

# **Instruction Manual**



FKS 315-1500 E



### Imprint

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Panel saw FKS 315-1500 E Item number 5900315

### Manufacturer

Stürmer Maschinen GmbH Dr.-Robert-Pfleger-Str. 26 D-96103 Hallstadt

 Fax:
 0049 (0) 951 96555 - 55

 E-Mail:
 info@holzstar.de

 Internet:
 www.holzstar.de

### Indications regarding the operating instructions

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### Indications regarding the copyright

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### 1 Introduction

You have made a good choice by purchasing the HOLZ-STAR sliding table saw.

## Read the operating instructions carefully before using the machine.

These are an important part and must be kept near the machine and accessible to every user.

The operating instructions inform you about the proper commissioning, the intended use as well as the safe and efficient operation and maintenance of the sliding table saw.

In addition, observe the local accident prevention regulations and general safety regulations for the area of application of the sliding table saw.

### 1.1 Copyright

The contents of these instructions are protected by copyright and are the sole property of Stürmer Maschinen GmbH. Their use is permitted within the scope of using the sliding table saw. Any other use is not permitted without the written consent of the manufacturer.

Passing on and copying of this document, exploitation and communication of its contents are prohibited unless expressly permitted. Violations will result in liability for damages. We register trademark, patent and design rights to protect our products, insofar as this is possible in individual cases. We emphatically oppose any infringement of our intellectual property.

### 1.2 Customer service

Please contact your specialist retailer if you have any questions regarding your panel saw or require any technical information. Your specialist retailer will be happy to support you with specialist advice and information.

#### Germany: Stürmer Maschinen GmbH Dr.-Robert-Pfleger-Str. 26 D-96103 Hallstadt

Repair-Service:Fax:0049(0)951 96555-111E-Mail:service@stuermer-maschinen.deInternet:www.holzstar.de

#### Spare parts ordering:

Fax:0049(0)951 96555-119E-Mail:ersatzteile@stuermer-maschinen.de

We are always interested in valuable experience and knowledge gained from using the application, which then could be shared and be valuable to develop ourproducts even further.

### 1.3 Limitation of liablility

All information and instructions has been compiled on the basis of the state-of-the-art, valid standards and guidelines as well as our many years of expertise and experience.

The manufacturer shall not be liable for damage in the following cases:

- Non-observance of these operating instructions
- Unintended use
- Deployment of inexperienced staff
- Conversions at one's own responsibility
- Technical modifications
- Use of unauthorised spare parts

The actual scope of delivery may deviate from the explanations and illustrations described here in the case of special designs, use of additional order options or due to the latest technical changes.

The obligations agreed in the delivery contract, the general terms and conditions as well as the delivery conditions of the manufacturer and the legal regulations valid at the time of the conclusion of the contract apply.

### 2 Safety

This section provides an overview of all important safety packages for personal protection as well as safe and reliable operation. The sections on individual service life phases contain additional, specifically applicable safety information.

### 2.1 Symbol explanation

### Safety Instructions

Safety instructions are indicated by symbols in these operating instructions. The safety instructions are initiated by signal words that express the extent of the hazard.





### DANGER!

This combination of symbol and signal word indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

#### WARNING!

This combination of symbol and signal word indicates a potentially dangerous situation that will result in death or serious injury if not avoided.

### CAUTION!

This combination of symbol and signal word indicates a potentially hazardous situation which, if not avoided, may result in minor or slight injury.

### ATTENTION!

This combination of symbol and signal word indicates a potentially hazardous situation which, if not avoided, may result in damage to property and the environment.



### NOTE!

This combination of symbol and signal term indicates a potentially dangerous situation which may cause material damage or harm the environment if it is not averted.

#### **Tips and recommendations**

## Tips and recommendations

This symbol highlights useful tips and recommendations as well as information for efficient and reliable operation.

Observe the safety information in these operating instructions to minimise the risk of personal injury as well as material damage and prevent hazardous situations.

### 2.2 Personal protective equipment

Personal protective equipment is intended to protect the health and safety of persons at work. Staff must wear the personal protective equipment indicated in individual sections of these operating instructions when carrying out the different tasks on the machine.

The personal protective equipment is described in the following section:



### Hearing- and Head protection

The hearing protection protects the ears against damages of hearing due to noise. The industrial helmet protects the head against falling objects and knocks against stationary objects items.



### Eye protection

Protective glasses protect the eyes against projected parts and splashes of liquid.



### Suitable protective gloves

The protective gloves are used to protect the hands from sharp-edged components, as well as against friction, abrasions or deeper injuries.



### Safety shoes

The safety shoes protect the feet from bruising, falling parts and slipping on slippery surfaces.



### **Protective clothing**

Protective clothing is tight-fitting work clothing, with no protruding parts, with low tear resistance.

