

# Operator's Guide

## WA 8



Version 1.5/2005



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## Safety instructions



- ***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 WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys***

## Foreword to Operator's Guide

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### **Right of technical modification reserved**

### **Foreword to Operator's Guide**

As a result of modifications made by the manufacturer the version of the sliding table saw supplied to you can deviate slightly from the sliding table saw described in this Operator's Guide. This Operator's Guide can thus not be regarded as a binding type description of the models involved.



**Removal of the safety equipment, especially the safety hood for the saw blade cover and the riving knife, endanger the operator and lead to accidents!**

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

- This information is written down so that it will be read, understood and all the points made in it noted by people who will be working with the ALTENDORF sliding table saw and are responsible for it.
- Please read this Operator's Guide through carefully before commissioning the saw since we do not accept liability for damage and disruptions to operations resulting from not adhering to this Operator's Guide!

### **Qualification of operating personnel**

Before working with the sliding table saw for the first time, note the following points: Persons operating this sliding table saw must have had sufficient instruction and be suitably qualified.

### **Notes**

The Operator's Guide contains unimportant notes on operating the machine in line with specifications, safely, correctly and economically. Your compliance helps to avoid repair costs and machine downtime and to increase the reliability and lifetime of the machine.

### **UVV**

In addition to the Operator's Guide, national regulations on health and safety at work and environmental protection should be noted.

The Operator's Guide must always be available at the location where the machine is being used and is to be read and used by any person involved with working with or on the machine, e.g.

- operation, including upgrading, troubleshooting during operation, rectification of production downtimes, service, disposal of operating and auxiliary materials
- Upkeep (maintenance, inspection, repair)
- Transport.

### **Important notes**

**Caution: Factory testing of machines by cutting material can mean that despite cleaning, residues of sawdust and small wood chips remain in the machine!**

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# 1. Prices/technical data

|  |  |
|--|--|
| <b>Wilhelm Altendorf</b><br>Maschinenbau<br>Wehmer Allee 43 / 45<br>32429 MINDEN / GERMANY   |  |
| <b>Formalkreissäge / Scie à format / Sliding table saw</b><br>Typ / Type _____<br>Nummer / Numéro / Number _____<br>Baujahr / Année / Year _____<br>Sägeblatt / Lame de scie / Sawblade min. Ø _____ mm<br>Sägeblatt / Lame de scie / Sawblade max. Ø _____ mm<br>Führungsschlitzebreite des Spaltkeils 13mm<br>Largeur de l'entaille du couteau diviseur 13mm<br>Width of riving knife fixing slot 13mm |  |
| <b>Elektrischer Anschluss / Raccordement électrique / Electrical connection</b><br>Spannung / Tension / Voltage _____ V<br>Strom / Courant / Current _____ A<br>Frequenz / Fréquence / Cycles _____ Hz<br>Phasenanzahl / Phases / Phases _____ 3   |  |
| <b>Hauptmotor / Moteur principale / Main motor</b><br>Fabrikat / Fabricant / Manufacturer _____<br>Typ / Type _____<br>Leistung / Puissance / Power _____ kW<br>Nummer / Numéro / Number _____   |  |
| <b>Vorritzermotor / Moteur inciseur / Scoring motor</b><br>Fabrikat / Fabricant / Manufacturer _____<br>Typ / Type _____<br>Leistung / Puissance / Power _____ kW<br>Nummer / Numéro / Number _____  |  |

Type label

## 1. Prices/technical data

### 1.1 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:

|                                       |  |
|---------------------------------------|--|
| Type:                                 | Machine designation  |
| Number:                               | Machine-specific identification number                                     |
| Year of manufacture:                  | Year when machine was made   |
| Saw blade min. Ø:                     | Diameter of the smallest permitted sawblade                                |
| Saw blade max. Ø:                     | Diameter of the largest permitted saw blade                                |
| Guide slot width of the riving knife: | Diameter of the guide pins for the riving knife in the riving knife holder |

### Test symbol

To document that the machine complies with the basic health and safety requirements as defined in Appendix I of Guideline 98/37/EWG for modifying Guideline 89/392/EWG (Machine Guideline) the machine is identified by the CE symbol.

### Manufacturer:

#### 1.2 Machine data

Altendorf Qinhuangdao  
 Machinery Manufacturing Co.Ltd.  
 Hengshan Road,  
 Economic & Technical Development Zone,  
 Qinhuangdao, P.R. China

### Machine:

ALTENDORF sliding table saw  
 Type WA8

Table 1: Usable main blade diameter and associated cutting heights

| Saw blade diameter [mm]        | 250  | 300  | 315  | 350 * | 400 * |
|--------------------------------|------|------|------|-------|-------|
| Saw blade height vertical [mm] | 0-55 | 0-80 | 0-87 | 0-105 | 0-130 |
| Saw blade height at 45° [mm]   | 0-38 | 0-56 | 0-60 | 0-73  | 0-91  |

### Attention!

\* Only at option safety hood not mounted at riving knife  
 Not in CE-Version!

## 1.2 Machine data

|   |   |                                 |
|---|---|---------------------------------|
| <b>Main saw</b>                             | Diameter of tool holder [mm]                                  | 30                              |
|   | Tilting range of the saw blade [°]                            | 0 - 46                          |
|   | No-load speed [1/min.]  | 3000/4000/5000                  |
| <b>Scorer saw</b>                           | Diameter of scorer saw blade [mm]                             | 120                             |
|   | Diameter of saw drive shaft [mm]                              | 15                              |
|   | Diameter of tool holder [mm]                                  | 22                              |
|   | No-load speed [1/Min.]  | 8000                            |
| <b>Fences, sliding table, machine table</b> | Size of the machine table [mm]                                | 900x702 ±5                      |
|   | Length of the sliding table [mm]                              | 3200 or 1800                    |
|   | Sliding table cutting length [mm]                             | 3100 or 1700                    |
| <b>Extraction</b>                           | Cutting width at rip fence [mm]                               | 1000 or 1300                    |
|   | Crosscutting at the crosscut fence [mm]                       | 3200                            |
|   | Connection support Ø under table [mm]                         | 120                             |
|   | Connection support Ø for upper safety hood [mm]               | 80                              |
|   | Vacuum at 20 m/s air speed at Overall connectionØ 140 mm [Pa] | 1500                            |
|   | Air consumption at 20 m/s air speed [m <sup>3</sup> /h]       | 1100                            |
| <b>Environmental conditions</b>             | Operating temperature [°C]                                    | 10...40                         |
|   | Transportation and storage [°C]-                              | 25 to 55/70 (for short periods) |
|   | Max. rel. humidity [%]  | 90, no condensation             |

***The machine may not be exposed to an environment with gases which present a danger of corrosion or are explosive!***

**Weight** Weight of machine, depending on version [kg] appr. 850

### **Electrical equipment**

- Voltage [V] + 5%, -10% see type label
- Current [A] see type label
- Frequency [Hz] see type label
- Number of phases 3
- Power of main saw motor [kW] 5,5
- Power of scoring saw motor [kW] 0,75
- Disconnectable main switch
- Push button control, control voltage 24 VAC
- Protective control for saw motors
- Digital tilt angle display
- Main saw motor with electronic braking module
- Main saw motor with winding temperature monitoring
- Scoring saw motor with protective winding contact
- Electrically controlled adjustment of the cutting height
- Electrically controlled adjustment of the tilt

***The machine may basically only be connected to a 3 phase alternating current supply with phases L1, L2, L3 since otherwise its braking module can be destroyed. If operated with phase converters, frequency converters or transformer-capacitor combinations the braking modules and the starter unit can be destroyed!***



## 1.3 Accessories

### 1.3 Accessories

|   | China<br>(non CE) | SO-Asien<br>(non CE) | CE          | UL/CSA      | GOST |
|---|-------------------|----------------------|-------------|-------------|------|
| <b>Safety hood</b> <ul style="list-style-type: none"> <li>Safety hood mounted at riving knife</li> <li>Safety hood mounted at riving knife with dust extraction</li> <li>Safety hood not mounted at riving knife</li> </ul> | X<br><br>Option   | X<br><br>Option      | <br><br>X   | <br><br>X   |      |
| <b>Usable saw blades</b> <ul style="list-style-type: none"> <li>250 - 315</li> <li>250 - 350 mm</li> <li>max. 400 mm</li> </ul>   | X<br>Option       | X<br>Option          | X           | X           |      |
| <b>Main saw blade rating and rotation speeds</b> <ul style="list-style-type: none"> <li>5,5 kW (7,5 HP) with three rotation speeds, 3/4/5000 RPM</li> </ul>   | X                 | X                    | X           | X           | X    |
| <b>Sliding table including locking in middle and end position</b> <ul style="list-style-type: none"> <li>Sliding table length 3200 mm</li> <li>Sliding table length 1800 mm</li> </ul>                                      | X<br>Option       | X<br>Option          | X<br>Option | X<br>Option |      |
| <b>Cutting width to rip fence</b> <ul style="list-style-type: none"> <li>Cutting width 1000 mm</li> <li>Cutting width 1300 mm</li> </ul>  | X                 | X<br>Option          | X           | X           |      |
| <b>Crosscut fence</b> <ul style="list-style-type: none"> <li>90°, cross cutting to 3200 mm</li> <li>Single sided mitre fence, stops to 2500 mm</li> <li>Crosscut-mitre fence, cross cutting to 3200 mm</li> </ul>           | X<br>X            | X                    | X           | X           |      |
| <b>Table length extension</b> <ul style="list-style-type: none"> <li>840 mm table extension, powder coated</li> </ul>   | X                 | X                    | X           | X           | X    |
| <b>Scorer saw unit</b>  | X                 | X                    | X           | X           | X    |
| <b>Anodised aluminium parts</b>   | X                 | X                    | X           | X           | X    |
| <b>Clamping shoe, push stick, push block handle and pull back handle</b>  | X                 | X                    | X           | X           | X    |
| <b>Operating tool</b>   | X                 | X                    | X           | X           | X    |
| <b>User information</b>   | X                 | X                    | X           | X           | X    |

