



# user manual

Instrukcja obsługi | Руководство полъзователя Manuel de l'Utilisateur | Betriebsanweisung Bruksanvisning | Manual del Usuario Betjeningsvejledning | Gebruikershandleiding Käyttöohjeet | Manual de utilizare | Bruksanvisning Manuale d'uso | Příručka uživatele | Navodila za uporabo

R e t a i n for fu ture use Zachować do przyszłego użytku Сохраните для последующего и с п о л ь з о в а н и я A conserver pour une utilisation future Für zukünftige Benutzung aufbewahren B e h o l d for s e n e r e b r u k Säilytä nämä käyttöohjeet tulevaa tarvetta marten Opbevar manualen til fremtidig brug Bewaren voor gebruik in de toekomst Conservare il presente manuale a l'uso futuro Pästraţi acest manual pentru utilizare viitoare Conservar para futuras consultas Behall för framtida användning Uchovejte pro další použití Hranite za prihodnjo uporabo



Safety, Setup, Operation and Maintenance



rev. A1.03 rev. A1.03

**Safety is our #1 concern!** Read and understand all safety information and instructions before operating, setting up or maintaining this machine.

Form #2500

**Original Instructions** Please keep for future reference

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## **SECTION 1 INTRODUCTION**

Congratulations on your purchase of a Wood-Mizer MS300 Table Saw!

Wood-Mizer is committed to providing you with the latest technology, best quality, and strongest customer service available on the market today. We continually evaluate our customers' needs to ensure we are meeting current wood-processing demands. Your comments and suggestions are welcome.

This documentation includes information on preparing the Table Saw for operation, servicing and repairing the machine.

#### GENERAL

Check your Table Saw as soon as you receive it. Report any transport damage to the transport company immediately.

Lift the Table Saw using a forklift or a pallet jack with lifting capacity of at least 500kg, using the eye bolts from the transportation kit.



FIG. 1-1

When replacing the spare parts, use only original parts and note that all electrical components must be assembled by a qualified electrician.

#### **APPLICATIONS**

The Table Saw can be used for sawing wood, chipboard, fibreboard etc.

The machine is intended for indoor use.

#### REQUIREMENTS

The Table Saw can be used in rooms with a temperature ranging from -15°C to +40°C. The ventilation must be mechanical and in accordance with standards.

The Table Saw must be connected to a dust extractor. The dust extractor must be turned on when the machine is working.

#### SAFETY DISTANCE



**WARNING!** No one, except the operator, should be within 3 meters of The Table Saw's sides or 4 meters from the infeed and outfeed sides during operation. Mark a limit to prevent anyone from accidentally entering the risk area.

#### STORAGE

The machine must be placed in a dry area, as it is not fully protected against corrosion. If the machine is placed in a cold area for an extended period of time, its unprotected components, such as tables or cutters, must be lubricated with a large amount of e.g. paraffin. It is also a good idea to cover the device for additional protection against corrosion. If the machine is supposed to be placed outdoors, its unprotected components must be covered and lubricated with anti-corrosive agents.

#### **1.1 Machine Description**

The MS300 is a solid precision table saw with large capacity and a minimal footprint, making it ideal for any workshop. Its cast iron base and wide sliding table enables you to achieve high accuracy and repeatability cut after cut.

With a large cutting depth, a 45 degree tilting capacity, and large rip capacity, it makes this saw ideal professional workshop. The base is made from cast iron for sturdy and stable operation. The sliding table runs on large ball bearings for smooth and accurate cuts. The angle and the height of the blade can be precisely adjusted. The board fence is micro-adjustable when you need absolute precision. The angled fence on the sliding table can be positioned on either side of the table, depending on whether you need to push the wood with the fence, or against the fence during the cut.

Various options are available like a SUVA blade guard and an extension for the sliding table. Chip extraction is located under the blade, and the blade guard can also be connected to a chip extractor. Additional material clamps and circular blades for various kinds of material are available.



