x 25 mm)
10		00 20 77 90	Saw blade 160 mm No: 118 46166. (cuts of gypsum board as well as other materials - cutting width: 1.80 mm)
11		00 20 78 01	Copying and tracing board Dm 25 mm No: 005 50134. (for changing of the unit - used as tracing board for copying tasks)

36.3 Article Number 00206422 Boardmaster's tool set, full equipment No: 46175

Comprises: Art. Nr. 00207792, 00207793, 00207795, 00207789, 00207796, 00207797, 00207799, 00207784, 00207790, 00207800, 00207801. These parts are included in the "small" tools set. 00207786, 00207802, 00207807, 00207808, 00207809, 00207810, 00207812, 00207788.

1		00 20 77 86	V-Groove mill 90°, Pd to 25 mm No: 011 50157. (for making edges with an angle of 90° - up to a board thickness of 25 mm)
2		00 20 78 02	Fluting mill 16 mm No: 011 46178. (for making flutes with a diameter of 16 mm, shaft 8 x 25 mm)
3		00 20 78 07	Fluting mill 24 mm No: 011 46173. (For making flutes with a diameter of 24 mm, shaft 8 x 25 mm)
4		00 20 78 08	PFTrev - Revision mill 1.0 mm, Pd 12.5 mm No: 069 0151. (for cutting revision openings with a joint width of 1 mm for boards with thickness of 12.5 mm)



Accessories

5		00 20 78 09	Groove mill for tiles No: 069 50160. (groove mill for imitating tile grooves, shaft: 8 mm)
6		00 20 78 10	V-Groove mill 135°, Pd to 12.5 mm No: 011 50160. (for making edges with an angle of 135° - up to a board thickness of 12.5 mm)
7		00 20 78 12	Profile cutting mill No: 054 50155. Fabrication of decoration profiles
8		00 20 77 88	PFTstrong - round edge mill Dm 4.0 up to 12.5 mm No: 069 50162.
9		00 20 78 20	Milling unit 1800 Watt SUH No: 047 50354. (with integrated suction channel, quick-exchange mounting and depth setting)
10		00 20 78 23	Milling unit 1050 Watt SUH/PFT No: 047 50154R. (with integrated suction channel, quick-exchange mounting and depth setting)
11		00 20 78 24	Milling unit 1050 Watt SUH/ PFT 120V No: 047 50154UR. (with integrated suction channel, quick-exchange mounting and depth setting) 120 Volt
12		00 20 78 26	Sawing unit, universal longitudinal sections SUH/PFT No: 005 50151R (For cutting different materials to size - with integrated suction channel, quick change mounting and depth setting)
13		00 20 78 27	Sawing unit, universal longitudinal SUH/PFT 120 No: 005 50151UR. (For cutting different materials to size - with integrated suction channel, quick-change mounting and depth setting) 120 Volt.
14		00 20 78 28	Sawing unit, universal cross-sections SUH/PFT No: 005 50152R (For cutting different materials to size - with integrated suction channel, quick change mounting and depth setting)

Accessories

15		00 20 78 29	Sawing unit, universal cross-sections SUH/PFT 120 No: 005 50152UR (For cutting different materials to size - with integrated suction channel, quick change mounting and depth setting) 120 Volt
16		00 20 78 30	Sawing unit 5-fold universal longitudinal sections SUH/PFT No: 005 50149R (Generate 5-fold groove milling for making rounding with integrated suction channel, quick change mounting and depth setting)
17		00 20 78 31	Sawing unit 5-fold longitudinal sections SUH/PFT 120V No: 005 50149UR (Generates 5-fold groove milling for making rounding with integrated suction channel, quick change mounting and depth setting) 120 Volt
18	No Fig.	00 20 78 32	Sawing unit 5-fold Uni. cross-sections SUH/PFT No: 005 50148R Generates 5-fold groove milling for making rounding with integrated suction channel, quick change mounting and depth setting)
19	No Fig.	00 20 78 33	Sawing unit 5-fold Uni. cross-sections SUH/PFT 120 No: 005 50148UR (Generates 5-fold groove milling for making rounding with integrated suction channel, quick change mounting and depth setting) 120 Volt
20		00 20 78 34	Industrial dust extraction equipment 50 Lt. HIT cpl incl. suction hose and adapter No: 047 46164 For working dust-free with Boardmaster - with automatic filter cleaning - recommended make)
21		00 20 78 35	Vac Control box for 120 Volt systems No: 005 44214U
22		00 20 78 36	Industrial dust extraction equipment 50 Lt. NIL. cpl No: 005 46230U. (For working dust-free with Boardmaster - with automatic filter cleaning - recommended make) 120V
23		00 20 78 39	PFTfix Primer equipment No: 069 50190