## 1.4 Noise figures

### 1.4 Noise figures

The noise emission figures determined in accordance with EN 3746 for the emitted noise level or EN 11202 (correction factor k3 calculated according to Annex A.2 of EN 11204) for the noise level at the workplace are as follows, based on the working conditions given in ISO 7960 Annex A:

**Table 2: Noise figures**

| Emitted noise level in dB (A)           | Emitted noise level at the workplace in dB (A) | Tool   |
|---|--|--|
| Idle LWA = 87.9<br>Operating LWA = 93.5 | Idle LPA = 79.1<br>Operating LPA = 88.2        | Circular saw blade 315x3.2/72 WZ<br>n = 4080 rpm |

For the emission figures stated a measurement tolerance of K = 4 dB (A) applies.

The specified figures are emission levels and therefore not necessarily the level for safe working. Although there is a relationship between emission and immission level there is no reliable method of deriving from this whether additional precautionary measures are required to protect the user. The factors that influence the current level of immission present at the workplace include the length of exposure, other sources of noise such as neighboring machines and their numbers for example or other processing operations linked to noise emission. In addition the level for assessing noise can differ from country to country. Despite this information is suitable for enabling the user of the machine to obtain a better estimation of the danger and the risk.

### 1.5 Assessment of dust emission

The workplaces at the sliding table saw are classed in accordance with BGI 739 Annex 4 as low-dust environments.

### 1.6 Use in accordance with regulations

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

#### Materials

- Lengthwise cuts and cross cuts in solid wood with at least one even support surface and a maximum thickness of 120 mm for a vertical cut.
- Cutting laminated and unlaminated sheet materials such as chip-board, woodworking boards, MDF boards and material to be processed in a similar way
- Cutting duroplastics and thermoplastics.
- Cutting plasterboard.
- Cutting cardboard.
- Processing of other materials such as nonferrous metals and composite materials made of NF metals and plastics requires our approval as regards the approval of the individual material and the saw blade intended for cutting it.

#### Tools

- Only one-piece (CV) or composite (HM) circular saw blades of at least 300 mm and maximum 400 mm diameter as well as routers/milling blades up to a cutting width of 15 mm are allowed for the main saw blade. For the scoring blades saw blades of maximum



## Machine workstations

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120 mm diameter are allowed.

- **Any other use which goes beyond this is taken as not in accordance with specifications. The manufacturer is not liable for any damage that may result; the risk is borne by the user alone.**

### **HSS saw blades**

- The use of HSS saw blades and oscillating router equipment is not allowed.

### **Installation site**

- The machine is not suitable for operation in the open air, in damp environments or in areas where there is a danger of explosion. Use of the machine according to specifications also includes connection to a suitably dimensioned industrial extraction system and adherence to the manufacturer's specifications as regards operating, maintenance and servicing conditions and following the safety precautions given in the Operator's Guide.
- Sliding table saw Type WA 8 may only be used, equipped and maintained by persons who are familiar with the unit and have been instructed in the dangers involved. Responsibilities for use, equipping and maintenance must be clearly defined. Service work must be carried out by our service department.
- The applicable accident prevention regulations as well as the other generally recognized safety and medical rules applying to the workplace are to be noted.
- Only original Altendorf spare parts may be used. The manufacturer does not accept any liability for damage caused by using no-original spare parts.
- **Modifications made to the machine by users and the use of non-original parts on the machine exclude any liability by the manufacturer for any resulting damage.**

### **Machine workstations**

In line with specifications the sliding table saw will be operated from the following workplaces:

- at the workstation on the left-hand side of the sliding table view in the direction of feed in the front part of the machine (main workstation).
- on the front opposite side of the machine to the right of the sliding table when working with the rip fence.
- The space for any workpiece acceptor is on the rear opposite side of the machine behind the table length extension, not under any circumstance in the area of travel of the sliding table and the telescopic tube of the swivel arm! Otherwise there is a danger of injury through impact in the knee area!
- The sliding table may only be operated from the front, using the handle provided, otherwise there is a danger of fingers and hands being trapped!





### Warning!

## 2. Safety

### 2.1 Explanation of symbols and instructions

You will find this symbol all information relating to health and safety in this Operator's Guide where there is a danger to life and limb. Please read this information carefully and take particular care in these cases. Please pass the safety information on to other users. As well as the information in this guide the generally-applicable safety and accident prevention instructions must be noted.

#### N.B.:

This **warning symbol!** appears at those points in the guide to which particular attention is to be paid so that guidelines, regulations, instructions and the correct work sequences are adhered to, as well as to prevent damage to or destruction of the machine.

### 2.2 Health and safety instructions

Operating any machine tool, in particular woodworking machines with manual feed, involves a high risk if the machine is operated incorrectly. For this reason please always comply with the safety instructions summarized in this Chapter as well as with official and other regulations governing health and safety at work (e.g. accident prevention regulations)!

- Never operate the machine without using the protective equipment provided for the procedure involved (see also the section entitled "Safe use of the sliding table saw (- working examples -)" and do not change anything that could affect safety.
- Check before working with the machine that the protective and operating equipment is securely attached and not damaged.
- Before changing tools, rectifying faults and during regular servicing work ensure that the machine cannot be turned on by mistake by securing the main switch with a padlock.
- Only saw blades and routing tools corresponding to European Norm EN 847-1 may be used..
- Only saw blades with the dimensions described in Table 1 may be fitted. The diameter of the mounting hole must be 30 mm in any event. Use of loose spacing rings is not permitted.
- The speed must be chosen so that the highest reliable speed when the tool is equipped with hard metal saw blades or routing cutters is not exceeded.
- The use of HSS saw blades and cracked or reformed saw blades is not permitted.
- Always wear working clothes and remove, rings, bracelets and watches.
- Ensure that the workplace is unobstructed and that nothing slides around and that there is sufficient lighting.
- Do not work on any workpieces that are too large or too small for the power of the machine.
- Take up a working position so that you are always standing to the side of the saw blade outside a possible recoil area (area directly in front of the saw blade).
- Before the machine is switched on loose parts must be removed from the immediate vicinity of the saw blades.
- Only start cutting when the saw blade has reached its full speed.
- Always use the upper safety hood!

## 2.2 Health and safety instructions

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- The upper safety hood must be set to the height that matches the thickness of the workpiece to be cut. When working with a tilted saw blade replace the narrow hood with the wide hood.
- Always use the riving knife except for insert cuts. It may not be thicker than the width of the cut and thinner than the master blade. It is to be set so that the gap to the tooth tip is a maximum of 8 mm. Only riving knives may be used for which the slot width does not exceed 13 +0.5 mm. The supplied riving knife covers the entire diameter range of the saw blades that can be used from 250 to 400 mm. As regards their thickness they are matched to the commercially-available carbide tipped saw blades that are as wide as the cut. If other saw blades, e.g. CV saw blades are used, the width of riving knife necessary must be selected so that this lies between the cut width and the main blade width. This type of riving knife is available in the trade or directly from us.
- For cutting inserts a recoil protector should be used, e.g. the front side of the clamping shoe. This is to be attached in the groove of the sliding table whereby the carriage with the clamp must be secured so that it does not move. After insert cutting the riving knife and the upper safety hood are to be refitted immediately.
- Always ensure secure workpiece guidance and use the appropriate fences (rip fence, fence scale, crosscut fence on cross slides, cross stop).
- For lengthwise cutting of narrow workpieces (gap between saw blade and rip fence smaller than 120 mm) the push stick must be used.
- Only make crosscuts with the cross slides attached to the sliding table. Ensure that the cut off workpieces are not caught by the rising tooth tip and catapulted out.
- Cross cutting and lengthwise cutting of round-section wood is not allowed with the series feed aids or fences.
- For trimming use the clamping shoe which is attached to the sliding table to hold down the workpiece.
- If a feed device is used at least the riving knife should be employed for recoil protection.
- Replace worn out table bars immediately.
- Use of an oscillating router or oscillating router milling tools is not allowed.
- Only router milling tools that have a maximum width of 15 mm and are allowed for manual feed may be used. With tools labeled "MAN" this is guaranteed.
- The noise level at the workplace generally exceeds 85 dB(A). For this reason wear ear defenders when working.
- The wood dust generated when working not only affects your vision but can also be damaging to your health in some cases. The machine must therefore be connected at both extraction sockets to a sawdust extractor. The air speed at the lower extraction socket must be at least 20 m/s. Suitable measures must be taken to ensure that when the machine is switched on, the extraction system is switched on at the same time (use of the floating contact).
- Work on the electrical parts of the machine may only be performed by electrical specialists.
- Regular cleaning of the machine, particularly the table, the sliding table and the guides (e.g. rip fence) represents an important safety factor. Before starting such work you should ensure that the machine cannot be inadvertently switched on.