#### **EXTENSION TABLES**

The machine is supplied with two extensions as standard. One of the extensions is for the carriage and one is for the table. In addition, the machine can be fitted with a 900x150mm extension table.

The Table Saw should be operated only by an adult who has read and understood the entire operator's manual.

The Table Saw is built to be durable and easy to operate and maintain.

#### MACHINE AND SITE PREPARATION

The machine is delivered on a pallet. Due to the weight, it has to be transported with a forklift or a pallet jack with a minimum capacity of 500 kilograms and in accordance with the general safety rules. To lift the Table Saw, use the eye bolts included in the transport kit.

Check your Table Saw as soon as you receive it. Any transport damage must be reported to the transport company immediately.

Most of the machine is protected against rust, but it will require extra maintenance in the form of lubrication for all the parts that are not protected against rust. See the Maintenance section.

- Place the saw on a stable and flat base.
- It is recommended that the Table Saw should be bolted to the ground (Bolt diameter 8-10 mm), if it does not have to be moved.
- Ensure that there is enough space for the longest boards you want to saw on the infeed and outfeed sides, and that there is enough space for maintenance and timber stocks.
- Connect the dust hoses and fix them using the hose clips on the Table Saw and fan.
- Hang the electrical cable of the machine to the ceiling or protect it in another way. Never step on the cable. The Table Saw should be connected via an earth-fault protection switch.
- CAUTION! The illuminance at the operator's position should be at least 300lx. The light source cannot cause the stroboscopic effect. Ensure that there is no risk of glare.

#### SPACE REQUIREMENTS

#### See Figure 1-1

The Table Saw needs a space of at least 3 m (10') wide.

INTRODUCTION Machine Description

The required length depends on the length of workpieces you want to saw. The minimum length is 4 m (13') from the front and from the end of the machine.



#### ANCHORING

For the highest safety, the Table Saw must be anchored to the floor with 8-10 mm diameter anchor bolts.

#### TOOLS REQUIRED TO USE THE TABLE SAW:

- Wrench 30 mm
- Allen wrench 3 mm
- Allen wrench 5 mm
- Allen wrench 6 mm
- Allen wrench 8 mm
- Slide Gauge

#### CHIP EXTRACTOR

The MS300 Table Saw must be connected to a chip extractor with a total capacity of at least 1000m<sup>3</sup>/h. Remember that the chip container has to be equipped with an air vent (e.g. a fine net or filter if dust is collected indoors). Poor suction is often caused by poor airflow from the chip container. During work in heated rooms, it is necessary to remember that the fan will quickly cool the space if the filtered air is not supplied back into the building. The fire risk and dust emissions (discharge) must be considered because of chip collection.



**WARNING!** There is a risk of fire and dust emission because of chip collection.

Contact the local authorities for advice about designing the chip collection system to conform to the national rules.

It is necessary to set the fan so that it is easy to reach the switch.



**IMPORTANT!** Remove the chips from the Table Saw when the work is finished.

#### TECHNICAL REQUIREMENTS FOR THE CHIP EXTRACTOR<sup>1</sup>

- The chip extractor must be approved according to the CE standard.
- The chip extractor hose diameters for the Table Saw = 100 mm (4") x 2.
- The pressure drop in the Table Saw is 20 mm column of water at 25 m/s.
- The dust extractor airflow ("without external connection") should be 1000 m<sup>3</sup>/h.



**IMPORTANT!** The dust extractor hoses must be grounded or made of materials that do not accumulate an electrostatic charge.

**CAUTION!** Always turn on the chip extractor before starting the machine.

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<sup>1.</sup> EN 12779:2016-04 standard contains requirements for chip and dust extraction systems equipment with fixed installations.



## 1.2 MS300 Table Saw Major Components



## SECTION 2 SAFETY

#### 2.1 Safety Symbols

The following symbols and signal words call your attention to instructions concerning your personal safety. Be sure to observe and follow these instructions.



