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## **Operating Instructions WA 8**

**1.0/2010**

**GB**

CE

Translation of the original operating instructions

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# 1 Foreword

## Safety instructions

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### WARNING!

- Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewelry which may get caught in moving parts
  - Nonslip footwear is recommend
  - Wear protective hair covering to contain long hair
  - NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
  - NEVER LEAVE TOOL RUNNING UNATTENDED. Turn POWER OFF. Don't leave tool until it comes to a complete stop.
  - KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
  - MAKE WORKSHP KID PROOF with padlocks, master switches, or by removing starter keys.
- 

***Please read these operating instructions carefully before commissioning the machine.***

***No liability will be accepted for any injury, damage or disruption to operations resulting from failure to comply with these operating instructions!***

***Persons operating this sliding table saw must have had sufficient instruction and be suitably qualified!***

***These operating instructions cannot be regarded as a binding type description as the manufacturer may have carried out technical modifications.***

The operating instructions must always be available where the machine is being used. They must be read and heeded by any person performing the following activities at or on the machine:

- Operating including set-up, troubleshooting during operation, elimination of production waste, care, disposal of operating and auxiliary materials
- Maintenance, repair, inspection
- Transport

It is necessary to comply with national regulations on health and safety at work and environmental protection, in addition to the operating instructions.

The removal of safety devices, especially safety hoods for the saw blade cover and riving knives, will endanger the operator and may lead to accidents.

Safe work is only possible with a clean machine and a clean environment!

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## 2 Identification

### 2.1 Machine identification

The type label attached to the machine stand is used to determine the machine identity and further important key data.

Meaning of the specified designations:

<b>Altendorf Qinhuangdao</b>	
Machinery Manufacturing Co.Ltd	
Hengshan Road,	Made in P.R. China
Economic & Technical Development Zone	
Qinhuangdao, P.R. China	
<b>Formatkreissäge/Scie à format/Sliding table saw</b>	
Typ/Type	
Nummer/Numéro/Number	
Baujahr/Année/Year	
Sägeblatt/Lame de scie/Sawblade	min. Ø mm
Sägeblatt/Lame de scie/Sawblade	max. Ø mm
Führungsschlitzbreite des Spaltkeils	13mm
Largeur de l'entaille du couteau diviseur	13mm
Width of riving knife fixing slot	13mm
<b>Elektrischer Anschluß</b>	
Raccordement électrique	
Electrical connection	
Spannung/Tension/Voltage	V
Strom/Courant/Current	A
Frequenz/Fréquence/Cycles	Hz
Phasenzahl/Fases/Phases	3
<b>Hauptmotor/Moteur principale/Main motor</b>	
Fabrikat/Fabricant/Manufacturer	
Typ/Type	
Leistung/Puissance/Power	kW
Nummer/Numéro/Number	
<b>Vorritzermotor/Moteur inciseur/Scoring motor</b>	
Fabrikat/Fabricant/Manufacturer	
Typ/Type	
Leistung/Puissance/Power	kW
Nummer/Numéro/Number	

Fig. 2-1 Type label

Typ:	Machine designation
Nummer:	Machine-specific identification number
Baujahr:	Year of manufacture
Sägeblatt min Ø	Diameter of the smallest permitted saw blade
Sägeblatt max Ø	Diameter of the largest permitted saw blade
Führungsschlitzbreite des Spaltkeils:	Diameter of the guide pins for the riving knife in the riving knife holder

## 2.2 Certificates

The following certificates are provided:

- CE declaration of conformity
- EC prototype certificate
- GS certificate
- BG certificate
- CSA/UL certificate

**CE declaration of conformity****EC-Conformity Declaration**

Manufacturer:

**Wilhelm Altendorf GmbH&Co.KG**  
Wettinerallee 43/45  
D-32429 MindenMr Rolf Tweer is authorised to compile the technical documentation.  
Address:  
Wettinerallee 43/45  
D-32429 MindenIt is certified herewith, that the sliding table saw Type **WA 80**, Type **WA 8** with the**Machine Serial Number:** \_\_\_\_\_

conforms with all the relevant provisions of the EC-Directive 2006/42/EC (machinery directive).

The following harmonised standards were applied:  
DIN EN 1870-1 August 2009

Minden, 04/01/2010

  
Herbert Oppenborn  
Technical Director

### EC prototype certificate

European notified body  
Identification number 0392



Fachausschuss Holz  
**Prüf- und Zertifizierungsstelle**  
im BG-PRÜFZERT

Hauptverband der gewerblichen  
Berufsgenossenschaften

Translation

### EC-Type Test Certificate

**041077**

no. of certificate

Name and address of the holder of the certificate: (customer)     Altendorf GmbH & Co. KG  
Wettiner Allee 45  
D 32429 Minden

Name and address of the manufacturer:     Altendorf GmbH & Co. KG  
Wettiner Allee 45  
D 32429 Minden

Ref. of customer:  
-

Ref. of Testing and Certification Body:  
612.17 Ts/Pz/104048  
Produktgruppe 009.3503

Date of Issue:  
24.06.2004

Product designation:     Dimension saw

Type:     WA 8

Intended purpose:     Working of wood and materials similar to wood.

Testing based on:     GS-HO-01 Principles for testing and certification of woodworking machines, issue 01.2004 with test regulations issue 01.2004.

Remarks:

The type tested complies with the provisions laid down in the directive 98/37/EC (Machinery).

The present certificate will become invalid at the latest on:

**25.06.2009**

Further provisions concerning the validity, the extension of the validity and other conditions are laid down in the Rules of Procedure for Testing and Certification of April 2004.

Signature (Dipl.-Ing. R. Kohler)

PZB02E  
35.04



Postal address:  
Postfach 80 04 80  
70504

Office:  
Vollmoellerstrasse 11  
70563 Stuttgart

Phone: 0711/1334-1116  
Fax: 0711/1334-1111  
E-Mail: fa.holz@t-online.deE-Mail:

GS-Certificate



Fachausschuss Holz  
Prüf- und Zertifizierungsstelle  
im BG-PRÜFZERT

Hauptverband der gewerblichen  
Berufsgenossenschaften

GS-Prüfbescheinigung

041078

Bescheinigungs-Nummer

Name und Anschrift des  
Bescheinigungsinhabers:  
(Auftraggeber) Altendorf GmbH & Co. KG  
Wettiner Allee 45  
D 32429 Minden

Name und Anschrift des  
Herstellers: siehe oben

Zeichen des Auftraggebers:

Zeichen der Prüf- und Zertifizierungsstelle:  
612.17 Ts/Ts/104048  
Produktgruppe 009.3503

Ausstellungsdatum:  
24.06.2004

Produktbezeichnung: Formatkreissägemaschine

Typ: WA 8

Bestimmungsgemäße  
Verwendung: Bearbeiten von Holz und gleichartig zu bearbeitenden Werkstoffen

Prüfgrundlage: GS-HO-01 Grundsätze für die Prüfung und Zertifizierung von Holzbearbeitungsmaschinen,  
Ausgabe 01.2004 mit den Prüfgrundlagen in der Fassung 01.2004.

Bemerkungen:

Das geprüfte Baumuster stimmt mit den in § 4 Absatz 1 des Geräte- und Produktsicherheitsgesetz genannten Anforderungen überein.  
Das Baumuster entspricht somit auch den einschlägigen Bestimmungen der Richtlinie 98/37/EG (Maschinen).  
Der Bescheinigungsinhaber ist berechtigt, das umseitig abgebildete GS-Zeichen an den mit dem geprüften Baumuster übereinstimmenden Produkten anzubringen. Der Bescheinigungsinhaber hat dabei die umseitig aufgeführten Bedingungen zu beachten.

Diese Bescheinigung einschließlich der Berechtigung zur Anbringung des GS-Zeichens wird spätestens ungültig am:

25.06.2009

Weiteres über die Gültigkeit, eine Gültigkeitsverlängerung und andere Bedingungen regelt die Prüf- und Zertifizierungsordnung vom April 2004.



Unterschrift (Dipl.-Ing. R. Kohler)

PZ0020  
05.04



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70504 Stuttgart

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70563 Stuttgart

Telefon: 0711/1334-1116  
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**BG-Certificate**



Fachausschuss Holz  
Prüf- und Zertifizierungsstelle  
im BG-PRÜFZERT

Hauptverband der gewerblichen  
Berufsgenossenschaften

**BG-Prüfbescheinigung**

**0 4 1 0 7 9**

Bescheinigungs-Nummer

Name und Anschrift des  
Bescheinigungsinhabers:  
(Auftraggeber)      Altendorf GmbH & Co. KG  
Wettiner Allee 45  
D 32429 Minden

Name und Anschrift des  
Herstellers:      siehe oben

Zeichen des Auftraggebers:      Zeichen der Prüf- und Zertifizierungsstelle:      Ausstellungsdatum:  
612.17 Ts/Ts/104048      24.06.2004  
Produktgruppe 009.3503

Produktbezeichnung:      Formatkreissägemaschine

Typ:      WA 8

Bestimmungsgemäße  
Verwendung:      Bearbeiten von Holz und gleichartigen Werkstoffen

Prüfgrundlage:      GS-HO-05 Grundsätze für die Prüfung und Zertifizierung des Teilaspektes Staubemission  
(Konzentrationsparameter) von Holzbearbeitungsmaschinen, Ausgabe 02.2004 mit den  
Prüfgrundlagen in der Fassung 02.2004.

Bemerkungen:      Hinweis: Holzstaubgeprüft im Sinne von BGI 739. Dem BG-PRÜFZERT-Zeichen muss der  
Vermerk "holzstaubgeprüft" angefügt werden.

Das geprüfte Baumuster entspricht der oben angegebenen Prüfgrundlage.  
Der Bescheinigungsinhaber ist berechtigt, das umseitig abgebildete BG-PRÜFZERT-Zeichen an den mit dem geprüften Baumuster  
übereinstimmenden Produkten anzubringen, und zwar mit dem unter 'Bemerkungen' genannten Hinweis.

Diese Bescheinigung wird spätestens ungültig am:

**25.06.2009**

Weiteres über die Gültigkeit, eine Gültigkeitsverlängerung und andere Bedingungen regelt die Prüf- und Zertifizierungsordnung vom  
April 2004.



Unterschrift (Dipl.-Ing. R. Kohler)

P23030  
05.04



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C US-Certificate

<h1>Certificate</h1>		
Certificate no. <span style="border: 1px solid black; padding: 2px;">CU 72090726 01</span>		
<b>License Holder:</b> Wilhelm Altendorf GmbH & Co. KG Wettiner Allee 43-45 D-32429 Minden Germany	<b>Manufacturing Plant:</b> Altendorf Qinhuangdao Machinery Manufacturing Co. Ltd. No. 4 Hengshan Road 066004 Qinhuangdao China	
<b>Test report no.:</b> USA-UH 30471584 002	<b>Client Reference:</b> Rolf Tweer	
<b>Tested to:</b> UL 987:1994 R9.00 C22.2 No. 105-1953 (R2004)		
<b>Certified Product:</b> Dimension Saw		<b>License Fee - Units</b>
Model Designation: WA 8, WA8, WA8.2006, F92T		7
Rated Voltage: AC 220V, 60Hz (3-phase)		
Rated Current: 23.5A		
Protection Class: I		
<b>Special Remarks:</b> Replaces Certificate US72042004.		
Appendix: 1, 1-4		7
<b>Licensed Test mark:</b> 	<b>Signature</b>  Dipl.-Ing. M. Glagla QA Certification Officer	<b>Date of Issue</b> (day/mo/yr) 27/05/2009
<small>TUV Rheinland of North America, Inc., 12 Commerce Road, Newtown, CT 06470, Tel (203) 426-0888 Fax (203) 426-4009</small>		

### 2.3 Marks of conformity

			
CE mark	Wood dust mark	GS mark	C US mark

## 3 Product description

### 3.1 Intended use

The WA 8 sliding table saw and the workpiece guide equipment supplied with it are intended to be used exclusively for the following purposes:

- Laminated and unlaminated board materials (e.g. chipboard, coreboard, MDF board, ...)
- Solid wood
- Veneer with a suitable clamping device
- Gypsum plasterboard
- Cardboard
- Dimensionally stable plastics (thermoset plastics, thermoplastics). Sawing these materials does not normally involve any risks in respect of dust, chips, and thermal degradation products
- Aluminium and aluminium-alloys

#### Tools:

- The chosen saw blade must be suitable both for the specific work cycle (e.g. longitudinal cutting or crosscutting) and for the specific material.
- Only circular blades which are solid chrome vanadium (CV) or tungsten carbide tipped (TCT) and have a minimum and maximum diameter of 250 mm and 400 mm as well as a maximum width of 20 mm are allowed for the main saw and milling/grooving cutter. The middle table strip and the cushioning disc must be removed when using a milling/grooving cutter.
- Blades with a maximum diameter of 120 mm are allowed for the scoring saw.
- **Saw blades made of high-alloy high-speed steel (HS) are not allowed to be used.**
- **Wobble units are not allowed to be used.**

**Site of installation/use:**

- The machine is not suitable for use outdoors, or in rooms that are subject to moisture or the risk of explosions.
- The intended use of the machine involves connection to a suitably dimensioned extraction system.
- Intended use also involves compliance with ALTENDORF's specified operating, maintenance and repair conditions and the safety information contained in the operating instructions.
- The WA 8 sliding table saw may only be used, set up and maintained by persons who are familiar with the machine and aware of the dangers.
- The pertinent accident prevention regulations as well as any other generally recognised technical safety and industrial medicine rules must be observed.
- Repair work must be carried out by our own customer service or by an organisation that we have authorised. Only original ALTENDORF spare parts are allowed to be used for this. ALTENDORF will assume no warranty for any damage that is caused by using non-original spare parts.

**Clamping device:**

A suitable clamping device should be used for small workpieces in particular, e.g.:

- Mechanical quick-action clamp M64200

**Machine operator positions:**

The sliding table is intended to be operated from the following positions:

- On the left of the sliding table at the front of the machine, seen in the feed direction (main operator position).
- At the front cross-end of the machine on the right of the sliding table when working with the rip fence (make sure you do not move your body or parts of it into the blade rotation area).
- Any person removing the workpieces must stand at the rear cross-end of the machine behind the main table length extension (under no circumstances in the sliding table traverse area)!

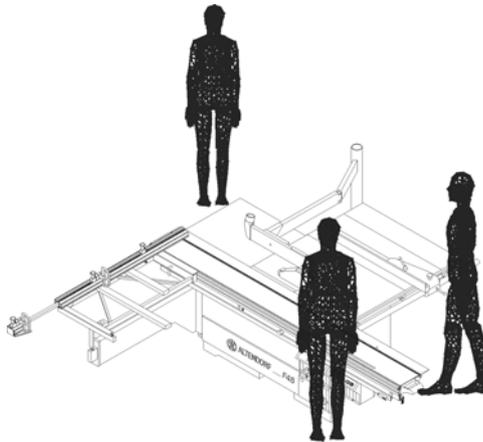


Fig. 3-1 Machine workplaces

**Note!**

Any use extending beyond this counts as unintended. ALTENDORF will not be liable for any kind of injury or damage that may result from such unintended use; the risk thereof is borne by the user alone.

Modifications by users to the machine or its electrical parts and the use of non-original parts on the machine exclude any liability by the manufacturer for any resultant injury or damage.