Accessories

24		00 20 78 40	PFTfix glue gun TEC 6100 No: 005 46208 (Glue gun for quick gluing of moulds and other materials) without spraying effect.
25		00 20 78 41	PFTfix glue gun TEC 6100 120V No: 005 46208 U (Glue gun for quick gluing of moulds and other materials) without spraying effect.
26		00 20 78 42	Sanitary template for WC cut-outs No: 114 50149
27		00 20 78 43	PFTform - water level (Snake) No: 001 44428 Foldable water level that adapts to the construction circumstances
28		00 20 78 44	Suction adapter for cleaning the system No: 005 46206
29		00 20 78 45	EY replaceable ruler for circle template, length: 2900 mm No: 005 50158
30		00 20 78 01	Copying and tracing board Dm 25 mm No: 005 50134 (For replacing the milling unit - serves as tracing board for copying work)
31		00 20 78 47	Copying and tracing board Dm 32 mm No: 005 50133 (For replacing the milling unit - serves as tracing board for copying work with V-groove mills)
32		00 20 78 48	PFTform – gluing table No: 50181 For gluing the moulds with integrated lighting
33		00 20 78 49	PFTset Positioning carriage No: 50170 For stable storage of glued moulds

Accessories

34		00 20 78 50	PFTset groove template No: 50172 For stable storage of reveal boards packaging unit: 3 piece
35		00 20 78 51	FEY slide board, reveal mill, outdoor BO/SU No: 50173 (Special slide board for making the groove for reveal boards, indoor area, suitable for 1400 or 1800 Watt milling unit)
36		00 20 78 52	FEY slide board, reveal mill, outdoor BO/SU No: 50174 (Special slide board for making the groove for reveal boards, indoor area, suitable for 1400 or 1800 Watt milling unit)
37		00 20 78 54	PFTroll 310 Insulating tape dispenser No: 005 5023 (Suitable for applying self-adhesive insulating tapes with a width of 28 to 100 mm)
38		00 20 78 56	PFTfix glue gun TEC 3200 No: 005 46220 without pneumatics (manual operation)
39		00 20 78 58	PFTfix special compressor HIT No: 005 5521 (for the gluing set and / or the pneumatic unit, elevating system)
40	No Fig.	00 20 78 60	PFTfix special compressor 120V No: 005 5521U
41		00 20 78 61	PFTfix extension of gluing gun 10m No: 005 44117
42		00 20 78 62	FTfix extension of gluing gun 10m 120V No: 005 44117 UR
43		00 20 78 63	Pneumatic extension hose 10m No: 005 46228
44		00 20 78 64	Pneumatic extension hose 10m 120V No: 005 46228U

**37 Tools**

No.	Fig.	Article No.	Designation
1		00 20 77 90	Saw blade 160 mm No: 118 46166 (Cuts of gypsum board as well as other materials - cutting width: 1.80 mm, diameter 160 mm)
2		00 20 78 65	Saw blade 150 mm No: 011 46166 (Cuts of gypsum board as well as other materials - cutting width: 1.80 mm, diameter 150 mm)
3		00 20 78 66	Saw blade 120 mm No: 054 50161 (Cuts of gypsum board as well as other materials - cutting width: 1.80 mm, diameter 120 mm)
4		00 20 78 68	Saw blade 100 mm No: 054 50159 (Cuts of gypsum board as well as other materials - cutting width: 1.80 mm, diameter 100 mm)
5		00 20 78 69	Saw blade - set 120 mm (5 pieces) No: 054 50160 Cutting width 1.80 mm, diameter 120 mm, material: hard metal, for equipping the 5-fold sawing unit
6		00 20 78 71	Diamond saw blade, 160 mm Z = 4 No: 054 50139 Diameter 160 mm, for machining hard gypsum boards
7		00 20 78 83	Diamond partitioning disc, universal Dm: 125 mm No: 054 50140 Cuts of different materials (hard gypsum boards, cement bonded boards)
8		00 20 78 84	Diamond partitioning disc, universal Dm: 115 mm No: 054 50141 Cuts of different materials (hard gypsum boards, cement bonded boards)
9		00 20 78 88	Diamond partitioning disc, universal set 115 mm 5-pcs No: 054 50142 Diameter 115 mm, cuts of different materials (hard gypsum boards, cement bonded boards), for equipping the 5-fold sawing unit
10		00 20 78 89	Diamond coated saw blade 160 mm No: 50171 Diameter 160 mm, for machining hard gypsum boards