### 2.3 Safety labels on the Panel saw

The following safety markings are attached to the panel saw (Fig. 1), which must be observed and followed.



Fig. 1: 1 Warning of danger 2 Warning of dangerous electrical voltage 3 Warning of danger of crushing upper limbs 4 Grounding symbol 5 Prohibition for touching 6 Safety instructions

If safety labels on the machine are damaged or missing, this can cause errors, personal injury and material damage. The safety symbols attached to the machine must not be removed. Damaged safety symbols must be replaced immediately.



As soon as the signs are not clearly visible and comprehensible at first glance, the machine must be stopped until new signs have been attached.

### 2.4 General safety instructions

This machine is equipped with various safety devices designed to protect both the operator and the machine. However, this cannot yet cover all safety aspects and thus the responsibility of the operator. Before putting the machine into operation, you must read and fully understand this chapter. In addition, the operator must also consider other aspects of the hazard in relation to the environmental conditions and the material.

#### The following must be observed:

Before connecting the device to the mains, make sure that all safety devices are in their intended positions. If possible, check their operation. If it is necessary to remove the doors or protective covers, switch off the machine and unplug the plug from the socket.

- The non-return valves must be free to move and their function must be checked regularly (several times a day).
- Do not connect the device to the mains when the protective cover has been removed.
- To avoid improper operation, familiarize yourself with the location of the switches before turning on the machine.
- Memorize the position of the emergency stop switch so that you can use it immediately at any time.
- Be careful not to touch any switches while the machine is in operation.
- Never touch a rotating tool with your hands or other objects.
- If you are not working on the machine, switch off the machine at the switch and disconnect the plug from the socket.
- Before cleaning and maintenance work, switch off the machine and remove the plug from the mains socket. Do not turn on the machine until all covers removed for maintenance have been replaced.
- Do not modify the machine in a way that would pose a risk to safe operation.
- If you have any doubts about the correctness of your procedure, contact a responsible person.
- Do not neglect to carry out regular inspections in accordance with the instructions for use.
- Check and ensure that the machine is not subject to any malfunctions caused by the user.
- After the work has been completed, adjust the machine so that it is ready for another work cycle.
- If there is a power failure, switch off the machine immediately.

- Do not contaminate or damage the safety devices.
- Do not modify or remove the safety plates.
- Keep the work area free. Overcrowded areas and workbenches cause injury.
- Consider the environment of the workspace.
- Do not expose tools to rain.
- Do not use tools in humid or wet environments or near flammable liquids or gases.
- Make sure the workspace is well lit.
- Do not work under the influence of drugs or alcohol or when you are tired.
- Be careful not to damage the electrical cables to prevent electric shock (electric shock).
- Maintenance on electrical parts of the unit may only be performed by a qualified person.
- Always use the tool that is suitable for the specified work and that meets the machine specifications. The tools, knife blocks, must comply with EN 847-1.
- Replace blunt tools as soon as possible because blunt tools can cause injury or damage.
- Never use the tools at speeds above the manufacturer's recommended rated speeds.
- Check regularly that the safety covers are properly installed and undamaged. Repair damaged covers immediately or replace them.
- Make sure that there are no nails, screws or other objects in the workpieces to be machined.
- Never use tools that are deformed, broken or dull.
- Do not use compressed air to clean the machine or to remove chips.
- Before starting work, take items such as Rings, watches, bracelets, ties, etc., as they can get caught on different parts of the machine and get caught.
- Protect and secure your hair so that it is not caught by moving parts on the machine.
- Wear shoes that are recommended or required by the health and safety regulations of all countries.
- Always wear the necessary safety equipment (safety glasses, apron, safety shoes, hearing protection, etc.).
- Wear a helmet if there are obstacles above your head in the work area.
- Always wear a protective mask while working on material that generates dust during the process.
- Never wear loose work clothing.
- Only use original HOLZSTAR spare parts and accessories.



### 2.5 Safety equipment

#### Motor protection switch

There is a thermal protection switch in the motor of the Panel saw, which switches off the motor automatically in case of thermal overload. After eliminating the cause of the overload and waiting for the engine to cool down completely, the engine can be restarted.

#### Workpiece kickback protection



Fig. 2: Workpiece kickback protection

If necessary, the workpiece kickback guard can be mounted on the sliding carriage to prevent the workpiece from being knocked back.

#### Chip cover

The chip hood protects against accidental contact with the saw blade and against flying chips. The chip cover must always be mounted during operation.

### **Riving knife**

The splitting wedge prevents a workpiece from being caught by the rising teeth and thrown against the operator. The splitting wedge must always be mounted during operation.