## 2.3 Safety devices

### 2.3 Safety devices

The Altendorf sliding table saw has been developed in compliance with European Standard DIN EN 1870-1 "Safety of woodworking machines - circular saw machines - :table circular saw machines (with and without sliding table) and sliding table saw machines".

The machine is equipped with all the necessary safety devices to guard against any danger from it that could not have already been eliminated during construction. In particular these safety devices include:

#### **Saw blade guard**

- 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.

Or

#### **Riving knives**

- Upper protective device with narrow and wide polycarbonate safety hood for optimum coverage of the part of the saw blade not required for cutting over the machine table with a safety device to prevent raising it above the maximum cutting height + 5 mm. Rollers integrated into the front and rear end of the safety hood make it easier both to feed the workpiece and also to pull it back with slightly different thicknesses of workpiece.
- 3 riving knives for saw blades between 250 and 400 mm diameter to avoid workpiece recoil through sticking in the kerf.
- Rip fence with scale adjustable in the direction of the cut: Withdrawable to avoid sticking of the cut lengths of workpiece between fence and rising tooth tip or adjustable to a lower feed surface for cutting narrower and flatter workpieces with sufficient space for manual feed, combined with the option here too of lowering the upper safety hood down to the workpiece.
- Trimming clamp to clamp and hold down untrimmed wood blocks to prevent slipping during trimming.
- Holder device for the sliding table as security against workpiece slippage when cutting inserts in conjunction with the crosscut fence.
- Electrical locking of the door in the machine stand for moving the belt to change speeds. When the door is open it is not possible to turn the machine on and when the machine is running the drives are turned off if the door is opened.
- Electrical locking of the cover plate on the dust channel below the machine table in the area of the saw blades. When the cover plate is open it is not possible to turn on the machine and when the machine is running the drives are switched off if the cover plate is opened.
- Automatic brake which stops the main saw blade in less than 10 seconds after the machine is switched off, regardless of the diameter and speed of the blade.
- Enhanced-flow design of the sawdust catcher and of the upper safety hood to reduce dust emission below 2 mg/m<sup>3</sup>, provided the machine is connected at both extraction sockets to an industrial extraction system with at least 20 m/s air speed.
- Good ergonomic design of the controls in easy-to-reach positions on the machine stand.

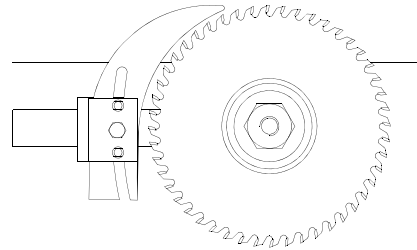
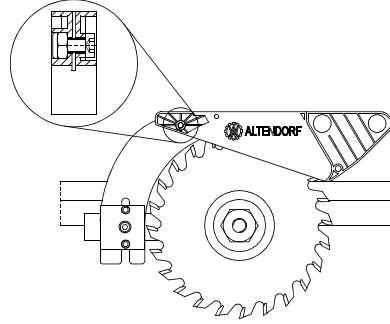
## 2.3.1 Safety hood

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### 2.3.1 Safety hood

To protect the saw blade above the table there must be an adjustable removable protection device. (DIN EN 1870-1)

#### 2.3.1.1 Safety hood mounted at the riving knife



Riving knife for concealed cuts

www.DaltonsWadkin.com

## 2.3.1.2 Safety hood not mounted at the riving knife

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### 2.3.1.2 Safety hood not mounted at the riving knife



**Not in CE-Version!**

#### Changing the safety hood

When working with a tilted saw blade replace the narrow hood with the wide hood

Never replace the safety hood when the saw blade is running!

Replacing the safety hood:

- After releasing the securing screw, pull the hood out forwards.
- To fit it, place the safety hood in the hood carrier
- push the safety hood up to the end until the two arrows are one above the other
- Tighten the securing screw



### 2.3.1.3 Moving the safety hood out of the way



**Not in CE-Version!**

#### 2.3.1.3 Moving the safety hood out of the way

*You may only work with the safety hood moved out of the way in special cases taking extra care, e.g. with bulky workpieces (carcass).*

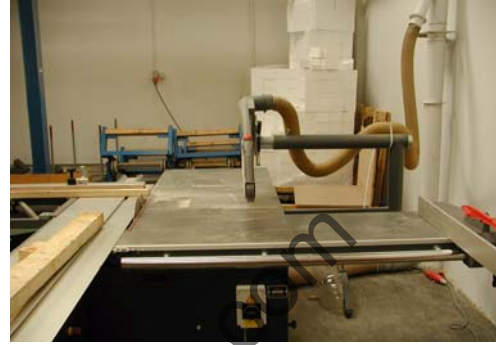
*When you have finished the safety hood is to be moved back immediately into its operating position!*

Move the safety hood as follows:

- Switch off the main switch and prevent it from being switched on again
- Release the clamping screw
- The protective hood can be moved out of the way



Normal position



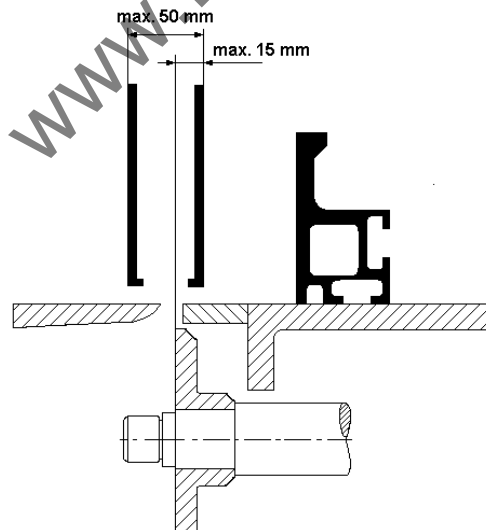
safety hood in place

*After you have finished move the safety hood back into its normal working position!*

#### 2.3.1.4 Lateral adjustment of the safety hood to the saw blade

Adjust the protective hood mount by moving it on its arm so that there is a gap of max 15 mm between the edge of the protective hood and the spacer of the saw drive shaft.

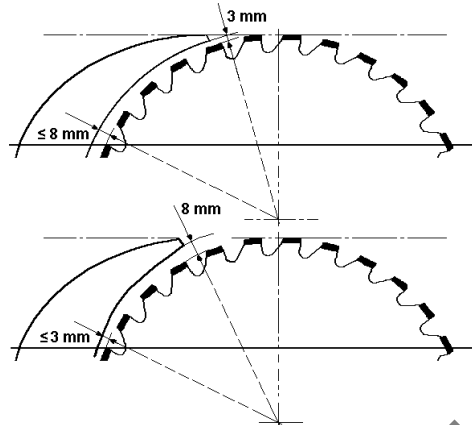
This setting is made at the factory and is marked by adjacent red arrows on the attachment bracket and the arm.



## 2.3.4 Riving knife adjustment

### 2.3.4 Riving knife adjustment

The correct setting of the riving knife is of great importance for safety. The gap between the riving knife and the toothed wheel of the saw blade may not be more than 8 mm in the area of the cutting height. The sensible gap in practice is around 5 mm. Use of the positively guided Altendorf riving knife automatically ensures with this gap that the height adjustment of the riving knife matches the tip approx. 2 mm below the uppermost tooth (see illustration).



#### Riving knives

Before adjusting the riving knife you must check whether its size and thickness match the saw blade being used. The series versions of the machine are supplied with the following riving knives: (range of diameters and thickness are stamped on the lower end of the knife in each case).

250/2,5 for saw blade diameter of 250 mm and a body thickness of maximum 2.5 mm

300-350/2.8 for saw blade diameter of 300 to 350 mm and a body thickness up to maximum 2.8 mm.

400/3.2 for saw blade diameter of 400 mm and a body thickness up to maximum 3.2 mm.

The thicknesses of the riving knife are selected so that they match the commercially available saw blade thicknesses in the relevant diameter range.

To adjust the riving knife unlock the upper carriage and move it to its end position and lift up the orange protective cover. The supplied special spanner can then be used to release the clamping bolt on the riving knife holder. The riving knife can then be positioned at the correct height by moving it in its slot or adjusting the gap between it and the blade by moving the entire holder on the bar, noting the markings on the riving knife when doing this. Then re tighten the clamping bolt and close the protective cover.

### 2.3.3 Table length extension

The table length extension prevents the workpiece tipping over after cutting and makes working safer.

The table length extension is part of the basic specification of the machine. With Type WA8 the table length is 840 mm.

### 2.3.4 Clamping shoe

The clamping shoe is used for trimming planks and fixes the workpiece



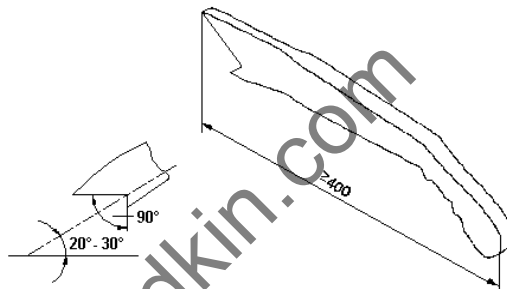
## 2.3.5 Push stick

securely on the sliding table.



### 2.3.5 Push stick

For cuts less than 120 mm the push stick must be used to prevent your hands getting near the saw blade when working. The push stick holder is located close to the work area on the rip fence.