Tools

11		00 20 78 90	Groove saw blade for aluminium composite materials No: 047 50142 for 90° V-cuts in wood, MDF, aluminium, composite aluminium, acrylic glass, plastic, composite plastic, sandwich board etc., up to a material thickness of 10 mm
12		00 20 78 91	PFTrev - Revision hinge mill 5.5 mm No: 083 46172 For installing the revision universal joints during the revisions
13		00 20 77 93	Copying and cutting mill 7 mm No: 083 46167 For machining boards up to 6 mm thickness
14		00 20 78 95	Shaft mill 8 mm for wood No: 011 46175P (Cutting cylinder - Dm 8 x 20 mm)
15		00 20 79 14	V-Groove mill 30°, Pd up to 15 mm No: 011 50162 (For making edges with an angle of 30° - up to a board thickness of 15 mm)
16		00 20 79 11	V-Groove mill 60°, Pd up to 12.5 mm No: 011 50163 (For making edges with an angle of 60° - up to 12.5 mm board thickness)
17		00 20 77 87	V-Groove mill 90°, Pd up to 15 mm with adhesive tape No: 011 50164 (For making edges with an angle of 90° - up to 15 mm board thickness) for adhesive tape.
18		00 20 79 16	V-Groove - special mill 90° PKD coating Pd-15 mm No: 011 46174 (For making edges with an angle of 90° - up to 15 mm board thickness) suitable for hard gypsum and cement coated boards)
19		00 20 79 21	V-Groove mill 120°, Pd up to 12.5 mm No: 011 50165 (For making edges with an angle of 120° - up to a board thickness of 12.5 mm)
20		00 20 79 87	PFTrev - Revi mill 1.0 mm, Pd 12.5 mm No: 069 50164 (For cutting revision openings with a joint width of 1 mm for boards with thickness of 12.5 mm)



Tools

21		00 20 79 88	PFTrev - Revi mill 1.0 mm, Pd 15 mm No: 069 50166 (For cutting revision openings with a joint width of 1 mm for boards with thickness of 1/4 inch)
22		00 20 79 89	PFTrev - Revi mill 1.0 mm, Pd 3/8 inch No: 069 50151 (For cutting revision openings with a joint width of 1 mm for boards with thickness of 15 mm)
23		00 20 79 90	PFTrev - Revi mill 1.0 mm, Pd 5/8 inch No: 069 50177 (For cutting revision openings with a joint width of 1 mm for boards with thickness of 5/8 inch)
24		00 20 79 91	PFTrev - Revi mill 1.5 mm, Pd 12.5 mm No: 069 50152 (For cutting revision openings with a joint width of 1.5 mm for boards with thickness of 12.5 mm)
25		00 20 79 94	PFTstrong - round edge mill, Dm 4.0 - 25 mm No: 069 50162U
26		00 20 79 97	PFTstrong - round edge mill, Dm 4.3 mm No: 069 50170
27		00 20 79 98	PFTstrong - round edge mill, Dm 5.0 mm No: 069 50154
28		00 20 79 99	PFTstrong - round edge mill, Dm 8.0 mm No: 069 50161
29		00 20 80 00	PFTstrong - round edge mill, Dm 10 mm No: 069 50169

Consumables

30		00 20 80 02	Groove feather mill for 19 mm boards No: 066 50162 (for wood and other boards)
31		00 20 90 63	PFTstrong - round edge mill Dm 3.3 to 12.5 mm.
32		00 20 80 03	Reveal edge mill, internal No: 047 50355
33		00 20 80 06	Reveal edge mill for window connection profile No: 047 50355FA
34		00 20 80 09	Reveal edge mill No: 047 50356A

38 Consumables

No.	Fig.	Article No.	Designation
11		00 20 80 66	Activator for the super glue No: 005 44116
12		00 04 05 52	PFT silicon spray 400 ml
13		00 20 80 69	PFTstrong flat rod edge NIRO 1.5x9.5 mm No: 005 5525 3m Packaging unit: 300m
14		00 20 80 70	PFTstrong edge table for flat edges (magnetic table No: 069 50191)
15		00 20 80 71	PFTstrong acrylic glass rod 4 mm/2m No: 005 5510
16		00 20 80 72	PFTstrong acrylic glass rod 5 mm/2m No: 005 5511

**Consumables**

17		00 20 80 75	PFTstrong acrylic glass rod 8 mm/2m No: 005 5512
18		00 20 80 76	PFTstrong steel rod, galv. 4 mm/2m No: 005 5513
19		00 20 80 77	PFTstrong aluminium rod 4 mm/3m No: 005 5520
20		00 20 80 78	PFTstrong aluminium rod 5 mm/3m No: 005 5514
21		00 20 80 79	PFTstrong aluminium rod (Rohr) 8 mm/2m No: 005 5515
22		00 20 90 67	PFTstrong aluminium rod 3.3 mm/3m
23		00 20 80 85	Table, base boards in Span 8 mm No: 005 44218
24		00 20 80 86	Stop limit boards made of MDF for MF3000 No: 005 44219
25		00 20 80 87	Aqua Akkord fabric, rounding 1m wide 50m ² No: 005 5516

WE CATER FOR THE FLOW OF THINGS



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