Fig. 3: Reving knife and chip cover

### 2.6 Safety data sheets

Safety data sheets on hazardous goods can be obtained from your specialist dealer or by calling +49 (0)951/ 96555-0. Specialist dealers can find safety data sheets in the download area of the partner portal.

### 3 Intended Use

The FKS 315-1500 sliding table saw was developed for sawing boards and strips of wood or wood-like workpieces. The FKS 315-1500 can be used to cut solid wood, chipboard, panels and profiles. The operating conditions for the saw blade used must be observed while following the safety instructions. Firewood should not be processed with the sliding table saw. The machine must be operated with a suitable extraction

system.

Intended use also includes compliance with all the information in these instructions.

### 3.1 Reasonably foreseeable misuse

Any use beyond the intended use or any other use is considered misuse.

Possible misapplications can be:

- Use of the Panel saw for materials other than wood (e.g. machining metal, plastic).
- Simultaneous machining of several workpieces.
- Machining workpieces that are too large or too heavy, or workpieces that are not fixed or not fixed enough.
- Operating the machine without the intended safety devices in place.
- Installation of spare parts and use of accessories not approved by the manufacturer.
- Service work carried out by untrained or unauthorised personnel.
- Maintenance work on an unsecured machine.
- Machining of several workpieces at the same time in one operation.
- Modifications to the machine or the use of modified tool systems.

Misuse of the Panel saw can lead to dangerous situations.

Stürmer Maschinen GmbH accepts no liability for constructive and technical modifications to the Panel saw.

Claims of any kind for damage due to improper use are excluded.



### 3.2 Residual risks

Even if all safety instructions are observed and the machine is used according to the instructions, there are still residual risks, which are listed below:

The following risks may occur if used improperly:

- Impairment of hearing during prolonged work without hearing protection or if it is defective.
- Heat generation on components can lead to burns and other injuries.
- Electrical hazard due to contact with parts and high voltage (direct contact) or with parts that are under high voltage due to a defect of the device (indirect contact).
- Risk of injury to fingers and hands from the tool or workpiece.
- Danger of breakage or ejection of the workpiece.
- Danger of injury from kickback of workpiece and workpiece parts due to improper handling.
- Risk of injury to the eye from flying parts, even with protective goggles.
- Danger from inhaling wood dust.

### 4 Technical Data

### 4.1 Table

Model	FKS 315-1500 E
Electrical connection 400 V / 50Hz	3,0 kW
Table dimensions [mm]	350 x 760
Extension table steel [mm]	600 x 760
Rear table [mm]	350 x 500
Sliding table [mm]	1500 x 238
Telescopic stop [mm]	1200-2200
Max. saw blade Ø	Ø 315 mm
Saw blade speed	4250 min-1
Max. cutting height 90°	100 mm
Max. cutting height 45°	75 mm
Max. Trimming length	1370 mm
Max. Max. cutting width with stop	940 mm
Weight	202 kg
Sound level with no-load	85 dB(A)
Suction for Blade guard Machine	Ø 38 mm Ø 100 mm
Min. Suction speed	20 m/s
Extraction volume Blade guard Machine	140 m <sup>3</sup> /h 690 m <sup>3</sup> /h

### 4.2 Type plate

Formatkreiss Sliding Table	<b>äge</b> Saw			Ĩ (€
<b>Тур</b> Туре	FKS 31	5-1500 E	Serien-Nr. Serial no.	
Artikel-Nr. Item no.	590 03	15	Baujahr Year of manufacture	
Abgabeleistung Output power		2,4 kW	Netzanschluss Power connection	400 V
Aufnahmeleistu Input power	ng	3 kW		
Zholzstar'			Sturmer Maschinen ( DrRobert-Pfleger-St Deutschland / Germ	GmbH r. 26, 96103 Hallstadt any

Fig.. 4: Type plate FKS 315-1500 E



### 5 Transport, Packaging, Storage

### 5.1 Delivery and transport

### Delivery

Check the Panel saw for visible transport damage after delivery. If you discover any damage to Panel saw, immediately report it to the transport company or the dealer.

### Transport

Improper transport is accident-prone and can cause damage or malfunctions for which we do not grant any liability or guarantee. Transport the scope of delivery secured against shifting or tilting with a sufficiently dimensioned industrial truck to the installation site.



### WARNING!

Severe or fatal injuries may occur if parts of the machine tumble or fall down from the forklift truck, pallet truck or from the transport vehicle. Follow the instructions and information on the transport box.

Note the total weight of the machine. The weight of the machine is indicated in the "Technical data" of the machine. When the machine is unpacked, the weight of the machine can also be read on the rating plate. Only use transport devices and load suspension gear that can hold the total weight of the machine.



### WARNING!

The use of unstable lifting and load suspension equipment that might break under load can cause severe injuries or even death. Check that the lifting and load suspension gear has sufficient load-bearing capacity and that it is in perfect condition.