### 3.2 Auxiliary power/power requirements

#### Auxiliary power/power requirements

Motor [kW]	Voltage [V]	Freq. [Hz]	Nominal current[A] with or without scoring saw
5,5	200 - 230	50	19,8 / 23,2
5,5	380 - 420	50	11,5 / 13,5
5,5	200 - 230	60	20,0 / 23,5
5,5	380 - 440	60	10,5 / 12,0
5,5	575	60	6,0 / 7,0
5,5	600	60	7,5 / 8,5

The permissible tolerance for the specified mains voltage is +5% and -10%. Greater variations will impair functionality.

Only connect the machine to a three-phase AC mains with phases L1, L2 and L3. If the power supply to the machine runs through a frequency inverter or phase converter, these devices, or the brake module in the machine itself, can be destroyed. Operating the machine together with phase converters, frequency converters or transformer-capacitor combinations will destroy the brake module or the frequency converter and power supply unit!

Screw-in fuse links of the type NEOZED D02 (utilisation category gL) should preferably be used as back-up fuses.

The supply lead should be dimensioned adequately to ensure it will not be overloaded and the max. voltage drop is < 3% at nominal current.

Inspection and checking of the loop impedance and the suitability of the over-current protection device must take place at the installation location of the machine.

### 3.3 Emissions

#### 3.3.1 Noise - characteristic values

Sound power level [dB (A)]	Emission sound pressure level at the workplace [dB (A)]	Tool
Idling____L <sub>WA</sub> = 98,1 Running__L <sub>WA</sub> = 102,5	Idling____L <sub>PA</sub> =88,5 Running__L <sub>PA</sub> = 85,2	Circ. saw blade 350x3,5/54 WZ n = 4160 rpm

The noise emission values determined according to DIN EN ISO 3746 for the sound power level or DIN EN ISO 11202 for the sound pressure level at the workplace on the basis of the working conditions stated in ISO 7960 Appendix A are as listed in the table.

A measurement uncertainty allowance of K = 4 dB (A) applies to the stated emission values.

The stated values are emission levels and therefore not necessarily levels for safe working. Although there is a correlation between emission and imission levels, it cannot be reliably deduced from this whether or not additional precautionary measures are needed to protect operators.

Factors that influence the imission level at the workplace cover the duration of exposure, room characteristics, other sources of noise such as the type and number of neighbouring machines, and other working processes involving noise emission.

#### 3.3.2 Electromagnetic compatibility

The machine complies with the requirements set out in the European electromagnetic compatibility directive 89/336/EEC (EMC directive).

### 3.3.3 Dust

The dust emission values – measured in accordance with the “Principles for Testing Dust Emission (Concentration Parameters) from Woodworking Machines” issued by the German trade association's technical committee for wood – are under  $2 \text{ mg/m}^3$ . When the machine is attached to a correctly functioning extraction system with an air speed of at least 20 m/s (measured after the join of the two extraction connections) you can assume it is and will stay compliant with the technical reference concentration (TRK) limit for wood dust that is in force in Germany. The machines bear the GS mark with the additional wood dust mark "holzstaubgeprüft". Consequently, a company operating the machine in Germany is exempt from the obligation to perform measurements at the workplace in accordance with TRGS 553.



Fig. 3-2 Mark

### **3.4 Ambient conditions**

#### **Transport and storage**

The machine must not be used in an environment with explosive or corrosive gases.

The ambient temperatures for transport and storage range from - 25° C to + 55° C, and + 70° C is permissible for a short time.

The maximum air humidity must not exceed 90%, and condensation must be avoided in all cases.

## 3.5 Safety information

### 3.5.1 Operational safety

All machine tools, particularly woodworking machines with manual feed involve a certain risk when handled incorrectly. Therefore always observe the safety information that is summarised in this chapter as well as government and other industrial safety regulations (e.g. accident prevention rules)!

- Never operate the machine without the protective devices intended for the specific work cycle (also refer to “Working safely with the sliding table saw – Working examples”), and do not make any changes that might impair safety.
- Before all work, make sure that the protective and working devices are securely fitted and are not damaged.
- Before changing a tool, rectifying any faults and carrying out repairs, make sure that the machine cannot be turned on accidentally, for example by padlocking the main switch.
- Only use saw blades and grooving tools that comply with European standard EN 847-1.
- Only fit saw blades with the dimensions described in the technical data. The diameter of the mounting hole must always measure 30 mm. Loose intermediate rings are not allowed to be used.
- Select the rotational speed so that the maximum permissible rpm specified for the tool is not exceeded when using tungsten carbide tipped saw blades or grooving cutters.
- HS saw blades and cracked or deformed saw blades are not allowed to be used.
- Always wear tight-fitting working clothes and do not wear rings, bracelets or watches.
- Make sure that the workplace is uncluttered, slip-proof and well lit.
- Do not cut workpieces that are too large or too small for the machine to handle.
- When working at the machine, always stand to the side of the saw blade outside a possible kick-back area.
- Remove any loose parts from the vicinity of the saw blade before switching on the machine.
- Only start cutting when the saw blade has reached its full rotational speed.
  
- Always use the top safety hood!
- Adjust the height of the top safety hood to the thickness of the workpiece to be cut. When operating with a tilted saw blade, exchange the narrow hood for a wide hood.
- Always guide the workpiece safely and use the appropriate stops/fences.
- Use a push stick when cutting narrow workpieces (less than 120 mm) at the rip fence.

- Crosscuts and longitudinal cuts in round wood are not allowed with the standard feeding aids or fences/stops.
- Always use the riving knife except for insert cuts. The riving knife must not be thicker than the cutting line width or thinner than the main blade. Adjust it so that it is at a distance of least 3 mm and at most 8 mm from the gear rim. The guide slot must be 13 + 0.5 mm wide. The riving knives supplied with the machine cover the range of saw blade diameters which can be fitted to the machine according to its configuration. With respect to their thickness, they match the cutting line widths of commercially available tungsten carbide tipped saw blades. If other saw blades, e.g. made of chrome vanadium (CV), are used, select a riving knife thickness that lies between the cutting line width and the main blade thickness. Such riving knives can be obtained from the trade or directly from ALTENDORF.
- Use an anti-kick device for insert cuts, e.g. the front of the clamping shoe. Fix this in the sliding table groove, ensuring that the sliding table is locked with its interlock to prevent movement. Following insert cutting, refit the riving knife and the top safety hood immediately.
- Only do angle cuts when the cross-slide is fixed to the sliding table. Make sure that small cut-off workpieces cannot be taken up by the gear rim and kick out, for example by using a deflection wedge.
- For trimming, use the clamping shoe fixed to the sliding table to hold down the workpiece.
- For trimming, use the clamping shoe fixed to the sliding table to hold down the workpiece.
- Replace worn-out table strips immediately.
- Wobble units or wobble cutting devices are not allowed to be used.
  
- Only use grooving tools with a maximum width of 20 mm that are permitted for manual feeding. This is the case when tools have the inscription "MAN".
- The sound pressure level at the workplace generally exceeds 85 dB(A). For this reason, wear hearing protection when working.
- Only qualified electricians are permitted to work on the electrical equipment of the machine.
- Regular cleaning of the machine and, in particular, the main table, sliding table and guides (e.g. rip fence) is an important safety factor. Before starting this work, make sure that the machine cannot be switched on unintentionally.
- The sawdust generated during cutting impairs visibility and is, in part, detrimental to health. The machine must therefore be connected to a chip extraction system with both extraction sockets. The minimum air speed at the lower extraction socket must be at least 20 m/s. When the machine is switched on, the extraction system must switch on at the same time.

#### 3.5.2 Safety devices

Altendorf's sliding table saws have been developed in compliance with European standard EN 1870-1 "Safety of woodworking machines – circular sawing machines – Part 1: Circular saw benches (with and without sliding table), dimension saws and building site saws.

During the design stages great importance was attached to creating optimum working conditions, ranging from numerous mechanical and electrical safety devices to noise insulation and reduction of dust emission.

The machine is equipped with all the necessary safety devices to protect against operating risks that could not be eliminated by its design. These safety devices include, in particular:

- Rip fence with straight edge adjustable in the cutting direction. Can be pulled back to prevent parts of crosscut workpieces from jamming between the fence and the rising gear rim, or can be switched over to a low guide surface for cutting narrow and flat workpieces, allowing adequate space for the guide hand together with the possibility of lowering the top safety hood onto the workpiece here, too.
- Trimming hold-down to clamp and hold down untrimmed solid wood to secure against slippage in the course of trimming.
- Electrical interlocking of the door in the machine frame to change over the belt to alter rotational speed (only with three-speed model). It is not possible to switch on the machine when the door is open, and if the door is opened while the machine is running, the drives will switch off.
- Electrical interlocking of the cover plate on the extraction duct beneath the machine table in the vicinity of the saw blades. It is not possible to switch on the machine when the cover plate is open, and if the cover plate is opened while the machine is running, the drives will switch off.
- Sliding table arresting device to prevent workpiece kick-back for insert cuts together with the cross-stop.
- Automatic brake which, after switching off, brings the main saw blade to a standstill in less than 10 seconds, regardless of the saw blade diameter and rotational speed.
- Ergonomic arrangement of the operating elements at readily accessible positions. With the swivelable eye-level operating panel option: Operating elements in the upper operating panel and beneath the sliding table at the front of the machine.
- EMERGENCY STOP button on all operating panels to allow all drives to be switched off quickly and safely.
- Favorable airflow design of the lower extraction duct and the top safety hood to reduce dust emission to below 2 mg/m<sup>3</sup>, providing that the machine is connected at both extraction sockets to an extraction system having a min. airspeed of 20 m/s.

### 3.5.3 Top safety hood/riving knife

For a max. tool diameter of 400 mm:

- Top safety hood fitted separately from the riving knife for max. saw blade diameter of 400 mm, available in a narrow and a wide format made of polycarbonate to optimally cover the section of the blade not required for sawing above the machine table with a safeguard against lifting beyond the maximum cutting height of +5 mm. Rollers integrated in the safety hoods at the leading and trailing ends make it easier both for feeding workpieces and for pulling back of workpieces if workpieces have a slightly different thickness.
- 3 riving knives for saw blades between 250 and 400 mm diameter to avoid workpiece kick-back as a result of jamming in the cutting line.

For a max. tool diameter of 315 mm

- The top safety hood (fixed to the riving knife) is made of high quality polycarbonate and designed to optimally cover the section of the saw blade not used for cutting above the machine table. The start up slope at the front end of the safety hood simplifies the workpiece feed with different workpiece thicknesses.
- 3 riving knives for saw blades between 250 and 315 mm diameter to avoid workpiece kick-back as a result of jamming in the cutting line.

### 3.5.4 Remaining risks

Even when the machine is operated in accordance with its intended use and all pertinent safety regulations, the following remaining risks may be encountered because of design changes caused by the intended use in question:

- Contact with the main saw blade and the scoring blade in the cutting area.
- Contact with the main saw blade and the scoring blade from beneath the table level when the sliding table is pushed fully forward or pulled fully back.
- Kick-back of workpiece or workpiece parts.
- Individual teeth spinning off tungsten carbide tipped blades.
- Breakage and hurling out of the saw blade.
- Crushing at the manual or motor-driven sliding table.
- Crushing between the motor-driven tilt movement of the saw blade and the rip fence or workpieces lying in the tilting area.
- Contact with live parts when the electrical installation area is open.
- Damage to hearing as a result of long-term work without hearing protection
- Emission of health-endangering dust from operation without extraction.



---

**WARNING!**

Avoid the potential dangers posed by these remaining risks by paying increased attention when setting up, operating and servicing the machine!

---

## 3.6 Working safely with the dimension saw

### 3.6.1 Cross-slide/crosscut fence

The cross slide is placed on the end bolts of the swivel arm and the circular bar of the upper carriage and clamped with the clamping screws. Depending on the size of the material to be handled this can be done at any point on the upper carriage. For the mitre fence there are two positions on the cross slide.

#### **Position 1: For handling boards**

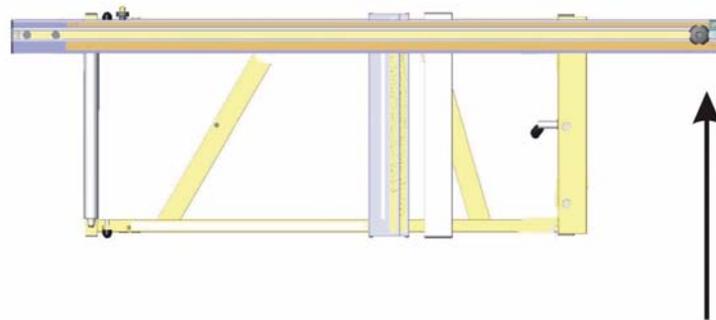


Fig. 3-3 For handling boards

The operator pushes the workpiece in the cutting direction against the fence

#### **Position 2: For handling wood and boards up to 600 mm width**

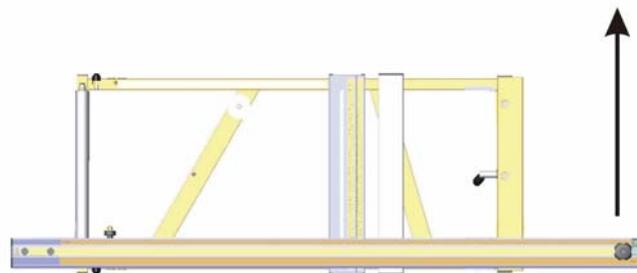


Fig. 3-4 For handling wood and boards up to 600 mm width

The operator pulls the workpiece against the cutting direction to the fence.

### Crosscut fence



Fig. 3-5 Controls: clamping lever

### Changing the crosscut fence:

- Raise the clamping lever and press it inward (for release).
- Place the crosscut fence in a new position, making sure that the centring bolts enter the holes.
- Raise the clamping lever and press it outward.
- Lightly press the clamping lever down (for clamping).



### Note!

For dimensions that have to be set with the hinged bar it should be noted that the individual tilt stop is actually against the fence of the cutout.



Fig. 3-6 Position individual tilt stop

### 3.6.2 Rip fence

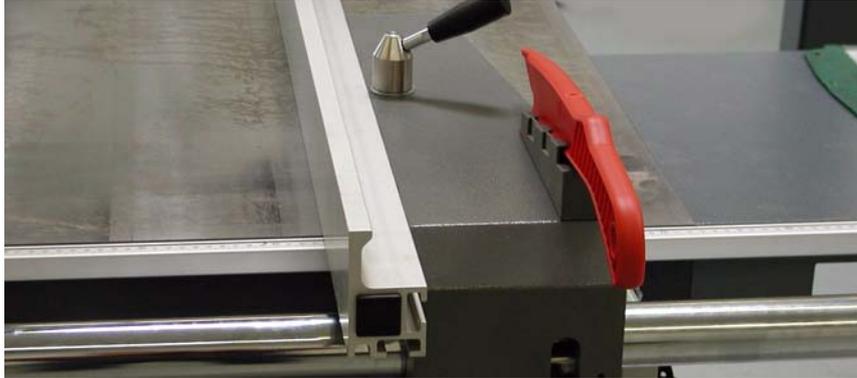


Fig. 3-7 Upright position of the stop fence

#### Setting

For cutting parallel, the rip fence is pushed up to the required dimension. The set dimension is read off from the edge of the aluminium profile.