DANGER! indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING suggests a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION! refers to potentially hazardous situations which, if not avoided, may result in minor or moderate injury or damage to equipment.



**IMPORTANT!** indicates vital information.

**NOTE:** gives helpful information.



Warning stripes are placed on areas where a single decal would be insufficient. To avoid serious injury, keep out of the path of any equipment marked with warning stripes.

#### 2.2 Safety Instructions

**NOTE:** ONLY safety instructions regarding personal injury are listed in this section. Caution statements regarding machine damage appear where applicable throughout the manual.

Observe safety instructions.

**IMPORTANT!** Read the entire Operator's Manual before operating the Table Saw. Take notice of all safety warnings throughout this manual and those posted on the equipment. Keep this manual with this equipment at all times, regardless of ownership.

Read all additional manufacturer's manuals and observe any applicable safety instructions including dangers, warnings, and cautions!

**IMPORTANT!** Only adult persons who have read and understood the entire operator's manual should operate the Table Saw. The machine is not intended for use by or around children. Never operate the Table Saw under the influence of alcohol or drugs.

**IMPORTANT!** The operator of the Table Saw should get adequate training in the operation and adjustment of the machine.

**IMPORTANT!** It is always the owner's responsibility to comply with all applicable federal, state and local laws, rules and regulations regarding the ownership and operation of your Wood-Mizer Table Saw. All Wood-Mizer Table Saw owners are encouraged to become thoroughly familiar with these applicable laws and comply with them fully while using the machine.



Wear safety clothing.



**WARNING!** Secure all loose clothing and jewelry before operating this machine. Failure to do so may result in serious injury or death.

**WARNING!** Always wear gloves and eye protection when handling blades. Changing blades is safest when done by one person! Keep all other persons away from area when carrying or changing a blade. Failure to do so may result in serious injury.



**WARNING!** Always wear protective gloves (compatible with EN 388, Category III) and protective apron (compatible with EN ISO 13688:2013-12, kategorie I) when operating the machine.

**WARNING!** Always wear ear, respiration, hand and foot protection when operating the Table Saw.



Keep the machine and area around clean.



**DANGER!** Maintain a clean and clear path for all necessary movement around the Table Saw and lumber stacking areas. Failure to do so will result in serious injury.

Dispose of sawing by-products properly.



**IMPORTANT!** Always properly dispose of all sawing by-products, including sawdust and other debris.

**CAUTION!** The work-stand of the Table Saw should be equipped with a 4 kg or bigger dry powder extinguisher.

• Check the Table Saw before operation.



**DANGER!** Make sure all guards and covers are in place and secured before operating the Table Saw. Check that all handles, screws, nuts, tailstocks, sleeves, saw blades etc. are properly tightened. Check that the saw blade can rotate freely and that there are no tools in or on the machine before it is started. Failure to do so may result in serious injury.





**WARNING!** Always shut off the motor to stop the cutter whenever the Table Saw is not in use. Failure to do so may result in serious injury.

**WARNING!** Do not for any reason adjust the motor drive belts with the motor running. Failure to do so will result in serious injury.

Keep all people away.



**DANGER!** No one, except the operator, should be within 4 meters of the Table Saw sides during operation. Failure to do so will result in serious injury.

Keep hands away.

**DANGER!** Moving parts can cut or crush fingers or hand. Keep hands clear. Make sure all guards and covers are in place and secured before operating the Table Saw. Failure to do so may result in serious injury.

**DANGER!** Always be aware of and take proper protective measures against rotating shafts, pulleys, fans, etc. Always stay a safe distance from rotating members and make sure that loose clothing or long hair do not engage rotating members resulting in possible injury.





**WARNING!** Beware of rotating parts. Shut down the machine and allow all moving parts to come to a complete stop before removing any guards and covers. Do NOT operate the Table Saw with any guards or covers removed.

**WARNING!** Kickback hazard. Stay clear of area during operation. Follow all anti-kickback service and safety rules. Failure to do so may result in serious injury. The protection hood should be positioned just above the workpiece (max. 6 mm).