Observe the accident prevention regulations issued by your Employers Liability Insurance Association or other competent supervisory authority, responsible for your company.

Fasten the loads properly.

#### General risks during internal transport



WARNING: DANGER OF TIPPING

The device may be lifted unsecured by a maximum of 2cm.

Employees must be outside the danger zone, the reach of loads.

Warn employees and, if necessary, advise employees of the hazard. Devices may only be transported by authorized and qualified persons. Act responsibly during transport and always consider the consequences. Refrain from daring and risky actions.

Gradients and descents (e.g. driveways, ramps and the like) are particularly dangerous. If such passages are unavoidable, special caution is required.

Before starting the transport check the transport route for possible danger points, unevenness and disturban-ces as well as for sufficient strength and load capacity.

Danger points, unevenness and disturbance points must be inspected before transport. The removal of danger spots, disturbances and unevenness at the time of transport by other employees leads to considerable dangers.

Careful planning of internal transport is therefore essential.

### Transport with a forklift / pallet truck:

For shipping, the boxed unit is delivered on a pallet so that it can be transported by forklift or pallet truck.

### 5.2 Packaging

All used packaging materials and packaging aids of the panel saw are recyclable and must always be recycled.

Packing components made of cardboard are crushed to waste paper collection.

The foils are made of polyethylene (PE) and the upholstery parts made of polystyrene (PS). You can hand over these substances to a recycling center or to the disposal company responsible for you.

### 5.3 Storage

Thoroughly clean the panel saw in a dry, clean and frostfree environment. Cover the machine with a protective tarpaulin.

Ambient temperature range: -25 ° C to +55 ° C.



### 6 Description of the Device

### 6.1 Machine

Illustrations in this manual may differ from the original.



Fig. 5: Panel saw FKS 315-1500 E

- 1 Extension table
- 2 Main table
- 3 Saw blade protection with suction connection
- 4 Saw blade
- 5 Rear extension table
- 6 Sliding carriages
- 7 Telescopic stop
- 8 Sliding table
- 9 Substructure
- 10 ON and OFF switch
- 11 ON and OFF switch
- 12 Workpiece hold-down device
- 13 Handwheel for adjusting the saw blade height
- 14 Handwheel for fine adjustment of the inclination angle
- 15 Stop
- 16 Drive

### 6.2 Scope of delivery:

- Sliding carriage with boom
- Saw Blade 315x30x3mm , 24 Teeth
- Bed extension and width extension
- Clamp sleigh
- Rip fence with rod guide and fine adjustment
- Saw blade protective hood with extraction hose

### 7 Setting up and connection

### 7.1 Requirements for the installation site

The panel saw must be set up stable on a level and firm ground. It is important to ensure that there is enough freedom of movement to work. The site should meet the following criteria:

- The substrate must be level, firm and vibrationfree.
- Altitude of the workplace: max. 1000 m;
- Max ambient temperature: 40 ° C
- Min ambient temperature: 5 ° C
- Max humidity at 40 ° C: 50%:
- Max humidity at 20 ° C: 90%
- The substrate must not let any lubricant through.
- The installation or work area must be dry and well ventilated.
- Do not operate machines that cause dust and chips near the machine.
- There must be sufficient space for the operating personnel, for material transport as well as for adjustment and maintenance work.
- The installation site must have sufficient lighting (see workplace ordinance and DIN EN 12464).
- There must be a suction device with min. 690 m3 /h extraction capacity, min. 20 m / s flow velocity at the suction connection; Hose diameter 100 mm, max. Hose length 4 m.

### 7.2 Setting up the panel saw



### CAUTION!

Danger of injury due to a machine that is not stably erected!

Check the stability of the machine after placing it on stable ground.



### CAUTION!

Some metal parts can be sharp-edged. Check all metal parts to avoid injury.



#### CAUTION!

Pay attention to the weight of the machine! The machine may only be set up by two persons. Check the aid accordingly for sufficient dimensioning and load capacity.





### **ATTENTION!**

To ensure sufficient stability of the machine, it should be screwed to the ground. There are 4 holes on the machine housing for this purpose

Make the machine operational by following these steps:

#### Mount sliding carriage and saw blade guard



Fig. 6: Mount sliding carriage and saw blade guard

- Step 1: Screw the sliding carriage B to the frame F with the screws, washers and nuts 8, 9, 10.
- Step 2: Screw the handle C with washer and nut 4, 5 to the sliding carriage. Screw the workpiece holder A to the sliding carriage with the screw, washer and nuts 1, 2, 3.
- Step 3: Screw the saw blade guard E to the cutting knife D with the screw and nut 6, 7.

### Mount sliding table



Fig. 7: Mount sliding table

Step 4: Insert the sliding table B in the sliding carriage A and the carrier C and fix it to the sliding carriage A with the clamping levers 2 and plate 1.