#### **DANGER!**

Danger by saw blade contact!

Thereby injury or loss of limbs possibly!

- When cutting widths of less than 120 mm, make sure that the material is fed with a push stick.
- Make sure that the stop fence is laid flat.



Fig. 3-8 Star grip screw (only type NT/T/TE)

The dimension scale can be adjusted to the individual tool thickness after releasing the knurled screw. The stop fence of the rip fence can be adjusted in the cutting direction and to the profile height. Clamp it in the required position by a star grip screw. (not for type X)

#### **Crosscutting**

For crosscutting short workpieces and for recessing (e.g. tenon cutting ) or other work cycles during which offcuts can become jammed between the stop and the saw blade, the stop fence is moved forward until its rear end is in front of the saw blade.

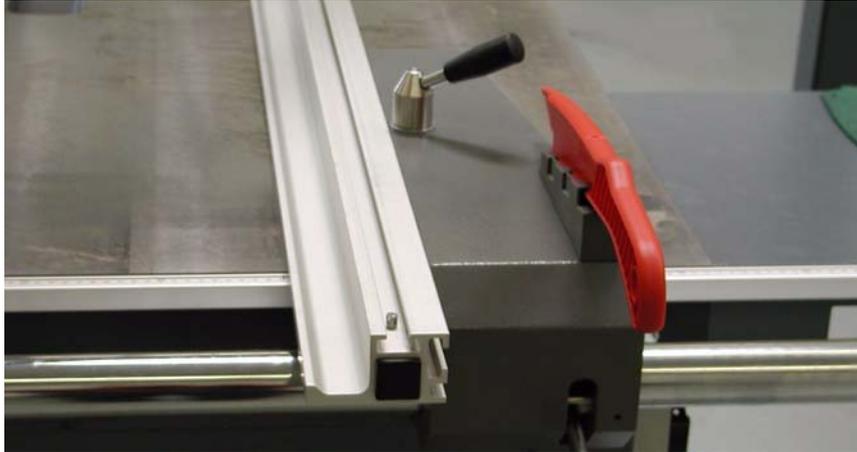


Fig. 3-9 Flat position of the stop fence

#### **Flat and narrow workpieces**

When handling flat and narrow workpieces the flat extension fence is used. This gives more space to guide the workpiece and the fence can be positioned closer to the saw blade, especially when the saw blade is tilted, without hitting the safety hood.

### 3.6.3 Working examples

#### General

The Altendorf sliding table saw is a universal machine which can be used for different cutting jobs. To do this however it is necessary to equip the machine accordingly.

#### Tool

The first important point is to only use undamaged saw blades, to correctly adjust the riving knife and to move the upper safety hood so that it is positioned closely above the workpiece to be cut. This last point is also of great importance for correct functioning of the extraction facility mentioned above.

#### Speed



#### Note!

Ensure that the correct speed is set and after switching on the machine, only begin to push the workpiece forward when the saw blade has reached full speed.

#### Positions of hands

The hands lie flat with the fingers closed on the workpiece; the thumbs are adjacent with a sufficient safety margin to the saw blade.

You will find further notes on safe working in the following description of the individual work processes:.

#### Edge cutting (trimming)



Fig. 3-10 Edge cutting (trimming)

*Tool: Ripping circular saw blade*

Operation: Mount clamping shoe on the sliding table. Place workpiece hollow side down and press down with clamping shoe. The ball of the right hand is used to apply forwards pressure to the edge of the workpiece. Place hands at a suitable safe distance from the tool.

### Ripping of narrow workpieces



Fig. 3-11 Ripping

Workpiece width < 120 mm

*Tool: Ripping circular saw blade*

Operation: Adjust rip fence to the desired cutting width. Lower the safety hood in accordance with the height of the workpiece. Move workpiece against the fence with the sliding table; Use the push stick in the area of the saw blade and push the separated workpiece until it is beyond the riving knife. For short workpieces use the push stick right from the start.

### Cutting of strips



Fig. 3-12 Cutting of strips

*Tool: Circular saw blade for fine cutting*

Operation: Set the aluminum scale of the rip fence to the lower guide surface. Place the workpiece on the sliding table and use your left hand to push it against the rip fence. Move the workpiece forward with the sliding table, using the push block in the area of the saw blade and continue to push the strip until it is beyond the riving knife.

### Crosscutting of wide workpieces



Fig. 3-13 Crosscutting

*Tool: Circular saw crosscut blade*

Operation: Place the workpiece against the mitre fence, use the left hand to press it firmly against the fence while moving it forward. When the flip stop is used, this is to be flipped up before pulling the workpiece back after cutting and the workpiece withdrawn from the saw blade or the workpiece is only to be removed beyond the rising blade tip.

### Concealed cutting, rebating



Fig. 3-14 Concealed cutting

*Tool: Circular saw blade for fine cutting*

Operation: For rebating select the cutting sequence so that the strip cut out falls away on the side of the saw blade opposite to the fence. Lower the safety hood onto the workpiece and ensure good workpiece guidance (left hand pushes the workpiece against the rip fence.)

### Concealed cutting, routing



Fig. 3-15 Routing

*Tool: Milling router permitted for manual feeding (maximum width 20 mm).*

Operation: Close the table opening by a table strip matched to the milling router. Set the tool to the desired routing depth. Leave the riving knife and the rear tool cover in place. On feeding push the workpiece firmly onto the table (otherwise there is the danger of an unintentional insert process).

***For crossrouting of narrow workpieces always use the mitre fence.***

### Crosscutting against the rip fence



Fig. 3-16 Crosscutting

The material is laid against the mitre fence of the cross slide. The desired dimension is set on the rip fence, the extension fence is pulled back to in front of the saw blade after unclamping it and the item to be cut moved with the sliding table. With the extension fence withdrawn the workpiece cannot stick between saw blade and fence.

### Crosscutting short and narrow workpieces



Fig. 3-17 Crosscutting

*Tool: Circular saw blade for fine cutting.*

Operation: Set the magnetic guide piece (not included with the machine) so that workpiece offcuts cannot come into contact with the rising part of the saw blade. Only feed the workpiece using the mitre fence. Do not remove fallen pieces from the vicinity of the tool with your hands.

### Dividing up large boards



Fig. 3-18 Dividing up

With this operation the dimension can be set either at the rip fence or at the mitre fence. If you wish to cut out many pieces with the same dimensions from a larger board, the best way to proceed is to first cut off parallel strips at the rip fence and then cut these to the desired dimensions. However as soon as the part pieces are greater than the cutting width of the machine the dimension is set at the mitre fence of the machine.



## 4 Definitions

### 4.1 Description of machine

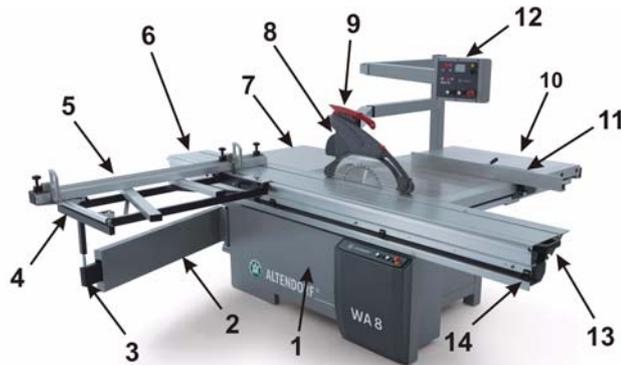


Fig. 4-1 WA 8 X

1	Machine frame	8	Safety hood
2	Swinging arm	9	Push stick
3	Telescopic tube	10	Main table width extension
4	Cross-slide	11	Motorised rip fence
5	Crosscut fence	12	Control panel at eye level
6	Sliding table	13	Pull-back handle
7	Main table length extension	14	Sliding tabel interlock

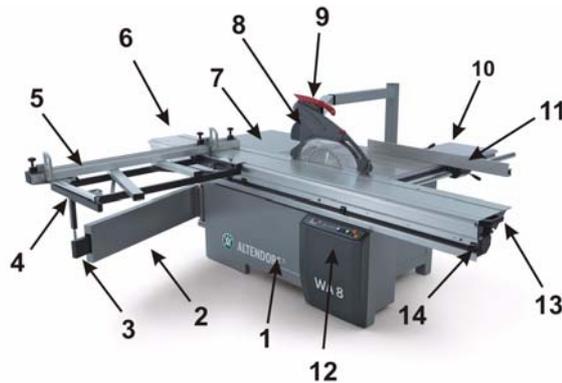


Fig. 4-2 WA 8 TE

1	Machine frame	8	Safety hood
2	Swinging arm	9	Push stick
3	Telescopic tube	10	Main table width extension
4	Cross-slide	11	Rip fence
5	Crosscut fence	12	Control panel on machine frame
6	Sliding table	13	Pull-back handle
7	Main table length extension	14	Sliding tabel interlock

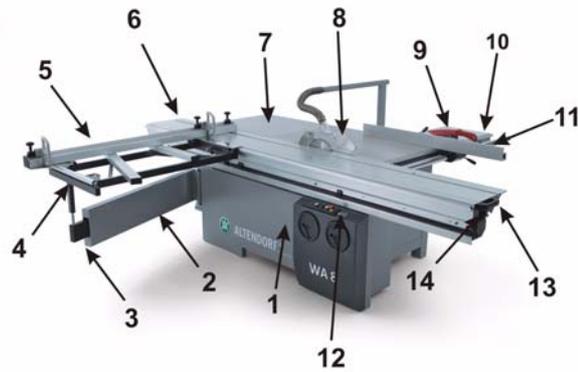


Fig. 4-3 WA 8 T

1	Machine frame	8	Safety hood
2	Swinging arm	9	Push stick
3	Telescopic tube	10	Main table width extension
4	Cross-slide	11	Rip fence
5	Crosscut fence	12	Control panel on machine frame with manual rise/fall and tilt adjustment
6	Sliding table	13	Pull-back handle
7	Main table length extension	14	Sliding tabel interlock

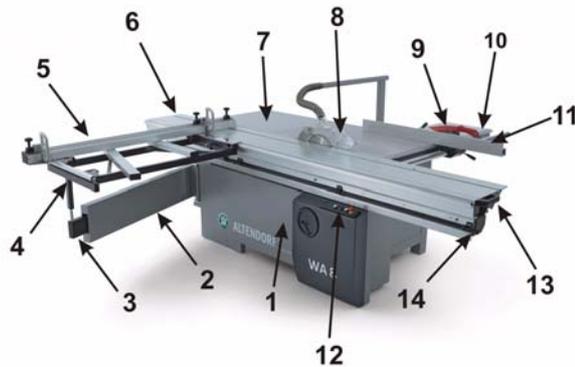


Fig. 4-4 WA 8 NT

1	Machine frame	8	Safety hood
2	Swinging arm	9	Push stick
3	Telescopic tube	10	Main table width extension
4	Cross-slide	11	Rip fence
5	Crosscut fence	12	Control panel on machine frame with manual rise/fall adjustment
6	Sliding table	13	Pull-back handle
7	Main table length extension	14	Sliding tabel interlock

## 4.2 Terms

### **Scoring**

Making of a shallow cut in the surface of a workpiece, deep enough to pass through any coating on the workpiece, so as to prevent damage to the underside when the main saw blade makes its cut.

### **Scoring blade**

A blade that is located in front of the sawing blade, is used to score the workpiece, and rotates along with the feed direction.

### **Grooves**

Making of cuts in the surface of the workpiece not deep enough to pass through using the saw blade or a milling tool. The rules for grooving set out in EN 1870-1 only cover grooves with a width of at least 8 mm that have been made in one pass using a grooving tool.

### **Hand feed**

Holding and/or guiding the workpiece manually. Hand feed includes the use of a hand-operated sliding table on which the workpiece is placed manually or clamped, as well as the use of a removable power feeding unit.

### **Safety appliance**

Additional device that is not an integral part of the machine but helps the operator to feed the workpiece safely, e.g. a push block or push stick.

### **Riving knife**

There is a riving knife to protect against workpiece kick-backs and unintentional contact with the rising gear rim. Sliding table saws on which saw blades of more than 250 mm diameter can be used are equipped with a force-guided riving knife.



Fig. 4-5 Zwangsgeführter Riving knife

### 4.3 Symbols

		
Danger warning	Hand injury warning	Voltage warning
		
Explosive substance warning	Crush risk warning	Laser beam warning

## 5 Installation

### 5.1 Transport

When transporting the sliding table saw by elevating truck or fork lift truck (forks only with unchangeable length), only lift the machine up slightly and secure it against tipping!

#### **Packaging**

The type of packaging depends on the type of transport. Unless otherwise contractually agreed, the packaging corresponds to the HPE guidelines established by Bundesverband Holzmittel, Paletten, Exportverpackungen e.V. (the German Association for Wooden Materials, Pellets, Export Packaging) and the VDMA. Observe the symbols on the outside of the packaging!

#### **Degree of dismantling**

The degree of dismantling of the sliding table saw depends on the transport conditions and the options supplied with the machine. The sliding table is always shipped dismantled into several installation assemblies.

#### **Sensitivity**

Particular care must be taken when transporting the sliding table saw in order to avoid damage from force or poor loading and unloading. Knocks and condensation due to extreme temperature fluctuations must be avoided during transport.

#### **Intermediate storage**

If the sliding table saw or its assemblies are not installed immediately after delivery, make sure that they are stored in a protected location. They must be correctly covered to prevent any ingress of dust or moisture. Bare, non-surface-treated parts of the sliding table saw are protected with a conserving agent which will protect them for approx. 1 year. Reconservation is necessary if storage is to last longer than this period.

## 5.2 Safety measures before use/installation

### Site of installation

No special foundations are required at the site of installation for the sliding table saw. The floor must have a load bearing strength suitable for the machine weight and should be flat and level.

Select a site of installation that provides enough clearance around the sliding table saw, allowing for the space requirements shown in the figure and the size of the workpieces to be cut. In addition, observe the safety clearances to parts of the building and other machines in order to eliminate the risk of crushing the operator or other personnel.