**DANGER!** Before changing the Blade or performing any service to the machine, disconnect the power cord from the electric box.

#### Table Saw Operation



**CAUTION!** The workplace should always be well illuminated. The illuminance at the operator's position should be at least 300lx. Never use the Table Saw under the influence of strong medication, alcohol or drugs.



**WARNING!** Make sure the Blade are properly fastened before starting the motor.



**IMPORTANT!** When starting the machine for the first time, check that the main motor rotation direction is as indicated by the arrow located on the motor body (fan guard). If the rotation direction is incorrect, invert the phases in the phase inverter in the power socket (electrical box). Setting the phases in the phase inverter correctly will ensure correct rotation directions of all motors.



**DANGER!** When sawing smaller material always use the push-stick and holder when sawing small workpieces to keep your fingers away from the blade. Always keep your fingers at least 10 cm from the blade to ensure that you have a safety margin.

• Use proper maintenance procedures.



**DANGER!** Make sure all electrical installation, service and/or maintenance work is performed by a qualified electrician and in accordance with applicable electrical codes.

**DANGER!** Hazardous voltage inside the electric boxes and at the motor can cause shock, burns, or death. Disconnect and lock out power supply before servicing! Keep all electrical component covers closed and securely fastened during machine operation.





**WARNING!** Consider all electrical circuits energized and dangerous.

**WARNING!** Never assume or take the word of another person that the power is off; check it out and lock it out.

**WARNING!** Do not wear rings, watches, or other jewelry while working around an open electrical circuit.



**IMPORTANT!** The Table Saw is equipped with an emergency stop button. It is used to immediately stop the motor in case of emergency. The emergency stop button should always be in good condition.

**IMPORTANT!** The Table Saw should not be modified by the owner. Use only original spare parts.

Keep safety labels in good condition.



**IMPORTANT!** Always be sure that all safety decals are clean and readable. Replace all damaged safety decals to prevent personal injury or damage to the equipment. Contact your local distributor or Wood-Mizer Customer Service to order more decals.

**IMPORTANT!** If replacing a component which has a safety decal affixed to it, make sure the new component also has the safety decal affixed in the same place.

Fire protection

**CAUTION!** The work-stand of the Table Saw should be equipped with a 4 kg or bigger dry powder extinguisher.

#### Safety Labels Description

See the table below for safety labels description.

Label View	Label Number	Description
	096317	CAUTION! Carefully read the operator's manual before operating the machine. Observe all instructions and safety rules when operating.
	099220	Close all guards and covers prior to operating the machine.
	099221H	CAUTION! Keep safe distance when the machine is working.

TABEL 2-1



S12004G-1	Always wear safety goggles when operating the machine !
S12005G-1	Always wear protective ear muffs when operating the machine!
501465-1	Always wear safety boots when operating the machine !
512107-1	Always wear safety gloves when operating the machine!

## TABEL 2-1

	539211-1	Always wear protective apron when operating the machine!
Leons	S20097	Motor rotation direction
CE	P85070	CE safety certification



## **SECTION 3 SETUP**

Some of the machine components need to be assembled by the user before the first usage.

To view the exact type and dimensions of the fasteners please see MS300 Parts List (#2501)

## 3.1 Mount the Blade Guard

**1.** Mount the blade guard (A) on the riving knife (B). Then bolt the lever (C) to the guard.

#### See Figure 3-1.



FIG. 3-1

## 3.2 Mount the Board Fence Guide Bar

**1.** Unbolt the eye bolt (A) used for lifting the table saw.

#### See Figure 3-2.





2. Mount the board fence guide bar (A) using the fasteners (B) and the spacer sleeves (C).



#### See Figure 3-3.



FIG. 3-3

Double check that the spacer sleeves are facing the board fence guide bar.