Example of push stick  
(Dimensions in millimetres)

### 2.3.6 Push block (trough-sawing)

Push blocks should be used for cutting narrower workpieces and if necessary, for pressing the workpiece against the fence. A push block can easily be made by the operator and be fitted with the push block handle supplied with the machine.



### 2.3.7 Kickback

Do not use the cross cut fence and the rip fence at the same time. Use of both fences at once can cause the material to bind on the saw blade, resulting in a kick back.

### 2.3.8 Freehand

Do not cut freehand, use a hand or clamping devices for fixing the workpiece.

## 2.4 Other risks

Even when the machine is used in accordance with specifications, despite compliance with all safety regulations, because of the construction of the ma-

## 2.4 Other risks

---

**Contact with the tools**

**Workpiece recoil**

**Workpiece breakage**

**Danger of sticking**

**Electrics**

**Noise**

**Dust**

chine which is determined by the purpose for which it is used, the following risks might still arise:

- Touching the main saw blade and the scoring saw blade in the cutting area.
- Touching the main saw blade and of the scoring saw blade below the table level when the sliding table is right forward or right back.
- Recoil of the workpiece or of parts of the workpiece.
- Catapulting off of individual teeth with carbide-tipped saw blades.
- Breakage and spinning off of the saw blade.
- Sticking on the manual or motorized sliding table.
- Sticking between the motorized tilt movement of the saw blade and the rip fence or workpieces located in the tilt area.
- Contact with live parts when electrical installations are open
- Long-term effects of noise when working for long periods without hearing protection
- Emission of dust that can damage your health if operating the machine without dust extraction.
- Avoid any dangers that may arise from these other risks by taking extra care when setting up, operating and maintaining the machine!

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## 2.5 Working safely with the sliding table saw

### 2.5 Working safely with the sliding table saw

#### 2.5.1 Cross slide/fence

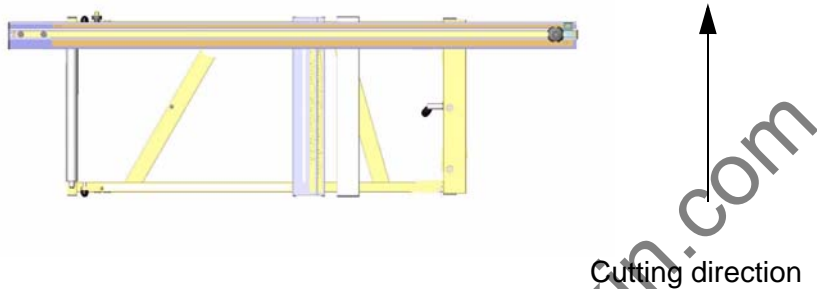
##### Sizing and mitre cutting

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

##### Use: For handling boards

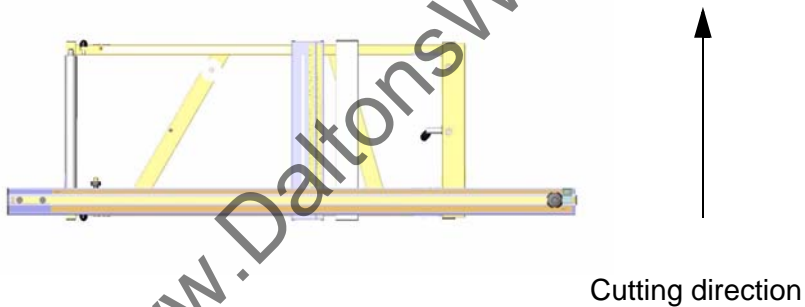
The operator pushes the workpiece in the cutting direction against the fence



##### Position 2

##### Use: For handling wood and boards up to 600 mm width

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



##### Changing the cross cut fence:

- Pull up the clamping lever and push to the inside (to loosen)
- Set the cross cut fence in the new position, ensure that the centring bolts are inserted into the holes
- Lift the clamping lever and push to the outside
- Apply light pressure and push down the clamping lever (to clamp)



## 2.5.2 Crosscut-mitre fence

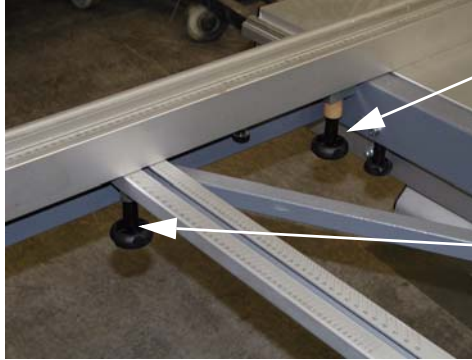
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### **Function de- scription**

### **2.5.2 Crosscut-mitre fence**

- Crosscut mitre fence adjustable to an angle of 49° , angle displayed on scale
- Additional clamping in the 90° position
- Movable C-profile that can be locked into position as additional workpiece support

### **Controls**



Clamping screw pivot

Clamping screw degrees scale

### **Changing the mitre fence:**

- Release the clamping screw degrees scale
- Unscrew the clamping screw pivot
- Move the mitre fence into the 2nd position
- Screw the clamping screw pivot back in
- Tighten the clamping screw

### **Setting the an- gle**

Release the clamping screw  
Set the mitre fence to the angle and tighten the clamping screw

### **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!***

## 2.5.2 Rip fence

### 2.5.2 Rip fence

**Adjustment**

For parallel cutting the rip fence is set to the desired dimension. The dimension set is read off via the edge of the aluminum profile bar. The scale can be adjusted in accordance with the relevant tool thickness after the clamping screw has been released.

**For cuts less than 120 mm wide the material must be fed with a push stick and the extended fence must be in a flat position.**

The extended fence of the rip fence is adjustable in the cutting direction and in the profile height. It is clamped in the desired position using a star knob screw.

**Crosscutting**

For crosscutting shorter workpieces, for removal (e.g. tenon cutting) or other procedures in which pieces falling off could jam between fence and saw blade, the extension fence is pulled far enough forward for its rear end to be in front of the saw blade.

**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.

Extension fence clamping



Flat position of the extension fence



Extension fence height adjustment

Fence clamping

## 2.5.3 – Working examples –

### 2.5.3 – Working examples –

#### **General**

The Altendorf sliding table saw Type WA8 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**

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.

#### **Position 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)**

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**

(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.



## 2.5.3 – Working examples –

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### **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 rising knife.



### **Crosscutting of wide workpieces**

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**

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.)



## 2.5.3 – Working examples –

### **Concealed cutting, routing**

Tool: Milling router permitted for manual feeding (maximum width 15 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**

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**

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.





## 2.5.3 – Working examples –

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### ***Dividing up large boards***

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.



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## 3. Transport

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### 3. Transport

When transporting the sliding table saw with a crane or fork lift (only fixed-length forks) only lift the machine a little and protect it from shocks!

#### 3.1 Packing

The transport route is a deciding factor in the type of packing. Unless specifically agreed otherwise, the packing corresponds to the packing guidelines HPE laid down by the German body Bundesverband Holzmittel, Paletten, Exportverpackung e.V. and by the VDMA.

The graphic symbols which appear on the packing should be complied with!

#### 3.2 Degree of dismantling

The degree to which the sliding table saw is dismantled is governed by the transport conditions and by the options available on the machine. Basically the sliding table saw is delivered divided into a number of installation modules.

#### 3.3 Sensitivity

Particular care should be taken when transporting the sliding table saw to prevent damage from external forces or lack of care when loading and unloading.

During transport buildup of condensation as a result of variations in temperature as well as shocks are to be avoided.

#### 3.4 Storage

If the sliding table saw or the assembly modules are not assembled immediately after delivery they must be carefully stored at a protected location.

When this is done they should be correctly covered so that no dust and no moisture can get in.

The sliding table saw is delivered with a preservative for the bare, non-surface treated parts which protects these parts for around 1 year. If it is stored beyond this period further preservation measures should be undertaken.

## 4. Assembly

### 4. Assembly

#### 4.1 Setting up the sliding table saw

##### Foundation

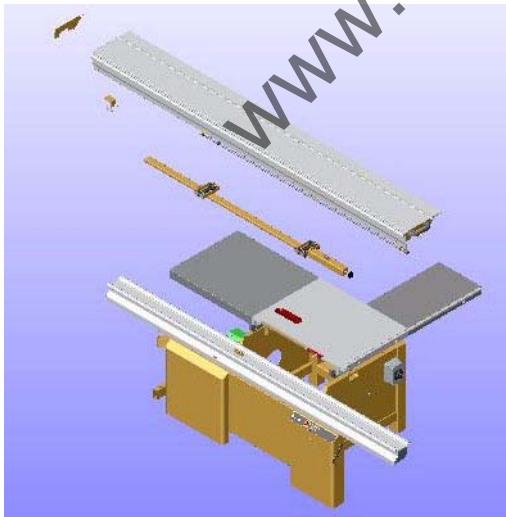
No special foundation is required at the installation site for the sliding table saw. The floor must have suitable load bearing capacity to take the weight of the machine, it must be even and level. If the machine rocks this should be remedied by putting a machine foot underneath it.

##### Installation site

The installation site for the machine should be selected so that, taking into account its space requirements and the size of the workpieces to be handled, sufficient free space is available around the sliding table saw. In addition the appropriate safe distances from parts of the building and from other machines are to be adhered to so that there is no danger to the operator or to others of being trapped.