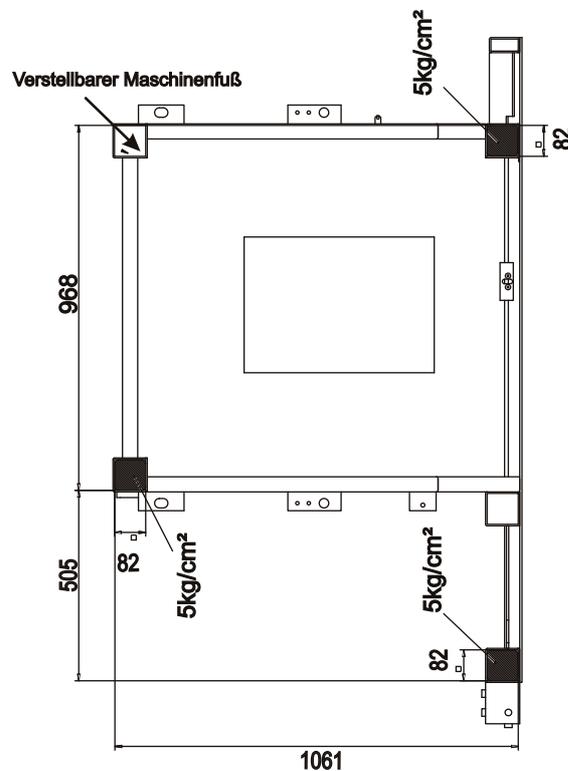


Fig. 5-1 Foundation plan



**DANGER!**  
**Danger of crushing!**

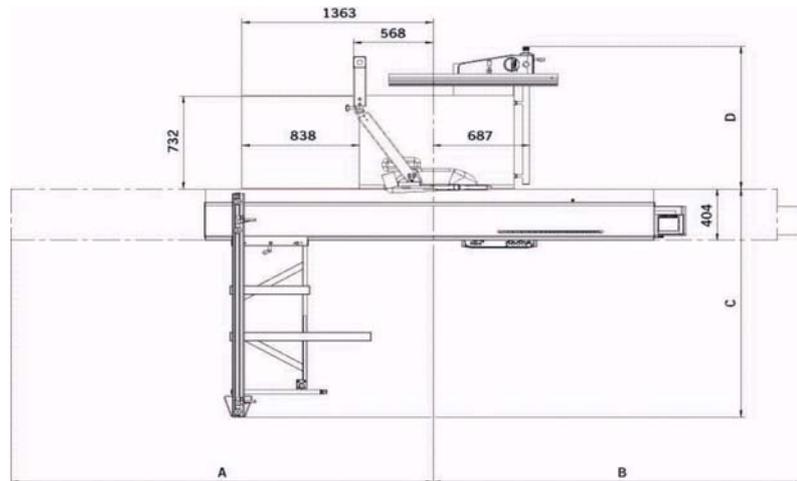


Fig. 5-2 Space requirements

**Legend**

**Dimension A:** Sliding table length + 290 mm

**Dimension B:** Sliding table length + 360 mm

**Dimension C:**

Crosscut fence up to 2500 mm: 1445 mm - max. 2630 mm

Crosscut fence up to 3200 mm: 1800 mm - max. 3350 mm

**Dimension D:** Cutting width + 310 mm with man. RF adjustment

Cutting width + 480 mm with motorised adjustment

Cutting width + 410 mm with DIGIT\_X

## 5.3 Installation

### 5.3.1 Telescopic tube for swinging arm



Fig. 5-3 Installing the telescopic tube

- [1] Undo the cheese head screw.
- [2] Push in the telescopic tube from the front through the housing for the swinging arm.
- [3] Insert and tighten the cheese head screw.

### 5.3.2 Main table length extension



Fig. 5-4 Installation main table length extension (Type TE/ NT/ T)

- [1] Guide the pins of the table length extension into the holes on the face of the table plate.
- [2] Secure loosely to the table plate with two M10 nuts and shake proof washers (1).
- [3] If necessary, correct the alignment and flushness by readjusting the support screws (2).
- [4] Tighten the M10 nuts.

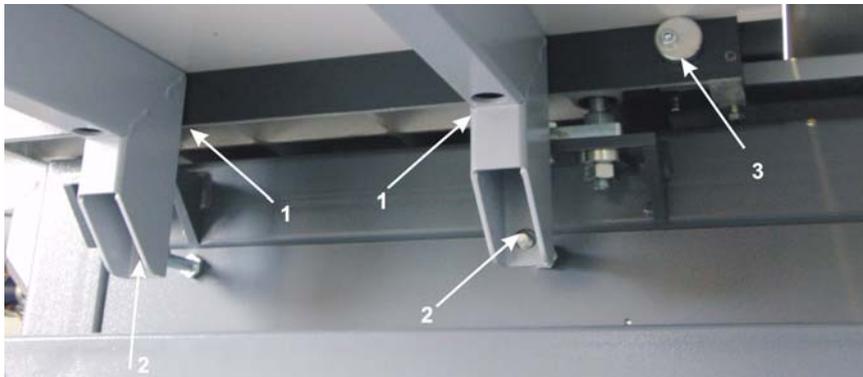


Fig. 5-5 Installation main table length extension (Type X)

- [1] Guide the pins of the table length extension into the holes on the face of the table plate.
- [2] Secure loosely to the table plate with two M10 nuts and shake proof washers (1).
- [3] If necessary, correct the alignment and flushness by readjusting the support screws (2).
- [4] If necessary, correct the height by means of eccentric screw (3).
- [5] Tighten the M10 nuts.

### 5.3.3 Rip fence

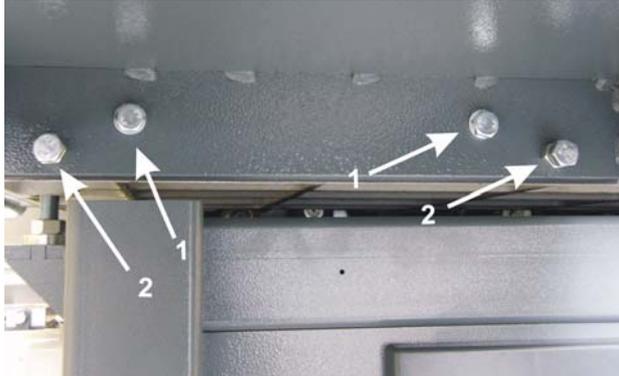


Fig. 5-6 Installation main table width extension (Type TE / NT/ T)

- [1] Guide the pins of the table length extension into the holes on the face of the table plate.
- [2] Secure loosely to the table plate with two M10 nuts and shake proof washers(1).
- [3] If necessary, correct the alignment and flushness by readjusting the support screws (2).
- [4] Tighten the M10 nuts.



Fig. 5-7 Installation main table width extension (Type X)

- [1] Guide the pins of the table length extension into the holes on the face of the table plate .
- [2] Secure loosely to the table plate with two M10 nuts and shake proof washers (1).
- [3] If necessary, correct the alignment and flushness by readjusting the support screws (2).
- [4] If necessary, correct the height by means of eccentric screw (3).
- [5] Tighten the M10 nuts.

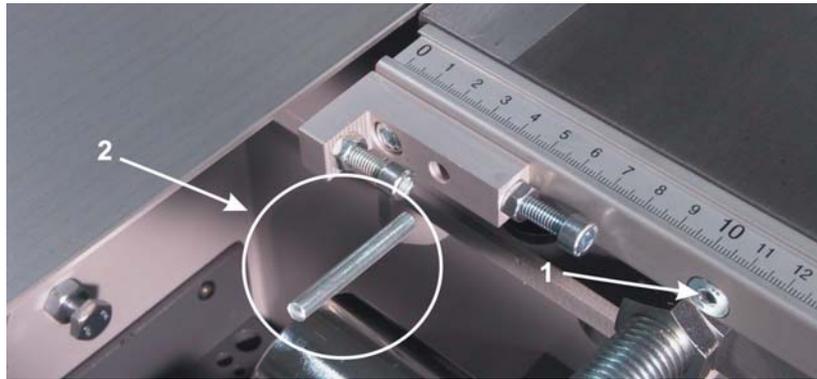


Fig. 5-8 Installing the measuring bar

- [1] Fit the measuring bar easily with M6x30 countersunk screws (1)
- [2] Knock a 6x45 clamping pin (2) through
- [3] Tighten the countersunk screws(1)

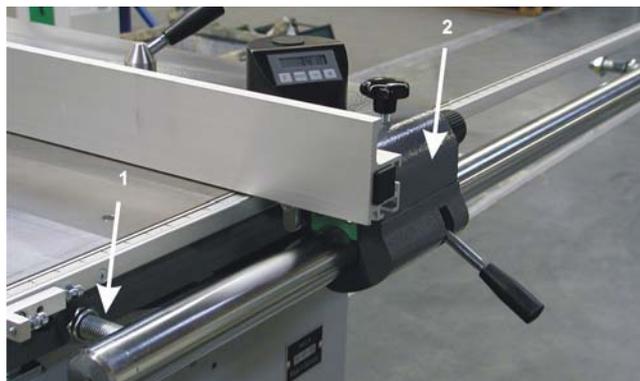


Fig. 5-9 Installing the rip fence

- [1] Put the fence bar bolts (1) through the holes in the main table.
- [2] Attach the M20 nuts from the rear of the main table and tighten them.
- [3] Carefully push the rip fence (2) from the right to left side on to the fence bar .

### Motorised rip fence (Type X)



Fig. 5-10 Installing the motorised rip fence

- [1] Fit the axis in front of the machine table with 3 M10 bolts.
- [2] Fasten on the other side with washers and M10 nuts. Make sure the axis is flush with the machine table.



Fig. 5-11 Installing the motorised rip fence

- [1] The axis is fixed to the table extension with an additional M10 bolt.



Fig. 5-12 Installing the motorised rip fence

- [1] Plug in the three electrical connections.

### 5.3.4 Cross-slide and crosscut fence

The cross-slide must be attached to every point of the outer-lying round bar of the sliding table, and must be clamped.

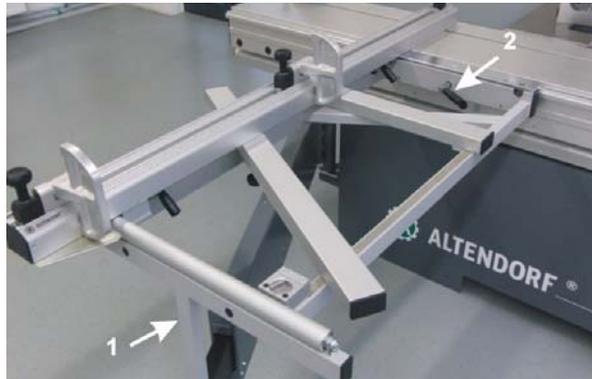


Fig. 5-13 Installing the cross-slide

- [1] Place the supporting pipe (1) of the cross-slide on the telescopic tube's bolt.
- [2] Swing the cross-slide to the sliding table, attach it and clamp it with an eccentric lever (2).

### Crosscut fence

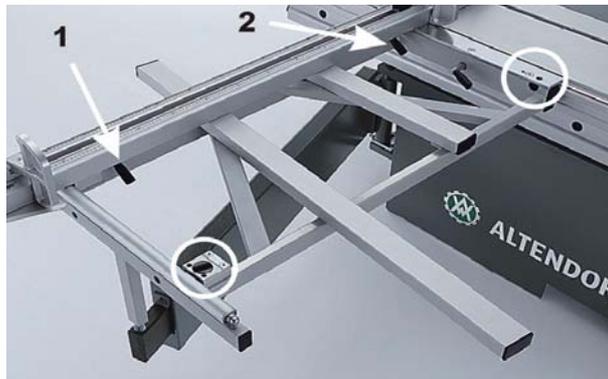


Fig. 5-14 Installing the 90° crosscut fence option

- [1] Place the crosscut fence on the cross-slide so that the centring bolts enter the hole or groove
- [2] Raise the clamping lever (1+2) and press it outward
- [3] Lightly press the clamping lever (1+2) down (for clamping)

- ***Changing the 90° crosscut fence***

- [1] Raise the clamping lever (1+2) and press it inward (for release)
- [2] Place the crosscut fence in a new position, making sure that the centring bolts enter the hole/groove
- [3] Raise the clamping lever (1+2) and press it outward
- [4] Lightly press the clamping lever (1+2) down (for clamping)

### 5.3.5 Sliding table

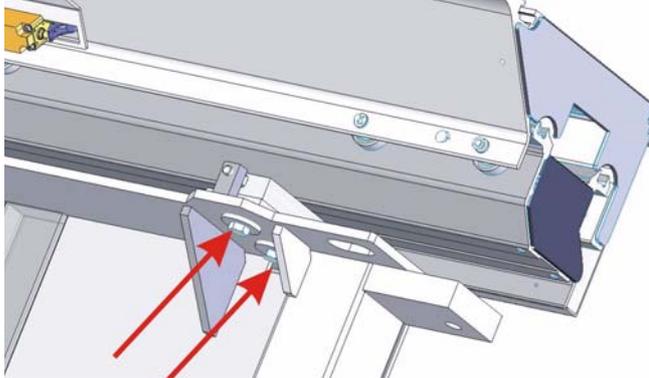


Fig. 5-15 Bottom carriage stop

- [1] Place the bottom carriage on the machine frame and push against the stop screws.
- [2] Screw on the bottom carriage.



Fig. 5-16 Installing the middle carriage

- [1] Place the middle carriage on the bottom carriage so that the interlock is pointing to the right.
- [2] Push the middle carriage to the right so that the 1st double roller is still just resting on the round bars.



Fig. 5-17 Installing the top carriage

- [1] Carefully push on the top carriage making sure it is not skewed.
- [2] Carefully push the guide rails onto the double rollers
- [3] Push the top carriage towards the left, all the way to the stop.

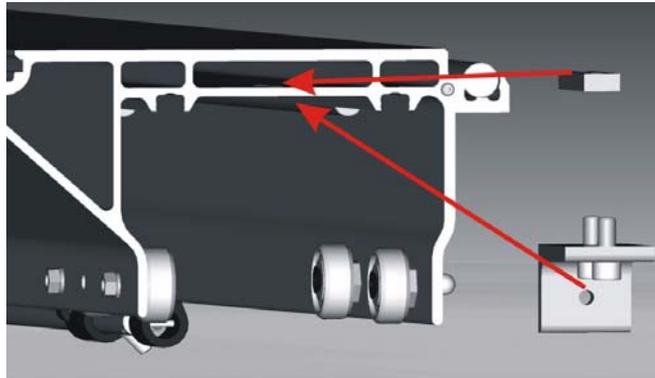


Fig. 5-18 Back stop

- [1] Fit the back stop.



Fig. 5-19 Top carriage stop

- [1] Check whether the stop on the top carriage and the stop on the bottom carriage hit the end position at the same time.
- [2] Adjust if necessary.



Fig. 5-20 Central fixing

- [1] Tighten the central fixing screw
- [2] Check the sub-rollers are correctly adjusted.

### 5.3.6 Electrical connection



---

**WARNING!**  
**Dangerous electric voltage!**

All work on the electrical equipment, including connection to the mains supply, may only be performed by a qualified electrician.

Disconnect the machine from the mains supply before working on the electrical equipment.

- After connecting the supply line, check the rotational direction of the main saw motor by briefly starting up and, if necessary, correct it by interchanging the two outer conductors in the mains connection box.
  - Pay attention to the rotational-direction arrow on the saw blade cover!
- 



Fig. 5-21 Mains connection

Connection to mains electricity is made in the housing of the main isolator which is located on the machine frame on the rip fence side. The terminals for the supply line are marked L1, L2, L3, N and PE, and the terminals for the potential-free contact are marked POT. The supply line cross-section and the fuses to be fitted by the user depend on the installed motor rating.

If the machine is connected via a flexible supply line, a rubber-sheathed cable (wire marking H07RN-F) must be used. Required plug-in device: Round connector in accordance with DIN 49463.