#### Mount telescopic stop and extension tables



Fig. 8: Mount telescopic stop and extension tables

Step 5: Insert the telescopic stopper A with the bolt in the hole on the sliding table B and fix it with the clamping lever 1 after adjusting the angle.



Fig. 9: Mount extension tables

Step 6: Loosely screw the extension tables B and C with the screws and washers 2, 3. Then align the extension tables in height on table A and tighten the screws. Fit hose guide D to table C.



Fig. 10: Mount measuring bar and guide rail

Step 7: Screw the measuring strip B to the table A with the screws 3. Then screw on the guide rail with screws and nuts 1, 2.



### Mounting the stop



Fig. 11: Mounting the stop

Step 8: Attach the stopper clip B to the guide rail C, then attach stopper A to B.

#### Align the tables



Fig. 12: Align the tables

Step 9: Set the distance between A and B to less than 3 mm. Then tighten bolts 1 and 2. Place a guideline on the steel table and the sliding table and adjust the height with the screws 5 and 6, then tighten the clamping screws 3 and 4.



Fig. 13: Align extension tables

Step 10: Place a guideline (A) on the steel table and extension tables E and F and adjust the height.

#### Mount the suction hoses







Fig. 14: Mount the suction hoses

- Step 1: Attach the 38 mm suction hose to the saw blade guard with a hose clamp, then insert the hose into the hose guide. Make sure that the hose runs freely and that there is enough clearance to the work surface.
- Step 2: Attach the other end of the suction hose to the suction connection on the machine housing with a hose clamp.
- Step 3: Attach the 100 mm suction hose to the suction connection on the machine housing with a hose clamp. Attach the other end of the suction hose with a hose clamp to the intake manifold of the extraction system.



### DANGER!

To ensure sufficient stability of the machine, it should be screwed to the ground. There are 4 holes on the machine housing for this purpose.



### 7.3 Electrical connection



### DANGER!

### **Danger of electrocution!**

There is danger to life when in contact with live components. Switched on electrical components can cause uncontrolled movements and lead to serious injuries.



### ATTENTION!

All work on the electrical installation may only be carried out by a qualified electrician.



### DANGER!

The three phases must be connected in such a way that the saw blade moves according to the cutting direction shown on the housing.

When making electrical connections, make sure that the characteristics (voltage, mains frequency, protection) match those on the rating plate and for the motor.

Requirements for the power grid:

- Overvoltage protection and undervoltage protection
- Voltage deviation from the nominal value: 0.9-1.1
- Frequency deviation from the nominal value: 0.99-1.01
- Hedging: 16 A
- Step 1: Check that the panel saw is switched off.
- Step 2: Connect the machine to the mains and check the direction of motor rotation. If the direction of rotation is wrong, two phases must be exchanged.

### 8 Operation of the Panel saw

DANGER!



### Danger of electrocution!

There is danger to life when in contact with live components. Switched on electrical components can cause uncontrolled movements and lead to serious injuries.

- Disconnect the power before starting adjustments to the machine.



### WARNING!

### Risk of death!

There is danger to life for the operator and other persons if they do not adhere to the following rules.

- The panel saw may only be operated by a trained and experienced person.
- The operator may not work while under the influence of alcohol, drugs or medication.
- The operator must not work when he is tired or suffering from concentration-impairing illnesses.
- The panel saw may only be operated by one person. Other persons must keep away from the work area during operation.



#### CAUTION! Risk of injury!

Wearing gloves is expressly prohibited when cutting workpieces.



### CAUTION!

Crushing!

Incorrect work on the machine can cause injury to the upper limbs.



### Wear ear protection!



Wear safety glasses!



Wear safety shoes!



### Wear protective clothing!

With the sliding table of the sliding table saw large-sized workpieces can be cut, without the stresses that would occur through sawing on a stationary table. In addition, the saw can be used as a regular table saw to cut smaller workpieces.



#### Working position



Fig. 15: Working position

Working positions on the sliding table saw:

- A: Working with the sliding table
- B: Working on the saw table

#### Workpiece downholder



Fig. 16: Workpiece downholder

Before the sawing process, place the workpiece holddown in a suitable position to the workpiece to prevent the workpiece from striking back during sawing (kickback protection).

#### **ON-OFF** switch



Fig. 17: ON-OFF switch

To start the machine, press the green START button.

#### Select suitable saw blade



Fig. 18: Number of teeth of a suitable saw blade: A

For a safe operation:

- Check that the machine is well secured and does not vibrate.
- Never take the workpiece back after cutting starts.
- Work at the proper and consistent feed rate, never stopping the workpiece during the cut.
- Only work with a sharp saw blade.
- Select suitable saw blade: At least 2 3 teeth should always cut the workpiece at the same time (A, Fig. 18).