#### 4.2 Sliding table assembly

- Position the lower carriage onto the machine frame and screw in place with the outer fixing screws. Push up against the stop screws prior to tightening!
- Only loosely screw in the middle fixing screw.
- Position the middle carriage onto the lower carriage such that the locking system points to the right
- Push the middle carriage to the right so that the 1st double roller is just resting on the round bars.
- **Carefully** push on the top carriage ensuring that the top carriage does not jam and that the guide rods are gently pushed onto the sliding table rollers
- Push the top carriage firmly through up to the stop.
- Fit the rear stop and check that the stop on the top carriage and the stop on the bottom carriage simultaneously hit the end position, readjust if necessary.
- Tighten middle fixing screw.
- Check the subrollers settings prior to starting up..



## 4.3 Installation of table length extension

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### 4.3 Installation of table length extension

- Guide the pins of the table length extension into the holes on the face of the table plate
- Secure loosely to the table plate with two M10 nuts and shake proof washers
- Push through the tensioning pins
- Tighten the M10 nuts

### 4.4 Installing the safety hood

#### 4.4.1 Installing the lower support

- Push the lower support onto the attachment bolts
- Put on shake proof washers and secure with nuts

#### 4.4.2 Installation of the upper support

- Push the safety hood with push rod into the holder
- Screw in the guide screw

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### 4.5 Electrical connection



**All work on the electrical system, including connection to the power network, may only be performed by an electrical specialist. When working on the electrical equipment the machine must be disconnected from the mains power.**

The electrical connections are made in the main switch housing which is on the front of the machine stand. The terminals for the leads are marked L1, L2, L3, N and PE, the terminal for the floating contact is marked POT. The lead is 2.5 mm<sup>2</sup> in cross section and 25A fuses are to be provided on the operating side.

If the machine is connected via a movable lead, a rubber tube lead (lead designation A07RN-F) must be used. Plug connector required: Round plug connector according to DIN 49463.



POT contact = AUTO-START FOR DUST EXTRACTION

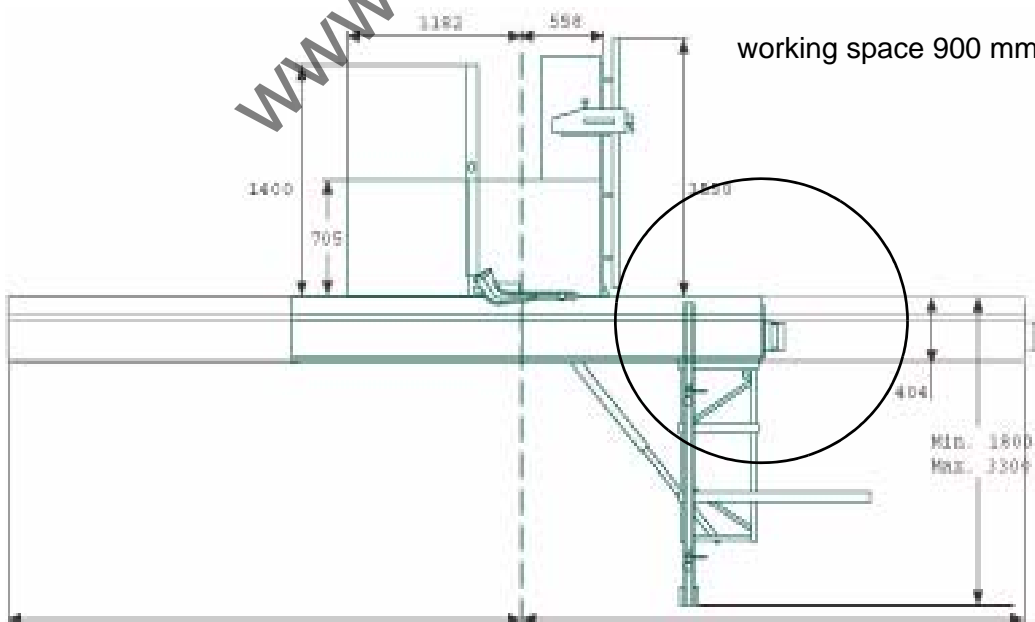
Connection for externally powered control circuit for simultaneous switching of dust extractor via auxiliary relay.

(Max. 1A/240VAC)



**After the lead is connected the direction of rotation of the main saw motor is to be checked by briefly turning the machine on and if necessary corrected by swapping two external leads in the mains connection box.**

**Note the arrow indicating direction of rotation on the saw blade cover!**

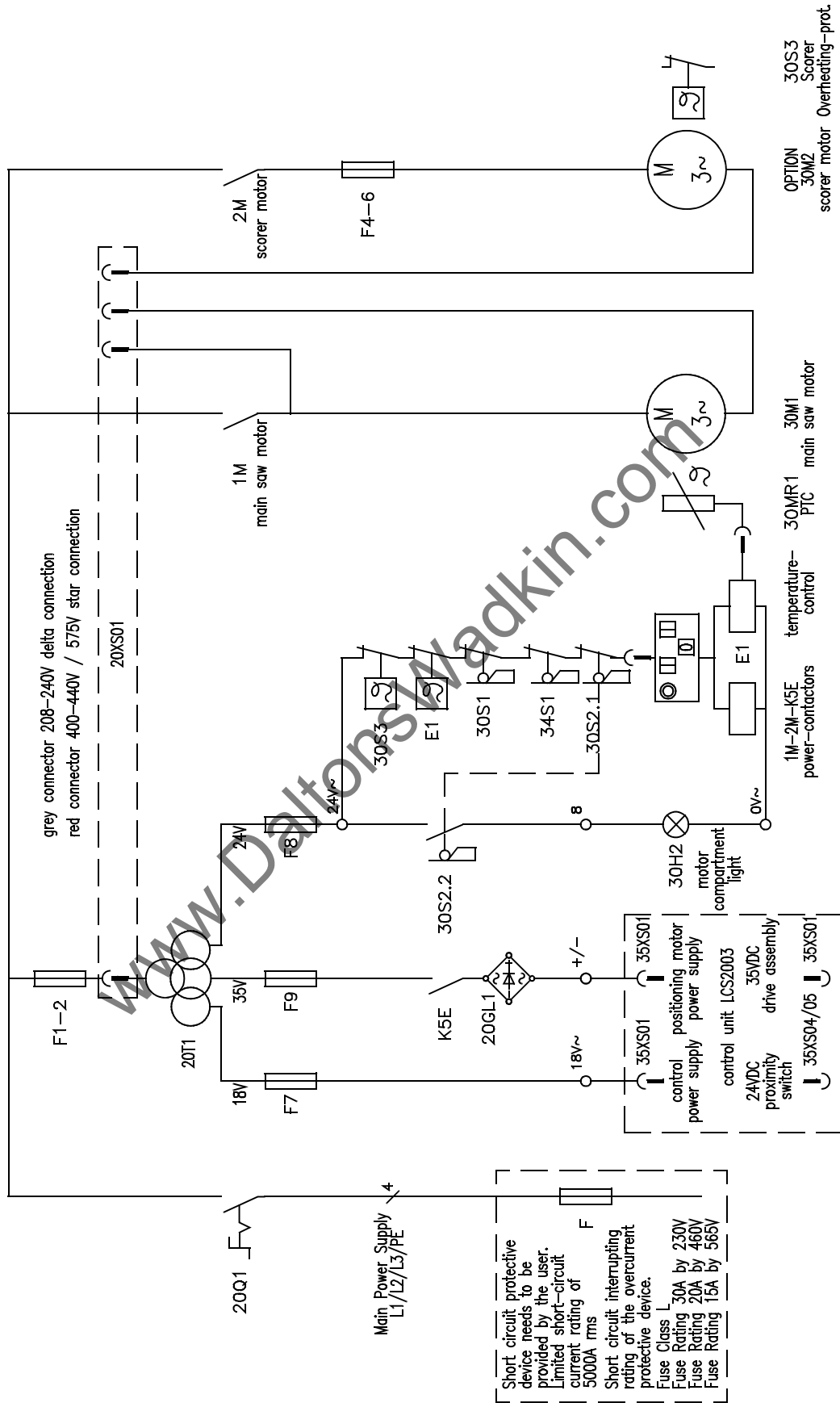


## 4.5 Electrical connection

| Short designation | Name                                     |
|-------------------|--|
| 20GL1             | Rectifier                                |
| 20Q1              | Main switch                              |
| 20T1              | Control transformer                      |
| 30M1              | Main saw motor                           |
| 30M2              | Scoring saw motor                        |
| 30MR1             | Main motor temperature monitor           |
| 30S1              | Safety switch sliding table              |
| 20VH4             | Light error codes                        |
| 30S3              | Scoring saw motor temperature monitoring |
| 34S1              | Cover plate safety switch                |
| E1                | Brake module                             |
| F1-F2             | Control fuse (primary)                   |
| F4-F6             | Fuses, scoring motor                     |
| F7-F9             | Control fuse (secondary)                 |
| F15-F16           | Fuses, brake current                     |
| K1M-K4M           | Motor cutouts                            |
| K5E               | Adjustment drive supply voltage cutout   |
| 30S2.1            | Safety switch machine door               |

# 4.5 Electrical connection

Circuit diagramm



## 4.6 Connection of extraction system

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### 4.6 Connection of extraction system

#### (customer side!)

The workplaces at the sliding table saw are classed in accordance with BGI 739 Annex 4 as low-dust environments when the following constructional features are in place:

- The safety hood for the saw blade over the table is equipped with an extraction connection with a diameter of at least 80 mm
- There is an extraction connection below the table of 120 mm. The required overall connection for extraction is 140 mm.