#### See Figure 3-4.



## 3.3 Mount the Side Handles

1. Mount the side handles (A) using the fasteners (B).

#### See Figure 3-5.







## 3.4 Mount the Extension Table

1. Unbolt the eye bolt (A) used for lifting the table saw.

#### See Figure 3-6.



FIG. 3-6

**2.** Loosly mount the extension table (A) using the fasteners (B).

#### See Figure 3-7.



3. Place a flat bar (A) on the main table and level the extension table (B) using the clamping screw (C).

#### See Figure 3-8.





**4.** Tighten the fasteners (A).

## See Figure 3-9.



## 3.5 Mount the Work Table Side Shelf

1. Assemble the work table side shelf (A) and the fasteners (B).

#### See Figure 3-10.



FIG. 3-10

2. Slide the assembled side shelf into the sliding table.

#### See Figure 3-11.



FIG. 3-11

**3.** Place a flat bar (A) on the main table and level the work table side shelf (B) using the fasteners (C).

#### See Figure 3-12.



```
FIG. 3-12
```

**4.** Tighten the fasteners (A).

## See Figure 3-13.



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## 3.6 Assemble Board Fence With Clamp Handle

**1.** Slide Clamp Handle (A) into the Parallel Guide (B).

#### See Figure 3-14.



FIG. 3-14

**2.** Put the Clamp Handle with Parallel Guide (A) on the Board Fence Guide Bar (B). Tighten elements by using knobs (C).





## 3.7 Assemble The Sliding Table Fence

1. Slide the Mounting Assembly (A) and Clamp Handle (B) into the Sliding Table (C).

#### See Figure 3-16.



FIG. 3-16

2. Slide the Guide (A) into the Clamp Handle (B) and the Mounting Assembly (C).

See Figure 3-17.



FIG. 3-17

**3.** Slide the Side Clamp (A) into the Guide (B).

#### See Figure 3-18.



```
FIG. 3-18
```

## 3.8 Fit the Sliding Table Fence Ruler

**1.** Raise the Blade (A) by using the Handle (B).

#### See Figure 3-19.



2. Slide the Guide (A) next to the Blade (B). Initially place the Guide Ruler (C) on the Guide (A).

#### See Figure 3-20.





**3.** Slide the Guide (A) at the edge of the Sliding Table (B), so the edge of the Guide and the edge of the Sliding Table are alongside each other.

#### See Figure 3-21.





- 4. Slide the Guide Ruler (A) the way that "0" on the ruler indicates inner cutting edge of the blade's teeth (B). On the ruler (A) mark the line (C) this is the place where the edge of the Guide (D) meets the Guide Ruler (A).
- 5. Cut off the marked part (C) of the Guide Ruler (A).



#### See Figure 3-22.



FIG. 3-22

See Figure 3-23.





**6.** Stick the cutted Ruler on the Guide.

### See Figure 3-24.



FIG. 3-24

7. Cut off the Ruler at the opposite edge of the Guide.

### See Figure 3-25.





## 3.9 Fit the Guide Bar Ruler

- **1.** Move the Parallel Guide (A) next to the blade (B) so it touches the blade.
- 2. Lock movement of the Gauge Assembly (C) by tightening the handle (D) to lock movement of the Gauge Assembly (C).

#### See Figure 3-26.



FIG. 3-26

3. Tighten the Lobe Knob (A). Set the Control Knob (B) that it shows "0" on the Indicator (C).

#### See Figure 3-27.



4. Mark the place (B) on the Guide Bar (A) where the "0" point will be.



#### See Figure 3-28.



FIG. 3-28

5. Remove the Gauge Assembly (A) from the Guide Bar (B). See Figure 3-29.



FIG. 3-29

6. Slide the Ruler (A) into the Guide Bar (B)

#### See Figure 3-30.



FIG. 3-30

7. Remove the excess tape. See Figure 3-31.





FIG. 3-31

8. Set the Ruler (A) so that the "0" point is in line with the Mark (B). Stick the Ruler (A) on the Guide Bar (C) See Figure 3-32.