### 8.1 Sawing with the sliding table



Fig. 19: Sawing operation with sliding table

- Step 1: Place the workpiece on the sliding table and fix it to stop B and kickback guard C.
- Step 2: Turn on the suction device and the saw.
- Step 3: From working position A push the sliding carriage in the direction of the saw blade.



### 8.2 Sawing with the sliding table

- Step 1: Slide the sliding table out of the sawing area and clamp the sliding carriage in a stationary position.
- Step 2: Adjust the fence to the desired cutting width.
- Step 3: Place the workpiece on the saw table.



Fig. 20: Sawing operation with the saw table

Step 4: Turn on the suction device, turn on the saw, and do the sawing.

### 8.3 Height adjustment



Fig. 21: Handwheel for height adjustment of the saw blade

- Step 1: Loosen the handwheel clamping lever for adjusting the height of the saw blade.
- Step 2: Adjust the desired position of the saw blade with the handwheel and lock the handwheel with the clamping lever again.

### 8.4 Adjust inclination angle



- Fig. 22: Handwheel for adjusting the angle of inclination (left)
- Step 1: Release the handwheel clamping lever to adjust the saw blade tilt angle (Fig. 22, left).
- Step 2: Use the handwheel to set the desired angle of inclination of the saw blade using the scale (Fig. 22, right). Then lock the handwheel with the clamping lever again.

### 9 Care, Maintenance and Repair



### DANGER!

**Danger of electrocution!** There is danger to life when in contact with live components. Switched on electrical components can cause uncontrolled movements and lead to serious injuries.

 Before starting any cleaning or maintenance work,switch off the machine and disconnect the power plug.

### 9.1 Care after the end of work



### Wear suitable safety gloves!

## 

Never use harsh cleaning agents for cleaning. This can lead to damage or destruction of the device.

Step 1: Disconnect the power plug from the socket.

Step 2: Empty and clean the suction device.





Fig. 23: Clean the machine

Step 3: Extract the machine from sawdust and sawdust and clean it with a dry cloth and / or compressed air (wear protective goggles!). In particular, the guide rails B (Fig. 24) and the sliding carrier A (Fig. 24) must be kept clean.



Fig. 24: Important lubrication points

- Step 4: Lubricate all moving parts, especially A, B (Fig. 24) regularly (weekly). Protect all belts and pulleys against oiling!
- Step 5: Spray all unpainted metal surfaces with some anti-rust spray.
- Step 6: Inspect the machine for damage to the safety devices and saw blade. If necessary, carry out the repair or arrange for it, observing the safety instructions.
- Step 7: Check the machine regularly and replace if necessary:
  - Loose screws and nuts
  - Worn or damaged switches
  - Worn or damaged saw blade
  - Worn or damaged blade guard
- Step 8: Every 3 months, check the drive belts monthly for daily use, replace if worn or damaged.



### NOTE!

The bearings are closed and pre-lubricated. They are maintenance-free for the normal life of the machine. The bearing surfaces should always be kept clean to ensure proper operation of the saw.

### 9.2 Maintenance and Repair

Maintenance and repair work may only be carried out by qualified personnel.

If the panel saw does not work properly, contact a dealer or our customer service. The contact details can be found in chapter 1.2 Customer Service.

All protection and safety equipment must be reinstalled immediately after completion of repair and maintenance work.

#### 9.2.1 Change the saw blade



Wear suitable safety gloves!



### DANGER!

The saw blade measures 315 x 30 x 3 mm (outer diameter, inner diameter, thickness).



### DANGER!

Each time you change the blade thickness, you must fit an appropriately dimensioned cutting blade and a suitable auxiliary saw blade.

Step 1: Disconnect the power plug from the socket.

- Step 2: Adjust the saw blade inclination angle to 0  $^\circ$  (90  $^\circ$  to the saw table) and raise the saw blade as far as possible.
- Step 3: Push the sliding carriage to the right as far as possible, unscrew the two M6x12 screws and remove the saw blade guard.
- Step 4: Remove the insert at the table.
- Step 5: Insert the shaft pin into the hole on the inside of the saw blade flange to lock the saw blade and unscrew the saw blade nut clockwise with the wrench.





Fig. 25: Unscrew the saw blade

- Step 6: Remove the saw blade flange and the saw blade.
- Step 7: Place the new saw blade with flange and nut on the shaft and tighten the nut (counterclockwise).



### DANGER!

If the saw blade thickness has changed, an appropriately dimensioned cutting knife and a suitable auxiliary saw blade must now be mounted.

- Step 8: Check that a correctly dimensioned cutting knife and a suitable auxiliary saw blade are fitted and aligned with the saw blade.
- Step 9: Mount the saw blade guard.