If these conditions are met at the sliding table saw WA8 the workplaces at this machine can be classified as low-dust since the air limit value will be safely met over the long term. The minimum air speed at the extraction connection must be 20m/s. The extraction connection and the hoses are not supplied with the machine!

It must also be ensured that when the machine is switched on the extraction system is also switched on. A floating contact (POT - see circuit diagram) supplied as standard can be used for this or a current converter installed in the inlet lead.

### 4.7 Rip fence

#### 4.7.1 Installing the table length extension

- Guide the bolts of the table length extension into the side holes of the table plate
- Secure loosely to the table plate with two M10 nuts and shake proof washers
- Tighten the M10 nuts

#### 4.7.2 Installation of the rip fence

- Guide the stop bar with the threaded bolts into the holes in the table plate
- Install the washers and nuts
- Tighten the nuts
- Install the belt scale
- Push on the fence
- Install the fence scale



## 5. Machine configuration

---

### 5. Machine configuration

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.

#### **Lower rollers on the sliding table**

- 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.

#### **Table plate**

- 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.

- Adjustment:

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.

#### **Free cut adjustment**

#### **Free cut adjustment of sliding table**

- Checking:

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

#### **Free cut adjustment of rip fence**

- Checking:

Set the saw blade to its max. cutting height, cut a 300x450 mm 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.

- Setting:

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.

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

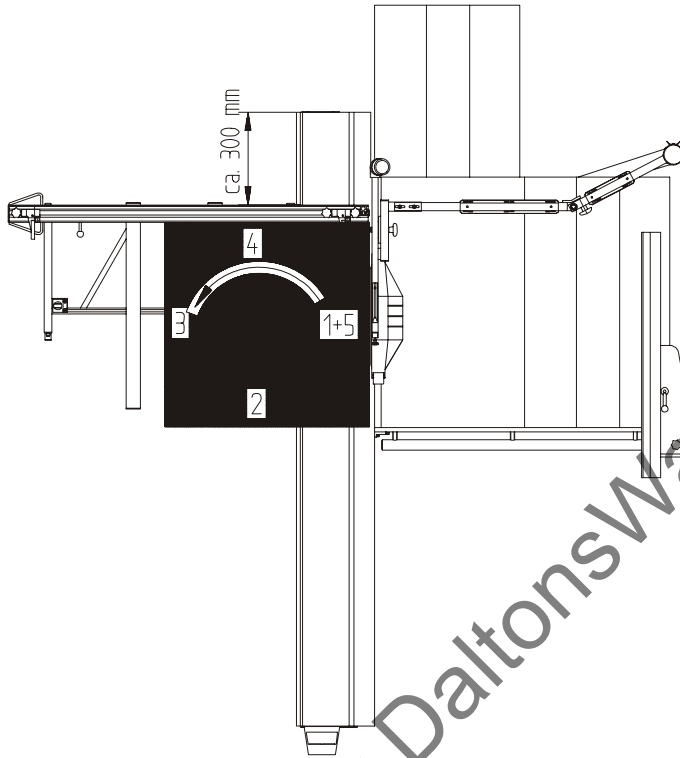
## Free cut adjustment

### Angle cut

Before the angle cut is checked the adjustment of the sliding table must be checked and corrected if necessary.

The angle cut is checked at the mitre fence as follows:

A sharp quality saw blade, D = 350 mm/ 3.5/2.5/72 teeth alternate teeth, at n=5000 1/Min is used as a tool. Take a 1000x1000 mm plank or sheet of MDF, thickness at least 19 mm. Make 5 cuts (see Fig. 1), laying the last cut side against the mitre fence for the next cut (turn the board in a counterclockwise direction). On the 5th cut cut off a strip about 10 mm wide. Measure the width of the strip at both ends with a gage. The difference between the two dimensions divided by 4 gives the angular error per meter cutting length.



The angle cut must be checked at least 2 different positions of the mitre fence on the sliding table.

### Factory adjustment of the angle cut:

The mitre fence is clamped in the position shown in the illustration (appr. 300 mm from the end of the table) and in a further position (appr. 1300 mm from the end of the table). In these two positions the angle cut, is checked and adjusted, as described above. The adjustment may not exceed an allowable max. tolerance of < 0.2 mm (on the 5th cut (dimension 1 - dimension 2)).

### 0° position of the saw blade

- Checking:

Lay 2 strips (appr. 70 mm wide) **on edge** in front of the mitre fence, cut them in this positions 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.

- Adjustment:

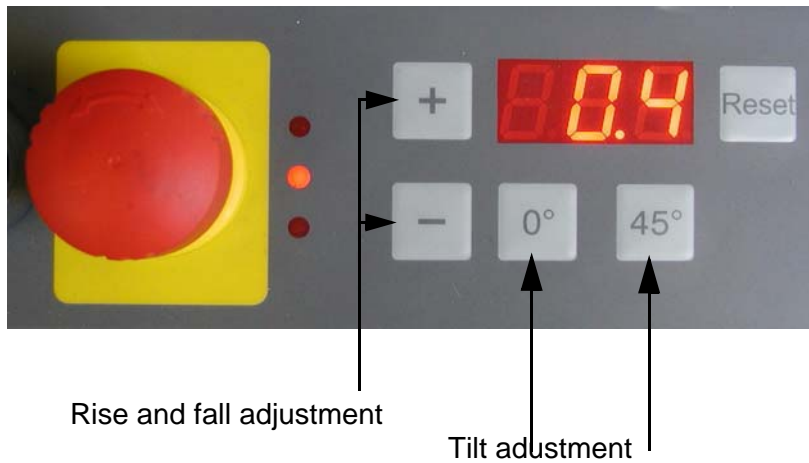
Recalibrate the machine!

## 6. Machine operation

### 6. Machine operation

#### 6.1 Adjustment of the main saw blade

##### 6.1.1 WA8 tilting



#### **Rise and fall adjustment:**

- The cutting height is reduced by pressing the **Minus key**.
- The cutting height is increased by pressing the **Plus 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**

- The angle of tilt is reduced by pressing the **0° key**.
- The angle of tilt is increased by pressing the **45° 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.
- Tapping the + / - keys briefly makes an adjustment of 0.1° in each case!



#### **Before tilting the saw blade it is vital to note the following points:**

- Use the wide safety hood!
- Free the table plate in the tilt area of the workpiece
- Move the scale of the rip fence into the flat position for a cutting width <130 mm!

#### **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 display shows **0**, the machine is calibrated

6.1.2 WA8 non tilting



Height adjustment

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## 6.2 Changing the main saw blade



### **Changing the saw blade:**

### 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.
- Only fit saw blades with a diameter of between 250 and 315 mm (350 non CE)
- 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  $n_{Max} = \dots$
- 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.
- Switch off the drives
- Set the saw blade to the upper height position and tilt it to 0°
- Switch off the main switch
- Guide the top carriage in the cutting direction, release the lock in the middle of the saw blade by pressing the ball button on the middle carriage
- Move the top carriage to the end in the cutting direction
- Hinge up orange colour base plate
- Bring bore holes in front flange into a vertical position
- Secure saw blade against with retaining pin (bore hole for this purpose in machine table and saw shaft)
- Loosen saw shaft nut by turning clockwise (left-hand thread)
- Prior to fitting the new saw blade remove any adhering chips and dust from both flanges
- Fit the saw blade and the front flange onto the saw shaft and tighten the saw shaft nut counter-clockwise
- Check that the thickness and spacing of the riving knife matches the saw blade
- Close the bottom protection covering and check by way of a brief trial run that the saw blade runs correctly. For this operation lower upper circular saw safety hood down to the table so that the saw blade is fully covered.



#### **Warning!**

**Check saw blade retaining disc for tightness before operating machine!**

#### **N.B.:**

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

## 6.3 Saw blade recommendation

### 6.3 Saw blade recommendation

- When selecting tools ensure that no blunt or damaged tools are fitted.
- The highest permitted speed specified on the tool may not be exceeded.
- HSS saw blades may not be used!
- 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 following table. 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!