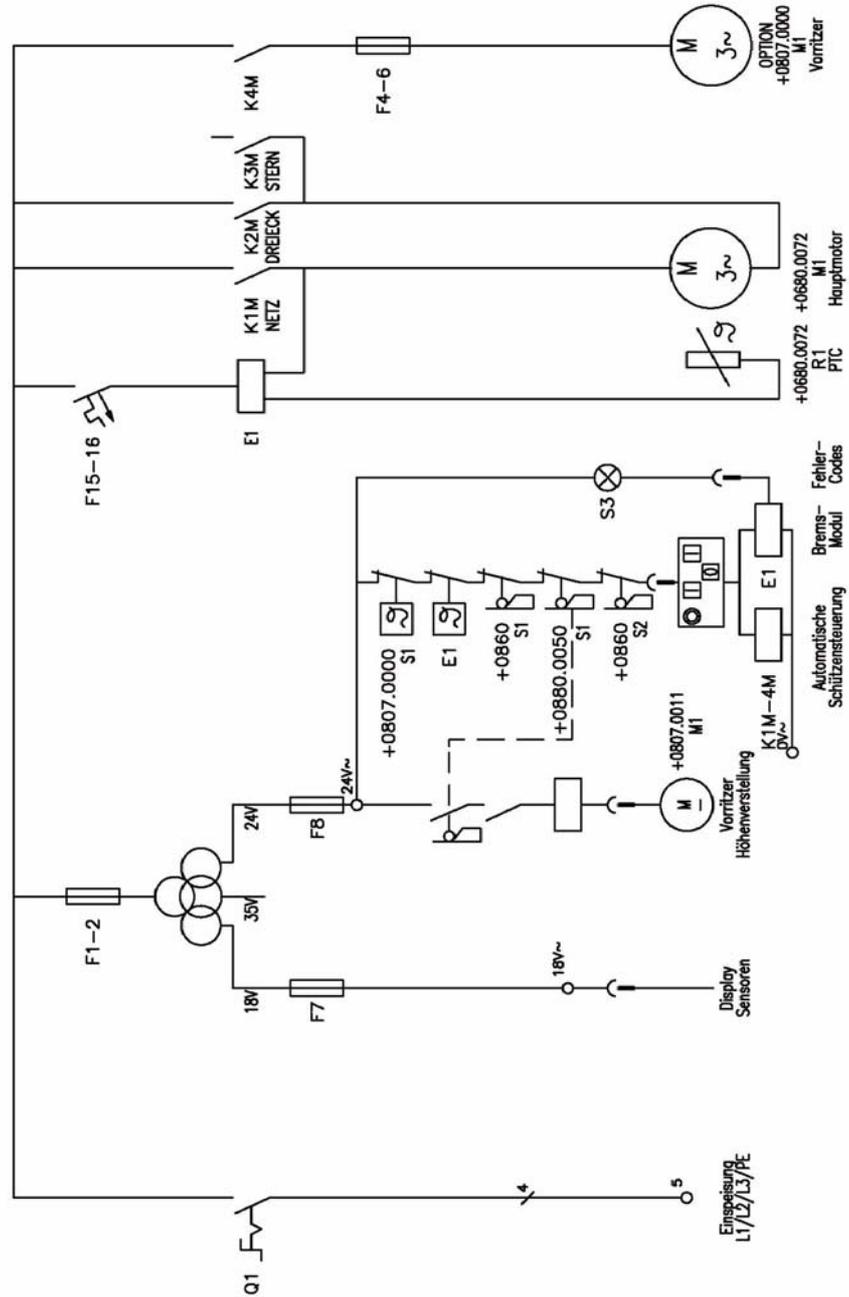


Fig. 5-23 Type NT/T

Item	Designation
Q1	Main switch
F1-F2	Control fuse (primary)
F7-F9	Control fuse (secondary)
F15-F16	Fuses, brake current
+0860 S1	Safety switch sliding table
+0880.0050S1	Cover plate safety switch
+0860 S2	Safety switch machine door
GL1	Rectifier
+0680.0072 M1	Main saw motor
+0807.0000 M1	Scoring saw motor
+0680.0072 R1	Main motor temperature monitor

### 5.3.7 Connecting the extraction system (customer side!)

The operator position at the WA 8 sliding table saw can be defined as low dust (according to the German safety authority publication BGI 739 paragraph 4) if the overall dust connection is 140mm. The minimum air speed at the overall dust connection must be 20 m/s. The sockets and hoses are not supplied as standard!

In addition, make sure that the extraction system is switched on together with the machine. For this, you can use the existing potential-free contact (POT - refer to circuit diagram) or a current transformer installed in the supply line.

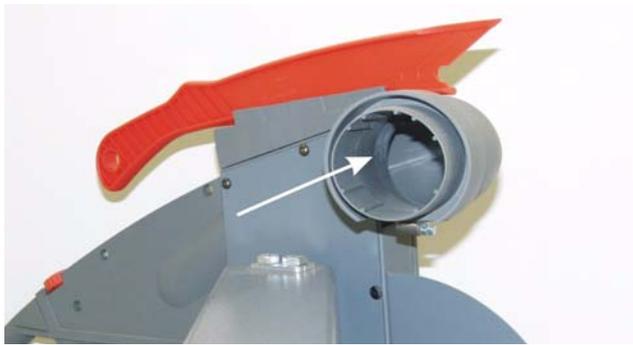


Fig. 5-24 Extraction system big safety hood for saw blades up to 400 mm



Fig. 5-25 Extraction system small safety hood for saw blades up to 315 mm



Fig. 5-26 Extraction system chip channel

## 5.4 Basic machine setting

### 5.4.1 Sub rollers on the sliding table

The basic machine settings are made in the works during final assembly. Dismantling various modules, transport and assembly at the installation site can mean that it is necessary to correct the machine settings. The machine parts to be checked are described below.

#### **Checking the lower rollers**

The lower rollers must move smoothly at the start and end of the running surface over the starting angle. They should be set so that they can be stopped manually by exerting a perceptible force and slide freely while the sliding table is moved.

#### **Adjustment of the lower rollers**

The lower rollers are supported eccentrically and adjustable. If they are set too tight the sliding table is hard to move.

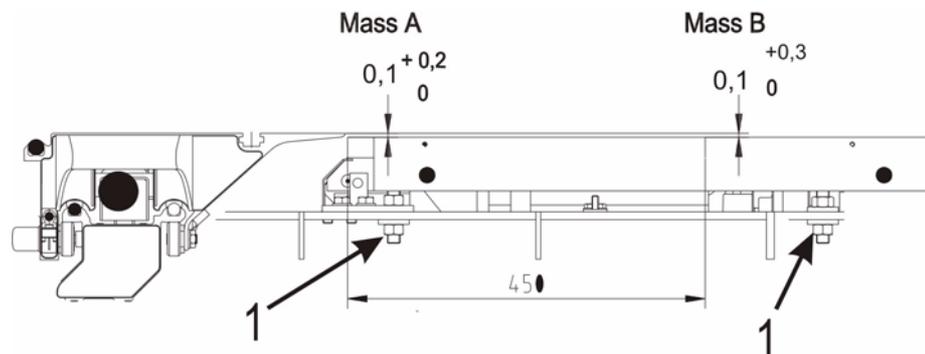
### 5.4.2 Main table

#### Checking the table plate

Place a straightedge on the sliding table, carriage in mid position. Move carriage backwards and forwards, Table plate must lie about 1/10mm lower.

#### Checking the table plate

Loosen the locknuts on the 4 fixed bolts, Adjust the table plate, tighten the nuts. Then lay the straightedge in parallel to the sliding table on the table plate.



### 5.4.3 Swinging arm

Check:

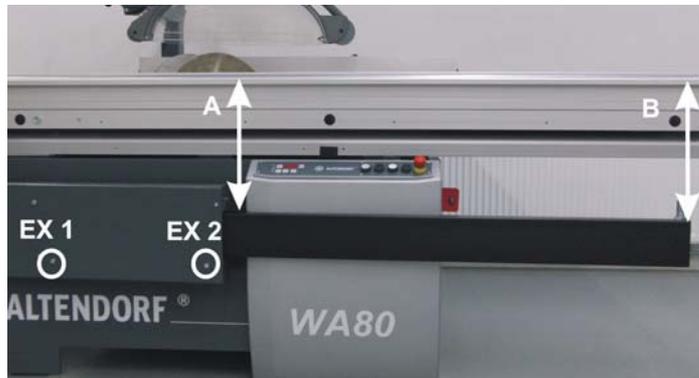


Fig. 5-27 Adjusting the swinging arm

Rest the swinging arm against the machine frame, fully extend the telescopic tube of the swinging arm and check dimensions A and B. Set dimensions A and B with a tolerance of 0.5 mm; if necessary correct the setting with EX 1 and EX 2.

The dimension between the bottom edge of the crosscut fence profile and the top edge of the top carriage profile (see fig. 2) is a feature for the tolerance of the swivel arm setting. The dimension must not exceed the cut length possible with the cross-slide between 0.1 and 0.9 mm (check with feeler gauge).

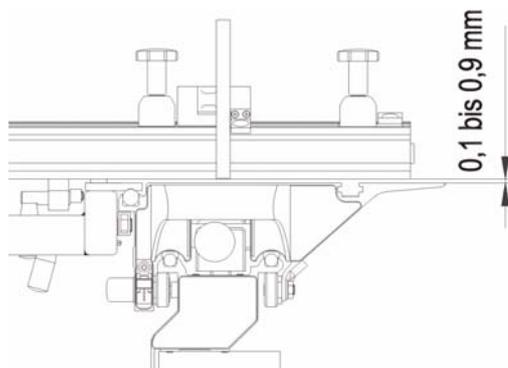


Fig. 5-28 Adjusting the swinging arm

#### 5.4.4 Cross-slide height

##### Check

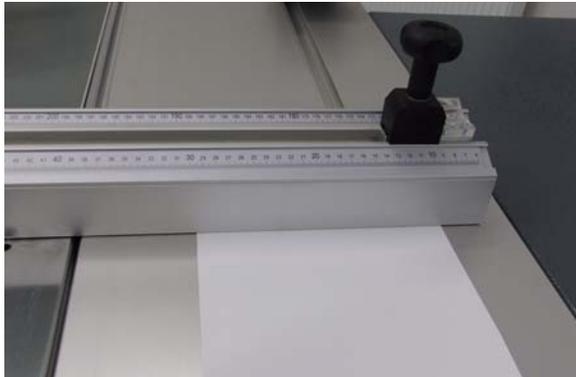


Fig. 5-29 Cross slide height check

Insert a card approx. 0.5 mm thick between the underside of the crosscut fence and the sliding table surface. The card must move freely in all positions. The crosscut fence must be parallel to the sliding table surface.

##### Adjustment

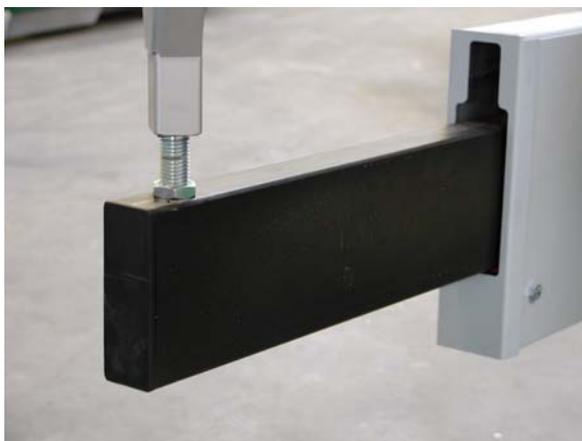


Fig. 5-30 Cross slide height adjustment

Adjust the height of the bolt at the end of the swinging arm and relock the nut. If the gap between the underside of the crosscut fence and the surface of the sliding table changes as the sliding table is moved, the parallelism of the telescopic part of the arm and the surface of the sliding table must be checked.

### 5.4.5 Setting free cut

#### Checking Free cut sliding table

Set saw blade to max. cutting height, cut a short piece of a test piece (where possible MDF) at the mitre fence. The difference in the noise between the cutting and non-cutting teeth allows you to determine whether the sliding table is set correctly. On the passage of the rising teeth a slight fluttering noise should be heard compared to the noise of the cutting teeth.

#### Adjustment

Release the sliding table attachment at both ends **and** in the middle (where present). Release the lock nuts on the fence screws. Make the appropriate adjustments and re tighten the lock nuts. Then readjust the sliding table and tighten all securing screws again.

#### Checking free cut rip fence

Set the saw blade to its max. cutting height, cut a 300x450xmm test piece (where possible MDF) at the rip fence. The noise of the rising teeth must be the same as for the free cut on the left with correct adjustment of the sliding table.

#### Adjustment

Release the bolts connecting the table extension to the circular rod. Then, by adjusting the center locknuts, change the position of the circular bar and thereby of the rip fence.



Fig. 5-31 Free cut adjustment manual rip fence

### Adjustment motorised rip fence (Type X)

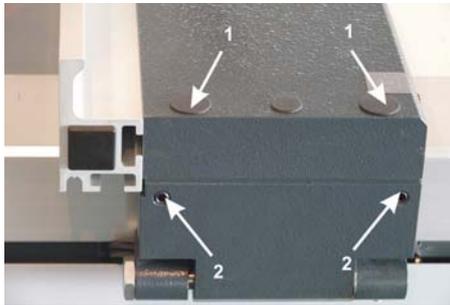


Fig. 5-32 Adjustment free cut motorised rip fence

- After removing the cover cap release the clamping screws (1).
- Set the free cut by adjusting the setscrews (2).
- Tighten the clamping screws (1).



---

#### CAUTION!

When a scorer is used ensure that both free cuts are set to approximately the same!

---

### 5.4.6 Angle cut

#### Checking the angle cut

Before checking the angle cut, check the settings of the sliding table (see operating instructions) and of the swinging arm, and correct them if necessary. Check the angle cut at the crosscut fence as follows:

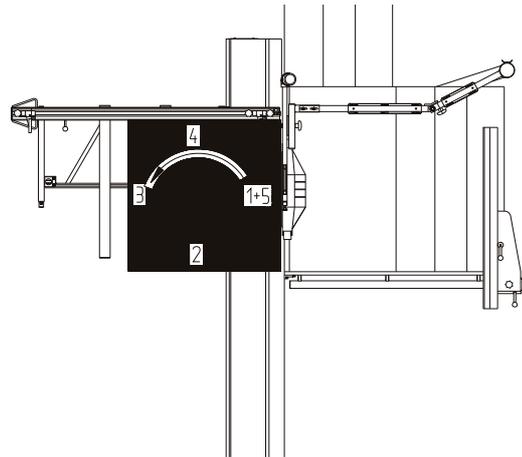


Fig. 5-33 Angle cut

As the tool, use a sharp quality saw blade,  $D = 350 \text{ mm}$ / 3.5/2.5/72 teeth alternate bevel at  $n = 5000 \text{ rpm}$ . Take a  $1000 \times 1000 \text{ mm}$  chipboard or MDF board, minimum board thickness  $19 \text{ mm}$ . Do 5 cuts (see fig.), laying the last cut side at the crosscut fence for the next cut (turn the board anticlockwise). For the 5th cut, cut off a strip approx.  $10 \text{ mm}$  wide. Measure the thickness at both ends with a vernier caliper. The difference between the two dimensions divided by 4 gives the squareness error per metre cut length.

Check:

The angle cut must be checked at 2 different positions at least on the cross-slide of the sliding table.

Factory setting:

The cross-slide is secured at positions of approx.  $300 \text{ mm}$  and  $1300 \text{ mm}$  from the sliding table end. In these two positions the angle cut is checked and adjusted as described above. The setting must not exceed the maximum permissible tolerance of **<0.2 mm** ( with the 5th cut (dimension 1 - dimension 2)).

### 5.4.7 0° setting of the saw blade

#### Checking

Lay 2 strips which have been previously cut using the rip fence (appr. 70 mm wide, 400 mm long) **on edge** in front of the mitre fence, cut them in this position and push the cut surfaces together. If the setting is exact the cut edges are parallel, i.e. there is no air gap detectable between the cut edges.