### 9.2.2 Change of the riving knife



Fig. 26: Adjust the Riving knife

- Step 1: Disconnect the power plug from the power outlet.
- Step 2: Adjust the saw blade inclination angle to 0  $^\circ$  (90  $^\circ$  to the saw table) and raise the saw blade as far as possible.
- Step 3: Push the sliding carriage to the right as far as possible, unscrew the two M6x12 screws and remove the saw blade guard.
- Step 4: Loosen the fastening bolt for the separating knife and remove the cutting knife.
- Step 5: Insert the new cutting knife and loosely screw it on.



### DANGER!

The riving knife is partially structured. The structured area must be below the saw table.

The mounting bolt is inserted in a slot so that the horizontal distance to the saw blade can be varied.



Fig. 27: Set the distance of the cutting blade to the saw blade

- Step 6: Screw the cutting knife with a distance between 3 mm and 8 mm from the saw blade.
- Step 7: Attach the saw blade guard.

#### 9.2.3 Replace the drive belt

- Step 1: Disconnect the power plug from the power outlet.
- Step 2: Remove the saw blade, s. Section "saw blade change".
- Step 3: Remove the chip container by unscrewing the 3 M8x18 screws.



### NOTE!

When removing the lower two M8x18 screws, the inclination angle is tilted to 30 °, when removing the upper M8x18 screw, the inclination angle is tilted to 0 °.



Fig. 28: Replace the drive belt

Step 4: Unscrew the 4 screws of the left cover and remove the cover.





Fig. 29: Loosen the engine screws

- Step 5: Screw the 3 fixing screws of the engine approx. 3 mm out of the engine mount, so that the engine still remains on the mount.
- Step 6: With the help of the second person, unscrew the 3 nuts on the engine mount completely and remove the engine
- Step 7: Remove remnants of a worn drive belt with the appropriate tool so that the drive belt fits well into the grooves.
- Step 8: Insert the drive belt into the engine mount
- Step 9: The engine is put on and pulled in this position so tight that there is still enough clearance to adjust the drive belt clearance.
- Step 10: Put on the spacer ring and secure the self-locking nut with a washer
- Step 11: Place a short bolt or similar between the base frame and the motor mount. By turning the height adjustment crank, you can vary the height adjustment guide.
- Step 12: First, the spacer sleeve must be inserted in the right position shown with a bar iron or appropriate tool. Pull the drive belt upwards and insert the belt pulley and place the drive belt in the middle
- Step 13: Now insert the saw blade spindle with the feather key into the top of the motor mount. Lightly tap the spindle into the bearing, tighten the spindle with the hexagon socket screw, tighten the threaded pin of the spacer sleeve.

### 10 Disposal, recycling of old equipment

In your own interests and in the interests of the environment, please ensure that all components of the machine are disposed of in the proper and approved way.

### 10.1 Decommissioning

Disused machines must be decommissioned immediately to prevent misuse at a later point and putting the environment or persons at risk.

- Step 1: Remove all environmentally hazardous fluids from the old unit.
- Step 2: If necessary, dismantle the machine into manageable and usable assemblies and components.
- Step 3: Guide the machine components and operating materials to the appropriate disposal routes.

### 10.2 Disposal of electrical equipment

Note that electrical equipment contains a variety of recycling-capable materials and also environmentally hazardous components. Please help to separate these components and dispose of them responsibly. In case of doubt, contact your local waste disposal authority. Consult a specialist disposal agent for recycling if needed.

### 10.3 Disposing of lubricants

Lubricant manufacturers provide disposal information for the lubricants used. If necessary, request product-specific data sheets.

### 10.4 Disposal via municipal collection points

Disposal of used electrical and electronic equipment (Applicable in the countries of the European Union and other European countries with a separate collection system for these appliances).

The symbol on the product or its packaging indicates that this product should not be treated as normal household waste, but must be returned to a collection point for the recycling of electrical and electronic equipment. By helping to properly dispose of this product, you are protecting the environment and the health of others. Environment and health are endangered by improper disposal. Material recycling helps to reduce the consumption of raw materials. For more information about recycling this product, contact your local community, municipal waste management, or the shop where you purchased the product.