| Workpiece                 | Cutting speed [m/s] | Saw blade Ø 250 Cut | Saw blade Ø 315 Cut | Saw blade Ø 350 Cut | Saw blade Ø 400 Cut | Saw blade Ø 250 Finishing cut | Saw blade Ø 315 Finishing cut | Saw blade Ø 350 Finishing cut |
|---------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------------------------------|-------------------------------|-------------------------------|
| Softwood lengthwise       | 60-80               | 24W                 | 28W                 | 32W                 | 36W                 | 40W                           | 48W                           | 54W                           |
| Softwood crosswise        | 60-80               | 40W                 | 48W                 | 54W                 | 60W                 | 48W                           | 60W                           | 72W                           |
| Hardwood lengthwise       | 60-80               | 24W                 | 28W                 | 32W                 | 36W                 | 40W                           | 48W                           | 54W                           |
| Hardwood crosswise        | 60-80               | 40W                 | 48W                 | 54W                 | 60W                 | 48W                           | 60W                           | 72W                           |
| Plywood                   | 50-70               | 40W                 | 48W                 |                     |                     | 48W                           | 60W                           |                               |
| Blockboard                | 60-80               | 48W                 | 60W                 | 72W                 |                     | 60W                           | 72W                           | 84W                           |
| Laminated wood            | 50-80               | 40W                 | 48W                 | 54W                 |                     | 60W                           | 72W                           | 84W                           |
| Raw chipboard             | 60-80               | 48W                 | 60W                 | 72W                 |                     | 60W                           | 72W                           | 84W                           |
| Coated chipboard          | 60-80               | 60TF                | 72TF                | 84TF                |                     | 80TF                          | 96TF                          | 108TF                         |
| Chipboard HPL coated      | 50-70               | 60TF                | 72TF                | 84TF                |                     | 80TF                          | 96TF                          | 108TF                         |
| MDF raw boards            | 60-80               | 48W                 | 60W                 | 72W                 |                     | 60W                           | 72W                           | 84W                           |
| Laminated MDF             | 60-80               | 60W                 | 72W                 | 84W                 |                     | 80W                           | 96W                           | 108W                          |
| Laminate floorings        | 50-70               | 60TF                | 72TF                | 84TF                |                     | 80TF                          | 96TF                          | 108TF                         |
| Hard fiberboard           | 60-80               | 60W                 | 72W                 | 84W                 |                     | 80W                           | 96WS                          | 108W                          |
| Hard paper/hard fabric    | 40-60               | 60TF                | 72TF                | 84TF                |                     | 80TF                          | 96TF                          | 108TF                         |
| Melamine compact laminate | 40-60               | 60TF                | 72TF                | 84TF                |                     | 80TF                          | 96TF                          | 108TF                         |
| PVC sheets                | 40-60               | 60W                 | 72W                 | 84W                 |                     | 60W                           | 72W                           | 84W                           |
| Clear acrylic sheets      | 40-50               | 60W                 | 72W                 | 84W                 |                     | 80WF                          | 96WF                          | 108WF                         |
| Plasterboard sheets       | 40-60               | 48W                 | 60W                 | 72W                 |                     | 60W                           | 72W                           | 84W                           |

## 6.3 Saw blade recommendation

| Workpiece            | Cutting speed [m/s] | Saw blade Ø 250 Cut | Saw blade Ø 315 Cut | Saw blade Ø 350 Cut | Saw blade Ø 400 Cut | Saw blade Ø 250 Finishing cut | Saw blade Ø 315 Finishing cut | Saw blade Ø 350 Finishing cut |
|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------------------------------|-------------------------------|-------------------------------|
| Plaster fiber sheets | 40-60               | 48W                 | 60W                 | 72W                 |                     | 60W                           | 72W                           | 84W                           |
| Mineral wool sheets  | 40-80               | 40W                 | 48W                 | 54W                 |                     | 48W                           | 60W                           | 72W                           |
| Alu, Profiles *      | 60-70               | 60TF                | 72TF                | 90TF                |                     | 80TF                          | 96TF                          | 108TF                         |

### Abbreviations:

\* :negative tensioning angle    W: Alternate tooth    WF:Alternate, tooth with bevel  
 TF: Trapezoidal flat tooth

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

**Saw blade diameter 350mm and 400 mm not in CE-Version!**

### 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.

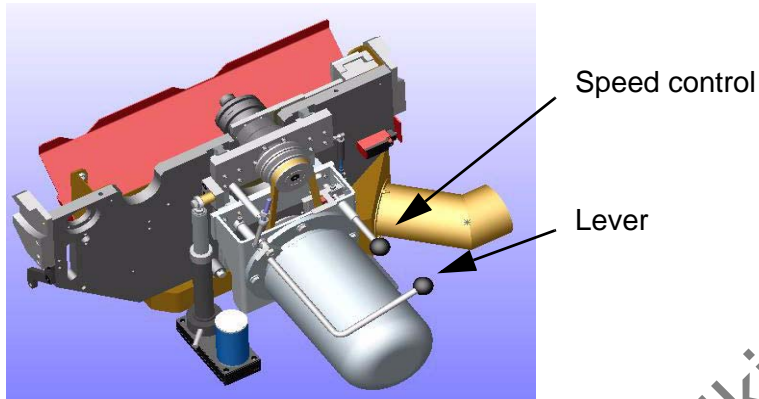
## 6.4 Setting the speed at the main saw blade

### 6.4 Setting the speed at the main saw blade

The following speeds can be set on the main drive by changing over the belt : 3,000, 4,000, 5,000 revolutions/minute.

#### Speed change

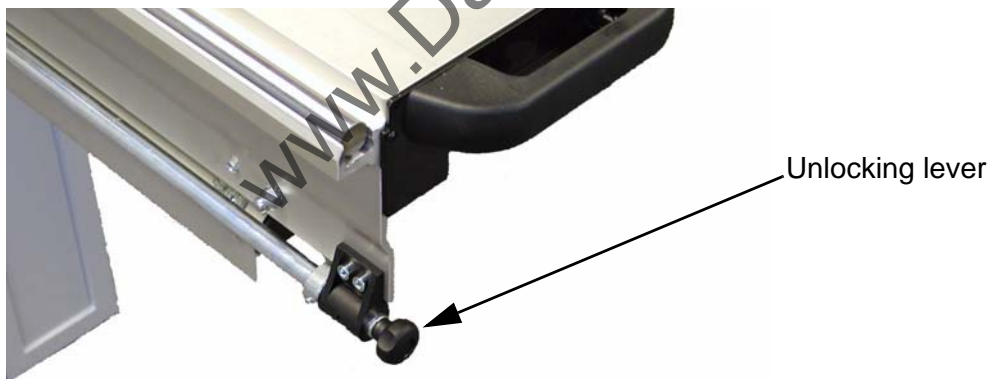
- Switch off drive
- Press the EMERGENCY OFF button
- Move lever down until it engages
- Set speed control to the desired speed setting, position the belt accordingly
- Lift the lever



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

### 6.5 Table locking

The sliding table lock automatically blocks the sliding table in its end 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.



With an additional locking adjustment the sliding table can be blocked in its center setting with the carriage lock.



## 6.6 Main switch

### 6.6 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!

### 6.7 Switching 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.

#### Start

The main saw is started by pressing the white button I located in the panel and identified by the main saw symbol. 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 white button II which is also located in the panel and identified by the symbol for the scorer saw. After the scorer saw is switched on this button lights.

#### STOP

To switch off normally the black button labeled „0“ next to the on buttons 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 corresponding button.

#### EMERGENCY OFF

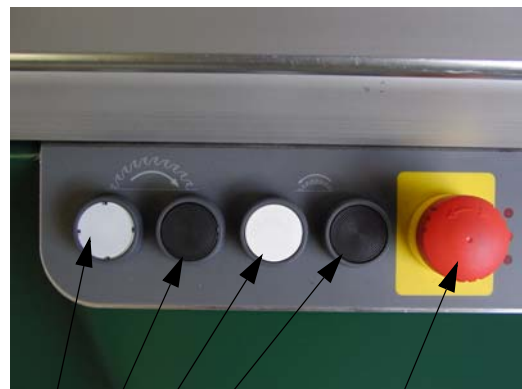
The machine can also be switched off with the EMERGENCY OFF-buttons on both sides of the sliding table. This facility for switching off the machine should however only be used in emergencies



WA8 tilting



WA8 non tilting



Main saw **ON**  
Saw motors **OFF**  
Scorer saw **ON**  
Scorer saw **OFF**

**EMERGENCY STOP**

## 6.8 Motor protection

### 6.8 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 (max. 10 minutes) to cool down!

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

The resistance figure ( $750 \text{ Ohm} \pm 200 \text{ Ohm}$ ) 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!

### Checking the winding protection

### 6.9 Scorer saw (option)

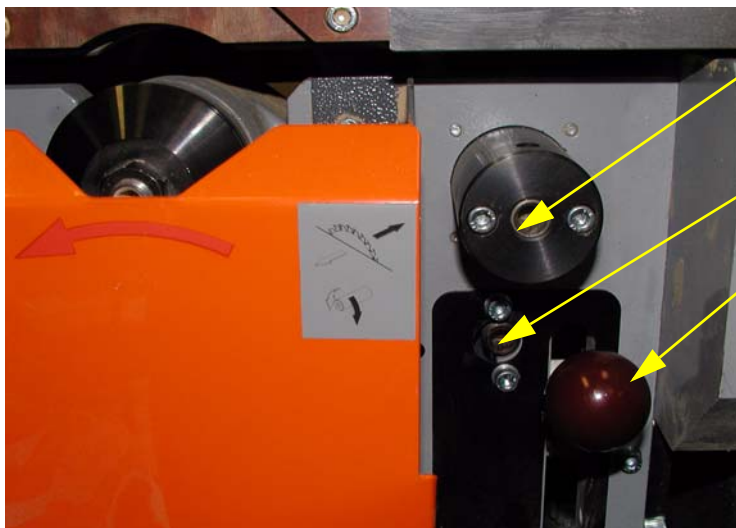
The Altendorf scorer saw was developed to enable boards coated on both sides to be cut on the underside without damage.

The material is only cut into by around 1-2 mm by the scorer or the underside and then separated from the main sheet. The blade of the scorer must be precisely aligned to the main blade and set to the corresponding width.