Fig. 5-34 Cutting a test piece



Fig. 5-35 Checking the 0° -setting

**Adjustment**

Recalibrate the machine by pressing the RESET-button for approx. 3 sec.  
(Type TE / X).

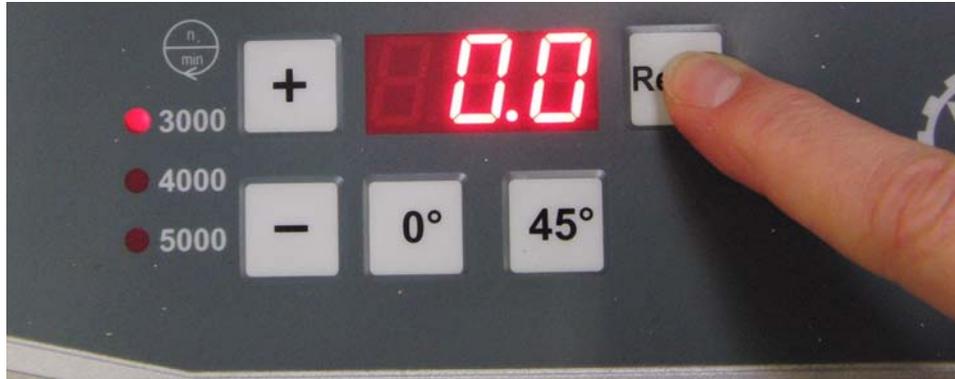


Fig. 5-36 Adjustment (Type X / TE)

Recalibrate the machine by pressing the F-and RESET-button simultaneously  
(Type T).



Fig. 5-37 Adjustment (Type T)

## 6 Operating

### 6.1 Adjustment of the main saw blade

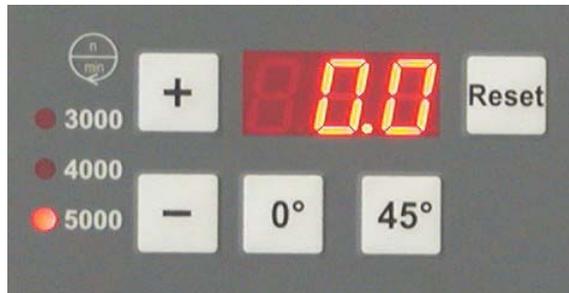


Fig. 6-1 Control system

#### Rise and fall adjustment (Type X/TE)

- The cutting height is reduced by pressing the - key.
- The cutting height is increased by pressing the + key.
- When the Plus key or the Minus key are held down the saw blade moves for 2 sec. in creep mode and then switches automatically to fast mode.

#### Tilt adjustment (Type X/TE)

It is imperative to ensure the following before tilting the saw blade:



#### DANGER!

Danger from kicked-out offcuts!

Danger from the blade touching the rip fence!

- Clear the main table of any workpieces in the tilting area
- When cutting widths less than 180 mm, set the rip fence straight edge in the flat position

#### Adjusting the tilt angle:

- The angle of tilt is reduced by pressing the 0°- key.
- The angle of tilt is increased by pressing the 45° key.
- When the 0° key or the 45° key are held down the saw blade moves for 2 sec. in creep mode and then switches automatically to fast mode.
- Tapping the 0°/ 45° keys briefly makes an adjustment of 0.1° in each case!

### Calibrating the tilt angle display

- Tilt the saw blade into the vertical position and check the 90° angle.
- Press the RESET key for 3 seconds, the displays shows 0.0.
- The machine is calibrated.



Fig. 6-2 Calibrating (Type X / TE)

### Height adjustment at WA 8 NT / T

The left handwheel (2) controls the height adjustment.



### Tilt adjustment at WA 8 T

It is imperative to ensure the following before tilting the saw blade:



---

#### **DANGER!**

Danger from kicked-out offcuts!

Danger from the blade touching the rip fence!

- Clear the main table of any workpieces in the tilting area
  - When cutting widths less than 180 mm, set the rip fence straight edge in the flat position
- 

The right handwheel (1) controls the tilt adjustment. The angle is shown in the digital display above.



### Calibrating the tilt angel display

- Tilt the saw blade into the vertical position and check the 90° angle.
- Press the F-and RESET keys simultaneously, the displays shows 0.0.
- The machine is calibrated.



Fig. 6-3 Calibrating WA 8 T

### Changing the batteries

		
<p>Remove the display electronics carefully</p>	<p>Undo the screws and remove the cover</p>	<p>Change the batteries, making sure the poling is correct!</p>

Tbl. 6-1 Changing the batteries

Alkali manganese batteries have an operating life of approx. 1 year.  
 The use of rechargeable batteries of any type is not recommended as their voltage and capacity deviate from those of alkaline batteries.

## 6.2 Changing the main saw blade

The following basic points should be noted:

- Do not fit any saw blades that have cracks or are damaged in any other way.
- **Type X/TE:** Only fit saw blades with a diameter of between 250 and 400 mm (Type NT/T optional with large safety hood).
- **WA 8 NT/T:** Only fit saw blades with a diameter of between 250 and 315 mm.
- Check that the speed set for the saw blade is not too high. For composite saw blades the highest permitted speed is shown on the blade in the form n max =... .

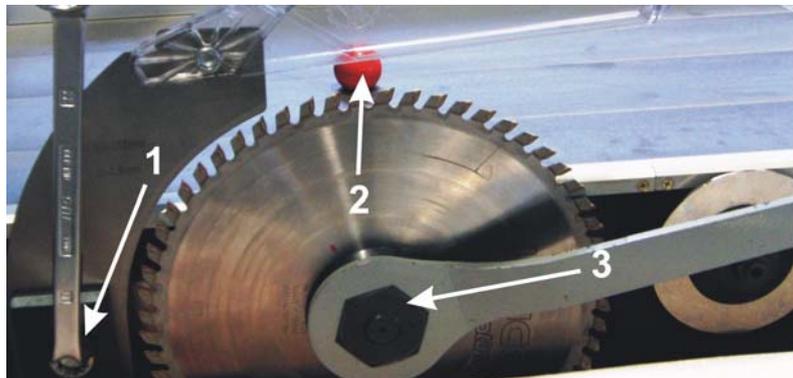
Please note that only saw blades with adjacent holes (2 holes 10 mm  $\varnothing$  spaced at 60 mm) can be tensioned. This is necessary to prevent the saw blade securing system becoming loose during braking.



### **DANGER!**

Check saw blade retaining disc for tightness before operating machine!

### **Changing the saw blade**



- Switch off the drives.
- Set the saw blade to the upper height setting and tilt to 0°.
- Switch off the main switch.
- Move the upper carriage to the middle of the saw drive shaft, unlock the lock in the center.
- Push the upper carriage in the cutting direction.
- Raise the red cover plate.
- Use the ring spanner (1) to release the screw.
- Insert locking pin (2) through table plate and saw shaft.
- Unscrew the nut (3) with ring spanner SW55 by turning it to the right .

- Before fitting the new scoring blade, remove any adhering chips and dust from both flanges.
- Place the saw blade and front flange on the saw drive shaft and screw in by hand. Tighten the nut with the ring spanner SW55 by turning it to the left.
- Check the riving knife with regard to its strength and distance from the saw blade.
- Close the lower protective cover and check by manual turning whether the saw blade is running correctly.




---

**WARNING!**

After the saw blade has been changed it is vital to make the correct riving knife adjustments!

- The gap between the riving knife and the teeth of the sawblade should be between 3 and 8 mm.
  - The highest point of the riving knife should be adjusted to be below the top of the uppermost tooth.
  - The thickness of the riving knife should be at least 0.2mm wider than the sawblade body, but narrower than the tooth kerf.
- 

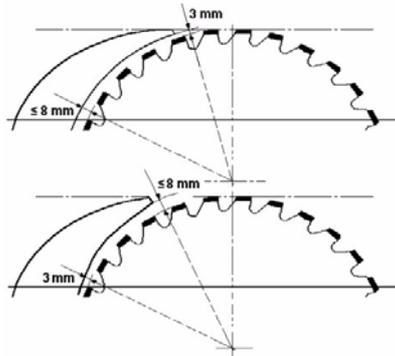


Fig. 6-4 Adjustment riving knife

### 6.3 Saw blade recommendation

Workpiece	Cutting speed [m/s]	Zuschnittsägeblatt D = 250 mm	Saw bladeCut Ø = 300 mm	Saw bladeCut Ø = 350 mm	Saw bladeCut Ø = 400 mm	Saw blade Finishing Ø = 250 mm	Saw blade Finishing Ø = 300 mm	Saw blade Finishing Ø = 350 mm
Softwood lengthwise	60 - 80	24 W	28 W	32 W	36 W	40 W	48 W	54 W
Softwood crosswise	60 - 80	40 W	48 W	54 W	60 W	48 W	60 W	72 W
Hardwood lengthwise	60 - 80	24 W	28 W	32 W	36 W	40 W	48 W	54 W
Hardwood crosswise	60 - 80	40 W	48 W	54 W	60 W	48 W	60 W	72 W
Veneers	70 - 80	60 W	72 W			80 W	96 W	
Plywood	50 - 70	40 W	48 W			48 W	60 W	
Blockboard	60 - 80	48 W	60 W	72 W		60 W	72 W	84 W
Laminated wood	50 - 80	40 W	48 W	54 W		60 W	72 W	84 W
Raw chipboard	60 - 80	48 W	60 W	72 W		60 W	72 W	84 W
Coated chipboard	60 - 80	60 TF	72 TF	84 TF		80 TF	96 TF	108 TF
MDF-raw boards	60 - 80	48 W	60 W	72 W		60 W	72 W	84 W
MDF laminated	60 - 80	60 W	72 W	84 W		80 W	96 W	108 W
Laminate floorings	50 - 70	60 TF	72 TF	84 TF		80 TF	96 TF	108 TF
Hard fiberboard	60 - 80	60 W	72 W	84 W		80 W	96 W	108 W
PVC-Profiles*	40 - 60	60 TF	72 TF	90 TF		48 DD	60 DD	72 DD
Clear acrylic sheets	40 - 50	60 W	72 W	84 W		80 WF	96 WF	108 WF
Plasterboard sheets	40 - 60	48 W	60 W	72 W		60 W	72 W	84 W
Aluminium-Profiles*	60 - 70	60 TF	72 TF	90 TF		80 TF	96 TF	108 TF

Abbreviations:

- \* negative tensioning angle
- W Alternate tooth, TF Trapezoidal flat tooth

- When selecting tools ensure that no blunt or damaged tools are fitted.
- The highest permitted speed specified on the tool may not be exceeded.
- Do not use high-speed steel (HS) saw blades!
- The tools must have a hole diameter of 30 mm and driving pin holes of 10 mm Ø in a 60 mm Ø semicircle.
- The correct choice of saw blade depending on the material to be handled and the strength of the material is vitally important, along with the correct cutting speed for clean cutting and low stress on the operator. A selection of saw blades for the Altendorf sliding table saw is shown in the table (p.29). This table makes no claims to be complete. Since the figures for the cutting speed cover large ranges in some cases it is vital to determine the best cutting speed for optimum cutting results by trial and error!

#### **Scorer saw blade**

Scorer saw blade: D=120 mm, 24 teeth, flat tooth, arbor diameter 22 mm

#### **Riving knife**

The riving knives supplied are suitable in size for the range of saw blade diameters specified in the table. The corresponding range is specified on the bottom end of the relevant riving knife.

The thickness of the riving knife is however only correct where the blades concerned are commercially available carbide-tipped saw blades. For CV saw blades other riving knives are required.

## 6.4 Setting the speed

The following speeds can be set on the main drive by changing over the belt :  
3000, 4000, 5000 revolutions/minute.

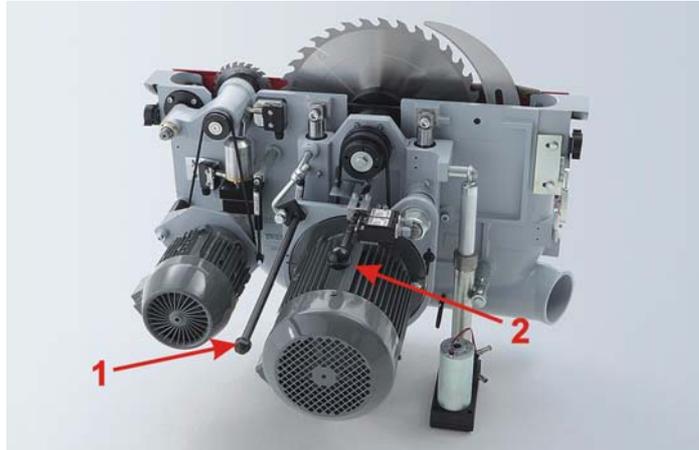


Fig. 6-5 Changing the speed

- [1] Lever
- [2] Speed control

### ***Speed change***

- Switch off drive.
- Press the EMERGENCY OFF button.
- Move lever with the included ring spanner down until it engages.
- Set speed control to the desired speed setting, position the belt accordingly.
- Lift the lever.



---

### **Note!**

The belt tension is set automatically after the belt is moved!

---

## 6.5 Table locking

The sliding table lock can block the sliding table in every position, so that the items for cutting can be pushed against the mitre fence without any undesired movement of the easy to move sliding table. The table is unlocked by turning the lever at the end of the upper carriage by hand.



Fig. 6-6 Unlocking lever

## 6.6 Main switch/Motor protection

### Main switch

Before the saw drives are switched on the main switch must be set to position I. The main switch is BLACK which means that this main switch has no EMERGENCY OFF function! When the main switch is used to turn the machine off the saw drives stop with no braking!

### Motor protection

If the motor protection cuts in it is a sign that the motor is being overloaded and the cause must be identified and rectified before the machine is switched back on (e.g. blocking of the drive by a jammed workpiece, feed too great or failure of a mains phase).

The drive motors are protected against overload by a coil protection. If the motor gets too hot this automatically switches the motor off. Note here that for machines with scorers this drive is switched off as well, even if this motor was not overloaded. The machine cannot be switched back on until the motor has cooled down. The motor can take several minutes to cool down!

Rapid flashing (frequency 4Hz) of the main saw ON button signals that the motor protection has cut in.



---

### Note!

Checking the winding protection

The resistance figure (750 Ohm  $\pm$  200 Ohm) of the PTC resistors is to be checked at least once a year in the motor terminal box by a specialist electrician. The test voltage of the meter may not exceed 1.5V for this test!

---

## 6.7 Switching the drives on and off

Before switching on the machine ensure that all the necessary protective devices for the relevant operation are fitted and operational. Also check that the saw blades are correctly tensioned and that there is no workpiece or other objects in their vicinity. Check that the correct speed for the saw blade and for the operation to be performed has been preselected. Check by switching on briefly that the circular saw blade is rotating in the right direction.

Ensure that when you switch the machine on you are simultaneously switching the extraction system on.

The main saw is started by pressing the left white button located in the panel. The machine runs up to its operating speed (with start current reduction) automatically. The scorer saw can only be started after the main saw has reached its operating speed (after around 5 seconds.), by pressing the right white button which is also located in the panel.



Fig. 6-7 Operating panel on eye level (only Type X)



Fig. 6-8 Operating panel at machine frame (Type X/TE)

To switch off the main saw normally the **left black** button is pressed. When the off button for the main saw is pressed both saw drives are switched off, the scorer saw can however also be switched off on its own with the right black button.