## 11 Troubleshooting

Fault	Possible cause	Solution
Engine does not start	No mains voltage Connection cable defective	Have the power connection checked by qualified personnel.
Engine is running but the saw blade is not turning	Drive belt torn	Replace the drive belt
Engine is getting hot	1.Engine short circuit	<ol> <li>Disconnect the power plug and have the machine repaired by qua- lified personnel.</li> </ol>
	2.Overload of the engine	2. Check whether the saw blade is suitable for the material to be cut.
		Check whether the saw blade is still sufficiently sharp Take a break from work and let the engine cool down.
Saw blade speed too low	1.Engine defective 2.too low mains voltage	1.Have the engine checked by quali- fied personnel.
		2.Have the mains voltage checked by qualified personnel
Saw blade rotates unevenly under load	Drive belt not sufficiently tensioned	Check the belt tension.
Saw blade does not start or stops un- der load	Drive belt not sufficiently tensioned	Check the belt tension.
Saw vibrates, saw blade strikes	1.Saw blade does not match the spe- cification	1.Check on the basis of the specifi- cations in the technical data whether the saw blade is suitable for installation.
	2.Saw blade not sufficiently secured	2. Tighten the fixing screw.
	3.Saw blade defective	3.Check the saw blade for mechani- cal damage and replace it if neces- sary.
No clean 45 ° or 90 ° cuts	1.Stops not aligned correctly	1.Check the saw blade with stan- dard angle and align the stops.
	2.Angle display not set correctly	2.Check saw blade with standard angle and adjust angle display.
Workpiece is knocked back by the	1.Stops not aligned correctly	1.Align the stops.
saw blade.	2.Disconnect blade not aligned with saw blade	2.Align the cutting blade with the saw blade.
	3.Defective saw blade	3.Replace the saw blade.



### 12 Spare parts

### DANGER!

Risk of injury due to incorrect spare parts!

The use of incorrect or faulty replacement parts may cause danger to the operator and cause damage and malfunction.

- Only use original spare parts from the manufacturer or replacement parts approved by the manufacturer.
- In case of doubt, always contact the manufacturer.

## 1

### Tips and recommendations

Using non-approved spare parts voids the manufacturer's warranty.

### 12.1 Spare parts orders

The spare parts can be obtained from the specialist dealer.

Specify the following key data when ordering spare parts:

- Device type
- Item number
- Position number
- Construction year
- Amount
- Desired shipping method (post, freight, sea, air, express)
- Delivery address

Spare parts orders without details given above can not be considered. If the shipping method is missing, shipping will be at the discretion of the supplier.

Information on the device type, article number and year of manufacture can be found on the type plate, which is attached to the machine.

#### Example

The sawblade for the Sliding table saw FKS 315-2000 E must be ordered. The sawblade has the number 108 in the spare parts drawing 2.

By ordering spare parts, send a copy of the spare parts drawing (2) with the marked part (sawblade) and marked positon number (108) to the dealer or spare parts department and provide the following information:

- Type of device: Panel saw FKS 315-1500 E
- Item number: 5900315
- Drawing number: 2
- Position number: 108



### 12.2 Spare parts drawings FKS 315-1500 E

The following spare parts drawings is intended to help identify the necessary spare parts. To order, please send a copy of the list of spare parts with the marked components to your dealer.

#### Spare parts drawing 1



Fig. 30: Spare parts drawing 1 Panel saw FKS 315-1500 E





Fig. 31: Spare parts drawing 2 Panel saw FKS 315-1500 E





Fig. 32: Spare parts drawing 3 Panel saw FKS 315-1500 E





Fig. 33: Spare parts drawing 4 Panel saw FKS 315-1500 E





Fig. 34: Spare parts drawing 5 Panel saw FKS 315-1500 E





Fig. 35: Spare parts drawing 6 Panel saw FKS 315-1500 E





Fig. 36: Spare parts drawing 7 Panel saw FKS 315-1500 E



## 13 Electrical Circuit Diagram



Fig. 37: Electrical circuit diagram FKS 315-1500 E



### 14 EC Declaration of Conformity

According to machine directive 2006/42/EC Annex II 1.A

Manufacturer/distributing company: herewith declares that the following product	Stürmer Maschinen GmbH DrRobert-Pfleger-Str. 26 D-96103 Hallstadt
Product group:	Holzstar® Holzbearbeitungsmaschine
Machine type:	Panel saw
Designation of machine:	FKS 315-1500 E
Item number:	5900315
Serial number*:	
Year of manufacture*:	20* please fill in according to the information on the type plate

complies with all relevant provisions of the above mentioned directive as well as the other applied directives (below) -

including their applicable modifications at the time of the declaration.

EU directives:	2014/30/EU	EMC-Directive		
The following harmonized standards have been applied:				
DIN EN ISO 12100-:2011-03	Safety of maching Risk evaluation	nes - General principles of design - and risk reduction		
DIN EN 60204-1:2019-06	Safety of machine Part 1: General	nery - Electrical equipment of machines - requirements		
DIN EN ISO 19085-5:2018-02	Woodworking m	achines - Safety - Part 5: Dimension saws		
Responsible for documentation:	Kilian Stürmer,	DrRobert-Pfleger-Str. 26, D-96103 Hallstadt		

Hallstadt, 13.03.2023

Kilian Stürmer Manager





### 15 Notes





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