- Two-piece scorer blades are to be recommended which are adjusted to the required blade strength by insertion of distance pieces. The cutting widths of the scorer blades should be at least 1/10 mm wider than those of the main blades, i.e., 5/100 mm to each side. In addition the two scorer blades should feature driver pins and the width should be printed on the spacers.
- The scorer saw can only be started after the main saw has reached its operating speed (after around 5 seconds.), by pressing the white button I which is also located in the panel and identified by the symbol for the scorer saw.

### Adjustment

Height and lateral adjustments are made mechanically and can be performed when the machine is running.



Lateral adjustment

Height adjustment

Scorer rise and fall adjustment

## 6.9.2 Saw blade change

### 6.9.2 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 scorer saw into its highest position
- Move sliding table in cutting direction
- Unlock the lock in the middle of the saw blade by pressing the spherical button on the center carriage
- Move the sliding table into its end position in the cutting direction
- Raise lower protective hood (orange hood)
- Release the securing screws by turning them to the left
- 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

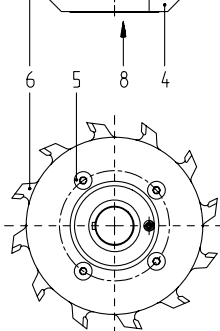
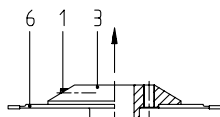
In addition the following points should be noted when using **RAPIDO** scorer saw blades with stepless cutting width adjustment :

- Ignoring the operating instructions reduces operational safety impermissibly and leads to exclusion of liability
- max. speed = 9000 1/Min
- 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!
- The scorer saw blade must be installed outside the machine
- **All** connecting elements must be installed
- If the connecting elements are lost or damaged only original spare parts may be used as replacements!

### 6.9.3 Adjustment of the saw blade width of the scorer saw

#### 6.9.3.1 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



#### 6.9.3.2 Saw blade with stepless cut width adjustment

- 2 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.

### 6.9.3.2 Saw blade with stepless cut width adjustment



Release the clamping screw

Turn the spindle



#### **Replace scorer saw blades for RAPIDO**

#### **Dismantling:**

- - 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!

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.

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

- 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 8,6Nm
- Proceed in the same way with the other half of the adjuster unit

#### **Assembly:**

- Clamping screw (1) is released
- Place flange (3) horizontally on the holder (4) so that the spindle (2) engages in 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

## 7. Maintenance

### 7. Maintenance



#### 7.1 Troubleshooting

There is generally an increased danger involved in troubleshooting. Therefore you should make sure that you take particular care when performing the actions required.

| Fault   | Cause  | Remedy   |
|---|--|--|
| Machine cannot be switched on                   | The main switch is not switched on   | Switch main switch to position „I“   |
|   | Mains failure or failure of a phase  | Wait for power to return or remedy cause of power failure (e.g. defective operational side fuses)  |
| Machine switches off by itself during operation | Overload protection has triggered  | Wait for motor to cool down  |
|   | Sliding table moved beyond middle of saw blade   | Pull sliding table back in front of saw blade  |
|   | EMERGENCY OFF button pressed   | Release the EMERGENCY OFF button again by pulling it   |
|   | Door on machine stand or lower protective cover in front of the saw blades opened  | Close door or lower protective cover   |
|   | Control circuit fuses defective  | 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!   |
|   | Power failure in one or more phases through activation of the operational side fuses<br>Overload protection triggered by blunt saw blade or feeding the workpiece too quickly<br>Control circuit fuses defective | Remedy cause of phase failure<br><br>Change saw blade or reduce feed speed. Wait for motor to cool down.<br>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  | Tension sharp saw blade  |
|   | Thickness of riving knife does not match saw blade being used  | Fit correct riving knife with a thickness greater than or equal to the master blade thickness of the saw blade   |

## 7.1 Troubleshooting

| Fault  | Cause  | Remedy   |
|--|--|--|
| The finished dimension of the cut workpiece does not correspond to the cutting width set at the rip fence      | Scale for cutting width display incorrectly adjusted | Readjust scale. Cut workpiece at rip fence, measure cutting width and move measuring scale so that the measured cutting width is shown on the edge of the straightedge |
| The finished dimension of the cut workpiece does not correspond to the cutting width set at the crosscut fence | Scale for cutting width display incorrectly adjusted | Readjust scale. Cut workpiece at crosscut fence, measure cutting width and move measuring scale so that the magnifier display matches the measured cutting width       |
| Tilt arm moves jerkily   | Telescopic tube or track rollers dirty               | Clean telescopic tube or track rollers; Test stripper  |
| 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     | Adjust free cut  |
|  | Free cut adjustment of rip fence too great           | Adjust rip fence   |
| 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                        | Adjust free cuts   |
|  | Workpiece sticks                                     | Place wedge in cut or use thicker riving knife   |
|  | Operating error                                      | Feed workpiece <b>left</b> or <b>right</b> on fence. When cutting with the sliding table <b>do not</b> feed the workpiece at the rip fence                             |
| Workpiece has burn marks   | Blunt saw blade                                      | Changing the saw blade   |
|  | Feed too slow  | Increase speed of feed   |
|  | Saw blade has too many teeth                         | Change saw blade   |
|  | Incorrect free cut                                   | Adjust free cut  |
| Tears instead of scorer  | Scorer not aligned with main saw                     | Adjust free cuts; the free cut should be almost „0“  |
|  | Scorer blade too narrow                              | Set saw width blade  |
| Workpiece lifts when cutting with the scorer   | Scorer blade blunt                                   | Replace  |
|  | Cutting height too small                             | Set blade higher   |

## 7.1 Troubleshooting

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| Fault                                 | Cause   | Remedy                                    |
|---------------------------------------|---|---|
| E01                                   | End switch ES_Min reached                     |   |
| E03                                   | End switch ES_Max reached                     |   |
| E04                                   | Emergency switch actuated                     | Control emergency switches/<br>door/cover |
| E07                                   | Error positioning drive                       |   |
| 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 |   |
| LED rotation speed blinking           | No input signal                               |   |

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### 8. Service

***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 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.

#### ***Sliding table guides***

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.

#### ***Solvents***

***N.B.! 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).***

### 8.1 Lubrication

#### 8.1.1 Saw drive shaft

The bearings of the main saw shaft and the scorer saw shaft are sealed for life so that no subsequent lubrication is needed.

#### 8.1.2 Tilt segments

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.

### 8.2 Brake

The electronic brake of the main saw unit is not subject to wear!



## 9. Customer service - spare parts

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### 9. Customer service - spare parts

Holding a stock of the most important spares and parts that wear out is an important prerequisite for the ongoing function and availability of the sliding table saw.

To order spare parts please use the spare parts list.

The spare parts codes entered in the spare parts list provide further information.

We only accept a guarantee for original spare parts supplied by us.

We would explicitly point out that spare parts and accessories not originally supplied by us are not tested and released by us. Fitting and/or use of such products can therefore under some circumstances negatively affect the characteristics specified by the construction of the sliding table saw and thereby adversely affect active and/or passive safety. No liability or warranty claims are accepted by Wilhelm Altendorf GmbH & Co KG for damage arising from use on non-original spare parts.

Please note that there are often special manufacturing and delivery specifications for own and third-party parts and that we always supply you with spare parts to the latest technical specification and in line with the latest official regulations.

When ordering spares please quote the following information:

- Machine number
- Item no.

Our address for spare parts sales and customer service:

Wilhelm Altendorf GmbH & Co KG

Service department

Postfach 2009

Wettiner Allee 43-45

D-32429 Minden

D-32429 Minden

Telephone: +49571/95500

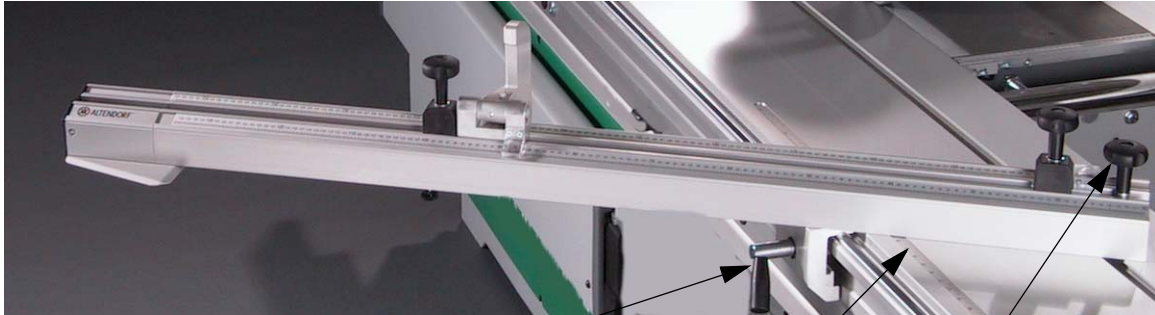
Fax: +49571/9550111

## 10. Single-sided mitre fence

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### 10. Single-sided mitre fence

- The eccentric clamping system of the fence allows it to be fast and easily fitted to the sliding table.
- Max. length to cut: 2500 mm
- The throw-over stops are of a sturdy, backlash-free and easy adjusting design.
- Dimension scales are inclined to enhance visibility for the operator..



Clamping lever

Clamping screw

Angle scale

### **Changing**

- Pull up the clamping lever and the clamping screw to loosen
- Change the angle
- Apply light pressure and push down the clamping lever and tighten the clamping screw to clamp