Fig. 6-9 Operating panel at machine frame (Type NT/T)

To switch off the main saw normally the **black** button is pressed. When the off button is pressed both saw drives are switched off.

The machine can also be switched off with the EMERGENCY OFF-buttons on both sides of the sliding table. This facility for switching off the machine should however only be used in emergencies.

## 6.8 Scoring saw

The scoring saw cuts a groove approx. 1-2 mm deep in the underside of the material before it is divided by the main blade. The scoring blade must be perfectly aligned with the main blade and be adjusted to the appropriate width.

- We recommend the RAPIDO shimless scoring system.
- The scoring saw is switched on by pressing the white button on the right of the switch panel, and turned off using the adjacent black button.

The standard flanges delivered with the machine are designed to accept all normal single and twin blade scoring saws with a diameter of 120 mm and a bore of 22 mm.

### Adjustment

The lateral adjustment is manual and can be carried out with the scoring saw running.

The allen T-key is used in position 1 for the lateral adjustment.



Fig. 6-10 Scorer adjustment

[1] Lateral adjustment

The scoring blade rises automatically to its preset operating height when switched on and drops away below the table when switched off. This operating height can only be preset with the main saw switched off.

**Normal operation:**

- When the lower sawblade guard is opened, the scoring blade rises to its preset working height.
- When the lower sawblade guard is closed, the scoring blade drops away to its lower rest position.
- When the scoring saw is switched on, the scoring blade rises automatically to the preset working height.

**Working height adjustment:**

*To set higher:*

- To increase the working height, release the clamping screw (1) and turn the set screw (2) to the LEFT.
- Once the correct operating height is reached, retighten the clamping screw (1)

*To set lower:*

- To reduce the preset height, release the clamping screw (1) and turn the set screw (2) to the RIGHT
- Then close the guard, so that the scoring blade drops away to its rest position.
- Once the guard is opened again, the scoring blade will rise to the new working height. (We recommend turning the set screw to the right as far as it will go and then closing the guard, so that the blade drops away to its rest position, so that you can then set the new working height starting from the lowest position).
- Once the correct operating height is reached, retighten the clamping screw (1).



Fig. 6-11 Height adjustment

**Saw blade change**

The description of saw blade change only applies to divided scorer saw blades and also to saw blades with stepless cutting width adjustment. Only use saw blades with a diameter of 120 mm and 22 mm arbor diameter!

- Switch off the drives.
- Move sliding table in cutting direction.
- Raise lower red protective hood (scorer saw moves into its highest position).
- Tighten the nut with the engaged tool in a counterclockwise direction .
- Before fitting the new scorer saw blade clean off any sawdust adhering to the two flanges.
- Place the saw blade and front flange on the saw drive shaft and tighten the nut in a clockwise direction.

In addition the following points should be noted when using **RAPIDO** scorer saw blades with stepless cutting width adjustment :

- Ignoring the operating instructions reduces operational safety impermissibly and leads to exclusion of liability
- max. speed =8200 rpm
- Permitted cutting width 2.8 - 3.8 mm
- The adjuster unit must be unpacked and packed with particular care, danger of injury!
- Only store the adjuster unit in its original packing!
- Die Montage des Vorritzsägeblattes hat außerhalb der Maschine zu erfolgen
- **All** connecting elements must be installed
- If the connecting elements are lost or damaged only original spare parts may be used as replacements!

## Adjustment of the saw blade width

### *Standard saw blade*

- Use spacers to bring the scorer saw blade to the width which is 0.1 mm greater than the width of the main saw blade
- Set the alignment of the scorer to the main saw first on the table plate side
- Test cut
- Set the alignment on the left side by adding or removing intermediate rings

### *Saw blade with stepless cut width RAPIDO*



Fig. 6-12 Release the clamping screw



Fig. 6-13 Turn the spindle



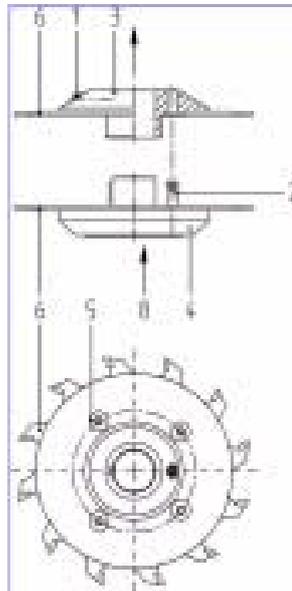
### **Note!**

Only use the tool supplied for adjustment work!

- Release the clamping screw, appr. 2 turns
- Turn the spindle until the desired dimension is reached. (1 turn = 0.5 mm)
- Tighten the clamping screw
- Test cut, if necessary correct the cutting width again as described above.

### Replace scorer saw blades for RAPIDO

Fig. 6-14 RAPIDO-Saw blades



Take the adjuster unit off the machine; the clamping screw may have to be released since a tightened clamping screw can cause the adjuster unit to jam on the shaft!

#### **Dismantling:**

With hexagonal key:

- Release clamping screw (1) appr. 3-4 turns, rotate spindle (2) clockwise until the flange (3) can be pulled away from holder (4)

With Innentorx key:

- Unscrew screws (5)

- Remove circular saw blade (6)
- Fully clean flange (3) and screws (5). The running and flange surfaces must be clean and dust free.
- Fit a new circular saw blade, note direction of rotation and arbor image when fitting: The circular saw blade (6) lies flat on the flange (3) and the protrusion on the circular saw blade points to the contact surface
- Screw in screws (5) and tighten to a torque of 8,6 Nm
- Proceed in the same way with the other half of the adjuster unit

#### **Assembly: Do not oil or grease!**

- Clamping screw (1) is released
- Fit the flange (3) vertically on to the holder (4) so that the spindle (2) engages in the threaded hole (7)
- Use the hexagonal key to turn the spindle (2) in a counterclockwise direction. The flange (3) will be pulled into the holder (4) no additional force may be used here
- Continue to turn spindle (2) until the two halves of the circular saw blade are lying against each other
- Install the adjuster unit on the machine
- Setting the cutting width, see above
- Only turn clamping screw (1) slightly

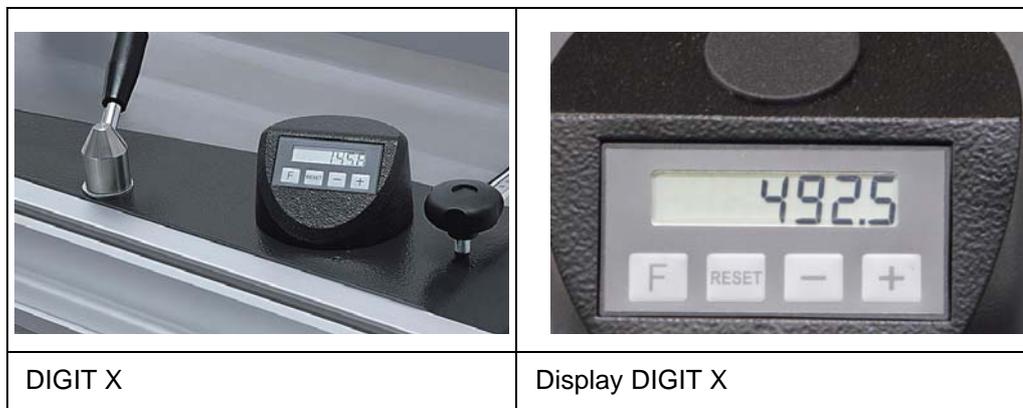
## 6.9 Rip fence fine adjustment



Fig. 6-15 Rip fence with fine adjustment

Manual fine adjustment enables the rip fence to be adjusted precisely. The fence can be set with pinpoint precision by means of the adjusting screw..

## 6.10 Rip fence with DIGIT X



The electronic measuring system with digital display and fine setting system ensures precise and fast setting of the rip fence. The display is always in the field of vision. The touch-free measuring system is not sensitive to dust. When the guide surface of the stop fence is changed, the dimensions are corrected automatically in the measuring system.

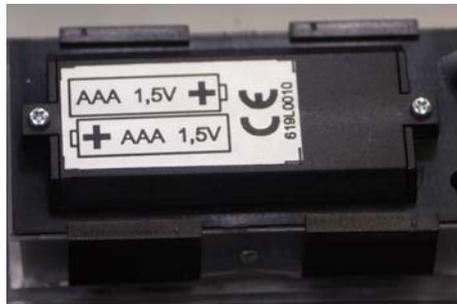
### Changing the battery



Release the clamping screw



Remove the housing with the display unit



Undo the screws and remove the cover



Change the batteries, making sure the poling is correct!

**Basic setting of the display unit**

The basic setting of the display unit is needed in order to adapt the measuring system to the machine situation. Check and, if necessary, re-enter the basic setting for each tool change. The basic setting can only be carried out together with the tools used so it cannot be done at the factory.

- Push the rip fence to the left against the mechanical stop.
- Hold the F button down and press the Reset button.
- Set the rip fence to a cutting width of 130 mm (straight edge in the position of the low guide surface).
- Cut a test piece and measure the workpiece width with a sliding caliper
- Hold the F button down; the right-hand digit of the display starts flashing after approx. 3 seconds.
- Pressing the Plus button increments the flashing digit by 1 in each case. When the maximum number value (9) is passed, the numbers start again with 0.
- Pressing the Minus button decrements the flashing digit by 1 in each case.
- Release the F button.
- The dimension that has been set is saved as the basic setting.

**Calibrating the display unit**

Calibration of the display unit is required when the fence has been moved under the main table.

- Push the rip fence to the left against the mechanical stop
- Hold the F button down and briefly press the Reset button; the display shows the basic setting again.

**Switching the display unit from mm > inches or inches > mm**

- Hold the Plus button down for more than 3 seconds; the display shows inches (mm).
- Release the Plus button; the display unit now shows the set dimension in inches (mm).

## 6.11 Motorised rip fence

### Motorised rip fence (Type X)

The motorised rip fence has a traverse speed of 200 mm/sec. and an accuracy of  $\pm 0,1$  mm. The fence automatically recognizes the position it's in, especially when it reaches the danger area around the saw blade. It has an emergency cut-out to prevent the risk of crushing. The dimensions are corrected automatically when the fence is changed from the upright or the flat position.

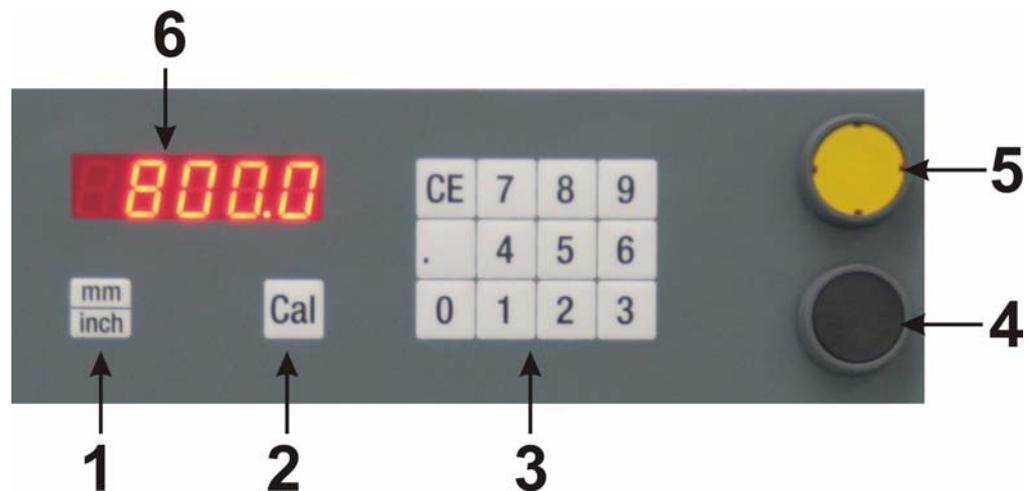


Fig. 6-16 Operation rip fence

- [1] Switch dimension mm/inch; button pressed > 3 sec. , the display will show inch (mm)
- [2] Cal-button for calibration; button pressed > 3 sec. , the display shows C. Enter the new value via the numeric keypad and press the Cal-button. The new value is shown on the display.
- [3] Numeric keypad
- [4] STOP positioning
- [5] START-positioning ; For cutting widths of less than 180 mm, the rip fence is in the safety area and it may only be possible to change the axes in touch mode, i.e. adjustment only takes place while the Start button is pressed. Touch mode is indicated by a flashing Start symbol at the top left of the display.
- [6] Display

## 6.12 DIGIT L dimension display unit



Fig. 6-17 DIGIT L

The dimensions that have been set are displayed digitally in the 150 mm to 3200 mm range to an accuracy of  $\pm 0.1$  mm. The touch-free sensor is not sensitive to dust. A fine setting system is used for exact setting to  $1/10$  mm.

### Operating the display unit



Fig. 6-18 DIGIT L display unit

Press button 1 to change position of the fence from front to back. Pressing button 2, 3 or 4 switches the measuring range over on the display unit. Throw-over stop 1 is firmly connected to the measuring system and the display unit. The measuring range is from approx. 150 mm to approx. 1630 mm. Throw-over stop 2 is a flip stop and, when making contact at the left of throw-over stop 1, it is at a distance of 295.0 mm from throw-over stop 1. If throw-over stop 2 is pushed on to the length extension, this results in a measuring range of about 1750 mm to 3200 mm; if necessary, the length extension can be connected to throw-over stop 1 with the aid of the detent bolt.

**Power supply**

Power is supplied by a rechargeable battery. The charging state is shown in the bottom right hand corner of the display. The batteries can be recharged using the power unit supplied.



Abb. 1-3 Charging unit



Abb. 1-4 Charging socket

Charging batteries:

1. Plug in charging socket on DIGIT L
2. Connect cable of charging unit and power unit
3. Connect mains cable on power unit
4. Insert mains cable into the socket, charging of batteries starts.

### Basic setting of the display unit

The basic setting of the display unit is needed in order to adapt the measuring system to the machine situation. Check and, if necessary, re-enter the basic settings following each tool change.

How to proceed:

- Push throw-over stop 1 with the display unit to the right against the mechanical stop.
- Fix throw-over stop 1 with a clamping screw.
- Cut a test piece, measure the workpiece width with a sliding caliper and enter the precise value as follows.
- Press key 2; after three sec. the following calibration menu will appear (only the first flip stop can be calibrated).



Fig. 6-19 Calibration

- [1] Press the adjacent function key to select the required decade. If the highest decade has been selected and the function key is reactivated, the lowest decade is automatically selected.
- [2] Press the "+" key to increment the display value of the active decade.
- [3] Press the "-" key to decrement the display value of the active decade.
- [4] Press this function key to store the new flip stop value under parameter L-L1; this value is also automatically multiplied by the flip stop values displayed on the user interface.

### Switching the display unit from mm > inches or inches > mm

- Press the Menu button.
- Select inch (mm) as the measuring unit.

## 6.13 Mitre fences

### Single-sided mitre fence



Fig. 6-20 Single-sided mitre fence

The fence can be fitted quickly and easily to the sliding table with an eccentric clamping system. Dimension scales are inclined in order to stay in the operator's field of vision. Crosscutting up to 2500 mm.

### DUPLEX mitre fence



Fig. 6-21 DUPLEX mitre fence

The DUPLEX mitre fence can be infinitely adjusted from 0° to 90°. The circular scale with a radius of 350 mm has 0.25° graduation, allowing precise and fast setting of the mitre angle. The DUPLEX mitre fence can be fitted at any position of the sliding table due to its eccentric clamping system.

The stop bar (2 throw-over stops) can be used in both stop profiles. It is possible to crosscut workpieces of up to 1350 mm in length or, when the extended stop fence is used, up to 2150 mm in length.

In addition, the DUPLEX and DUPLEX D mitre fence features a length compensation scale with which the length dimension is set in accordance with the mitre angle.

### Basic setting of length compensation scales

	
<p>Fig.1-1 Test cut</p>	<p>Fig.1-2 Adjusting the fence stop</p>
<p>Swing the DUPLEX to a 90° angle and fix it.</p>	<p>Adjust the length scale so, that the mark in the magnifying glass corresponds to the cut dimension (the length scale can be adjusted by exerting slight pressure on its centre point and moving it).</p>
<p>Set the first stop to a distance 200 mm from the saw blade and fix it.</p>	<p>Adjust the throw-over stop to 200 mm.</p>
<p>Cut a test piece and measure it, e.g. 201 mm.</p>	

	
<p>Fig. 1-3 Adjusting the length compensation scale</p>	<p>Fig. 1-4 Adjusting the angle</p>
<p>Release the screws of the length compensation scale with a 2.5 wrench.</p>	<p>Adjusting the cutting angle acc. to scale, e.g. 22.5°.</p>
<p>Move the length compensation scale so that the 0° mark corresponds to the mark on the throw-over stop.</p>	
<p>Tighten the screws.</p>	



**Note!**

***Run through this process for both sides of the fence!***

	
<p>Fig. 1-5 Adjusting the fence stop</p>	<p>Fig. 1-6 Adjusting the length compensation scale</p>
<p>Adjust the mark on the throw-over stop to the cutting angle of the degree scale.</p>	<p>Move the length scale so that the mark of the red "20" corresponds to the mark in the magnifying glass.</p>
	<p>The length scale has now been adjusted to the corresponding angle of 22.5°.</p>
	<p>Now the required measure of length can be adjusted.</p>

## 6.14 Clamping device

### Manual quick-action clamp



Fig. 6-22 Manual quick-action clamp

The manual quick-action clamp fixes the workpiece to the crosscut fence.

The manual quick clamp can be fixed anywhere along the groove in the sliding table. First undo the grip at the top of the bar so that the bottom opens up enough to allow the guide piece to be inserted into the end of the groove. Then, once the desired position has been reached, tighten the grip using moderate force. Preset the height of the clamp by loosening and retightening the horizontal grip. The workpiece is fixed by screwing down the clamp handle on the threaded part.

## 6.15 STEG (second support)

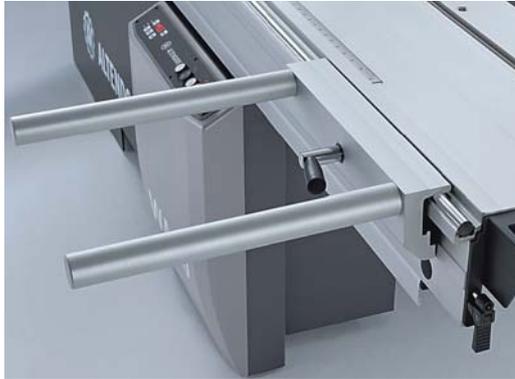


Fig. 6-23 STEG

The STEG provides additional support when cutting large panels and can be positioned anywhere along the sliding table using its cam clamping handle.

## 7 Faults



### WARNING!

As a rule, troubleshooting involves a higher risk.

For this reason, pay particular attention to safety aspects when carrying out the necessary measures.

- Turn the main switch to switch position "0"
- Always switch off the main switch

Fault	Cause	Troubleshooting
Machine cannot be switched on	<p>The main switch is not switched on</p> <p>Mains failure or Failure of a phase</p> <p>Overload protection has triggered</p> <p>Sliding table moved beyond middle of saw blade</p> <p>EMERGENCY STOP button pressed</p> <p>Door on machine stand or lower protective cover in front of the saw blades opened</p> <p>Control circuit fuses defective</p>	<p>Switch main switch to position „I“</p> <p>Wait for power to return or Remedy cause of power failure (e.g. defective operational side fuses)</p> <p>Wait for motor to cool down</p> <p>Pull sliding table back in front of saw blade</p> <p>Release the EMERGENCY STOP button again by pulling it</p> <p>Close door or lower protective cover</p> <p>Switch off the main switch, open switching cabinet and determine which of fuses F1, F2, F8 is defective. Clarify and remedy cause. Replace defective fuses, use fuses of the same ratings as replacements!</p>
Machine switches off by itself during operation	<p>Power failure in one or more phases through activation of the operational side fuses</p> <p>Overload protection triggered by blunt saw blade or feeding the workpiece too quickly</p>	<p>Remedy cause of phase failure</p> <p>Change saw blade or Reduce feed speed. Wait for motor to cool down</p>

**7 Faults**

Fault	Cause	Troubleshooting
	Control circuit fuses defective	Switch off the main switch, open switching cabinet and determine which of fuses F1, F2, F8 is defective. Replace defective fuses, use fuses of the same ratings as replacements!
Workpiece sticks on feeding	Blunt saw blade  Thickness of riving knife does not match saw blade being used	Tension sharp saw blade  Fit correct riving knife with a thickness greater than or equal to the master blade thickness of the saw blade
The finished dimension of the cut workpiece does not correspond to the cutting width set at the rip fence	Incorrect calibration	Recalibrate
Tilt arm moves jerkily	Tilt arm moves jerkily	Clean telescopic tube or track rollers; Test stripper
The finished dimension of the cut workpiece does not correspond to the cutting width set at the cross-cut fence	Incorrect calibration	Recalibrate
Sliding table has sideways play	Lower rollers incorrectly adjusted	Adjust lower rollers
Sliding table in end positions higher than machine table	Lower rollers incorrectly adjusted	Adjust lower rollers
Saw blade burns on the sliding table side	Insufficient free cutting space of sliding table  Free cut adjustment of rip fence too great	Adjust free cut  Adjust rip fence

<b>Fault</b>	<b>Cause</b>	<b>Troubleshooting</b>
Saw blade burns on the rip fence side	Insufficient free cut of the rip fence	Adjust free cut
Saw blade burns on both sides	Incorrect free cut adjustment Workpiece sticks Operating error	Adjust free cuts Place wedge in cut or use thicker riving knife Feed workpiece left or right on fence. When cutting with the sliding table do not feed the workpiece at the rip fence.
Workpiece has burn marks	Blunt saw blade Feed too low Saw blade has too many teeth Incorrect free cut	Changing the saw blade Increase speed of feed Change saw blade Adjust free cut
Tears instead of scorer	Scorer not aligned with main saw Cutting height too small	Adjust free cuts; the free cut should be almost „0“ Set saw width blade
Workpiece lifts when cutting with the scorer	Scorer blade blunt Cutting height too small	Replace Set blade higher

### Errors at type X/T/ NT/T

Fault	Cause	Troubleshooting
Quick blinking (4Hz) in the ON-switch	Overtemperature mainsaw motor	
Slow blinking (1Hz) in the ON-switch	Error brake: Mains relay is not in 0-position	Turn the main switch to switch position „0“ and than to switch position „I“
LED rotation speed blinking	No input signal	Check the speed control position

### Errors at type X

Fault	Cause	Troubleshooting
E 001	Rip fence section in high position End switch Min. reached	
E 002	Rip fence section in flat position End switch Min. reached	
E 003	End switch Max. reached	
E 004	Emergency switch actuated	Control emergency switch, control door/cover/sliding table end switches
E 006	Fence stopped by collision	
E 007	Error positioning drive	

**Errors at typeTE**

<b>Fault</b>	<b>Cause</b>	<b>Troubleshooting</b>
E.H1	End switch Min. reached	
E.H3	End switch Max.. reached	
E.S3	End switch Max.. reached	
E.04	Emergency switch actuated	Control emergency switch, control door/cover/sliding table end switches
E.07	Error positioning drive	



## 8 Maintenance / cleaning



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### CAUTION!

Risk of injury!

- Before performing any maintenance always switch off the main switch and prevent it from being switched on again!
- 

***Regular cleaning of the machine extends its working life and is also a requirement for problem-free cutting. The sliding table saw should therefore, depending on how dirty it is, be cleaned at least once a week. The particular areas affected are:***

- the machine table
- the sliding table
- the sliding table guides
- the tilting segments
- the round bar of the rip fence
- the interior of the machine
- the machine environment

Sawdust and dust adhering is removed with a vacuum cleaner. To remove resin residues it is best to use a cleaning solvent. It is essential that parts treated in this way are treated afterwards with an oil-soaked cloth to avoid the buildup of rust.

The sliding table guides are to be cleaned regularly. If contaminated with resin, the guides are to be cleaned with petroleum and possibly using Scotch Brite pads for example. It is not advisable to use steel wool or sandpaper since this than irreparably damages the guide tracks.

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### Note!

Before using a solvent and cleaner you must make sure that this substance will not cause any damage to the lacquered, anodized or zinc-plated surfaces as well as to plastic parts. You can obtain information about this by consulting the safety data sheets for this substance (obtainable from makers of solvents or cleaners).

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### Lubrication

- The bearings of the main saw shaft and the scorer saw shaft are sealed for life so that no subsequent lubrication is needed.
- The tilt segments are to be cleaned and lubricated on a regular basis. The intervals for such work (2 weeks) depend on the period of use.
- Rip fence and height adjustment must be lubricated once a year.

### Lubrication height adjustment

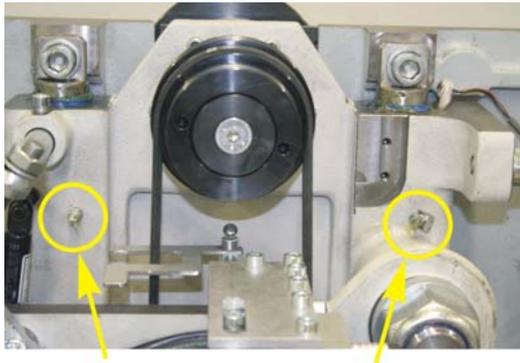


Fig. 8-1 Lubricating nipple height adjustment

To relubricate, open the machine door, set the tilt to 0° and the cutting height to 0 mm. The lubricating nipples are then in the optimum position for access.

### Lubrication motorise rip fence (Type X)

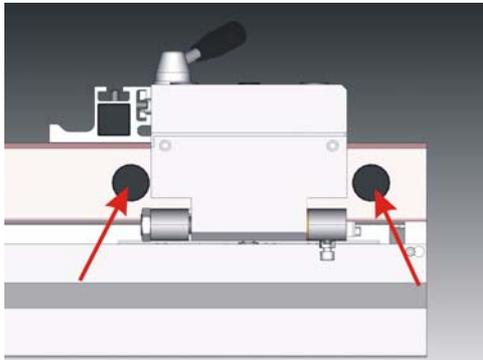


Fig. 8-2 Lubrication point for linear guide

The guide is lubricated via lubricating nipples on the carriage. Before lubricating, the rip fence must be moved into the lubrication position in order to reach the lubricating nipple with the grease gun supplied.

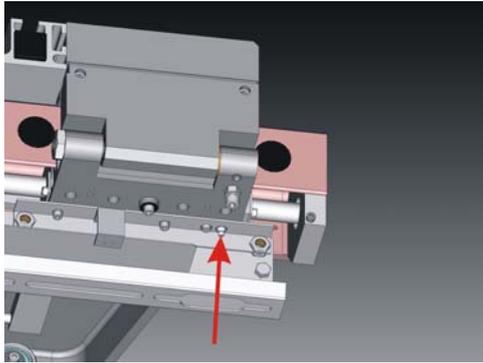


Fig. 8-3 Lubrication point for spindle drive

**Quantity of lubricant**

When lubricating with the filled grease gun that is part of the scope of supply, 5 strokes are necessary to inject the required quantity. Excessive lubrication due to short intervals and/or by too much lubricant will lead to failures!

**CAUTION!**

***Lubricants containing graphite or MoS<sub>2</sub> additives are not allowed to be used!***



## 9 Technical data

### 9.1 Standard equipment

<b>Main saw</b>	Diameter of tool holder Tilting range of the saw blade No-load speed	30 mm 0 - 46° 3000/4000/5000 rpm
<b>Sliding table</b>	Sliding table length	see table
<b>Crosscut fence</b>	Crosscutting up to Crosscutting with DIGIT L up to	3500 mm 3200 mm
<b>Rip fence</b>	Cutting width at rip fence	1000/1300 mm
<b>Scorer saw</b>	Diameter of scorer saw blade Diameter of tool holder No-load speed	120 mm 22 mm 8200 rpm
<b>Extraction</b>	Lower outlet connection Ø Upper outlet connection Ø at WA 8 X/TE (NT/T optional) Upper outlet connection Ø at WA 8 NT/T Vacuum at overall connection Ø 140 mm Air speed Minimum air volume	120 mm / 5 " 80 mm 50 mm 1500 PA 20 m/s 1100 m <sup>3</sup> /h
<b>Ambient conditions</b>	Operating temperature  Max. relative humidity <b><i>Do not expose the machine to a gaseous environment which is explosive or may cause corrosion!</i></b>	10 - 40 °C  90 %, no condensation

## 9 Technical data

<b>Weight</b>	Weight of machine	ca. 1100 kg
<b>Electrical equipment</b>	Lockable main switch Contactor control with pushbutton operation  Braking of main saw motor, monitoring of winding temperature  Adjustment of tilting and cutting height for the main saw (only WA 8 TE/ X) Main saw motor Scoring saw motor	Control voltage 24 VAC  Electronic multifunction module  Motorised adjustment, digital tilt angle display  5,5 kW 0,75 kW

**Sliding table cutting lengths**

Maximum cutting length when cutting panel material using the crosscut fence or crosscut-mitre fence.

Table length[mm]	2000	2600	3000	3200
Cutting length[mm] with or without scoring saw blade	1905	2505	2905	3105

**Usable saw blades:**

Saw blade diameter [mm]	250	300	315	350	400
Cutting heights, vertical [mm]	0 - 50	0 - 75	0 - 82	0 - 100	0 - 125
Cutting heights at 45° [mm]	0 - 33	0 - 50	0 - 56	0 - 70	0 - 87



## 10 Maintenance and repairs

### 10.1 General

Keeping a supply of the most important spare and wear parts on site is an important prerequisite for the constant functioning and operating capability of the sliding table saw. We only accept a guarantee for original spare parts supplied by us. We expressly point out that original spare parts and accessories not supplied by us have not been checked and released by us. Therefore, the fitting and/or use of such products may negatively influence the properties of the sliding table saw and thus impair its active and/or passive safety. Wilhelm Altendorf GmbH&Co. KG will not accept any liability or guarantee for damage resulting from the use of non-original spare parts and accessories.

Please note that special production and delivery specifications exist for our own and our suppliers' parts, and that we always supply spare parts that meet the latest state of the art and comply with the latest statutory regulations.

Please refer to the spare parts list when ordering spare parts.

For further information please refer to the spare parts drawings included in the spare parts list.

When ordering spare parts, please state the following information:

- Machine no.
- Article no.

### 10.2 Customer service addresses

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