FIG. 3-32



## 3.10 Fit Angle Ruler

- **1.** Put the Angle (A), so it touches the Blade (B) and the Sliding Table Fence (C).
- 2. Align the Sliding Table Fence using the Clamp (D).

### See Figure 3-33.







- **3.** Set the Angle Ruler (A) so that the "0" point on the Angle Ruler matches the edge of the Sliding Table Fence (B).
- **4.** Stick the Angle Ruler (A) on the Sliding Table (C).

#### See Figure 3-34.



FIG. 3-34



## **SECTION 4 OPERATION**

## 4.1 **Pre-Operation Check**



**IMPORTANT!** Before starting to use the MS300 Table Saw you have to meet the following conditions:

- Set up the MS300 Table Saw on firm, level ground and level the machine. Secure the machine to the ground to prevent moving during operation. A cement pad with 8-10 mm diameter anchor bolts is recommended.
- The MS300 Table Saw can be operated indoors with the sawdust collection system only.
- The MS300 Table Saw must not be operated when it is raining/snowing and in case of rain or snow the machine must be stored under roof or indoors.
- The MS300 Table Saw can be operated in temperatures ranging from -15°C to +40°C only.
- The illuminance at the operator's position should be at least 300 lx<sup>1</sup>.
- The operator's position and E-Stop button locations are shown below.

See Figure 4-1. The figure shows the MS300 Table Saw controls and position of the operator.



FIG. 4-1

<sup>1.</sup> The light source must not cause the stroboscopic effect.

**See table 4-1.** Have a qualified electrician install the power supply (according to EN 60204 Standard). The power supply must meet the specifications given below.

3-Phase Volts	Fused Disconnect Switch	Suggested Wire Size
400 VAC	16 A	1.5 mm <sup>2</sup> Max. length: 15 m
		TABLE 4-1

**IMPORTANT!** It is recommended that a 30mA GFI (Ground Fault Interrupter) be used.

**IMPORTANT!** When starting the machine for the first time, check that the main motor rotation. If the rotation direction is incorrect, invert the phases in the phase inverter in the power socket (electrical box). Setting the phases in the phase inverter correctly will ensure correct rotation directions of the main motor and the blade.



**WARNING!** If the drive belt breaks, wait until all rotating parts are completely stopped. Failure to do so may result in serious injury or death.

- Check if no tools have been left in the machine.
- Check if the blade can rotate freely.
- Review the safety instructions!
- ■Make sure the emergency stop button is released.
- Make sure the side cover is closed. Be sure all the parts of the machine are tightened, especially the cover of the working element.
- Make sure that no one apart from the operator is in the high risk area.
- Turn on the chip extractor.



**DANGER!** Connect the Table Saw electrical installation. Check the rotational direction.



## 4.2 MS300 Table Saw Operation

#### 4.2.1 Control Panel

See Figure 4-2. The MS300 Table Saw controls are shown below.



#### FIG. 4-2

- Top red button (A) the emergency stop button which disconnects power to all functions. When
  it is pressed, it must be released before restarting the Table Saw (turn right).
- Main Switch (B). To turn the power on switch to "I" (On) position. To turn the power off switch to "0" (Off) position.
- The button (C) starts the main motor.
- The button (D) stops the blade motor.

#### 4.2.2 Setting the machine for sawing



**DANGER!** Before you remove any cover of the Table Saw, ensure that the power is switched off and the sawblade is not rotating.

**WARNING!** Use protective gloves, particularly when you need to loosen screws that are tightly fastened, or when you are tightening screws (see the safety instructions).



**WARNING!** Beware of the blade. It is extremely easy to cut yourself touching the blade, even with the slightest touch.

#### 1. Blade Height

Raise the Blade (A) to the proper working level with the handle (B).

#### See Figure 4-3.





2. Blade Angle



**IMPORTANT!** The Saw Blade must be set down to max 65 mm before it is angled.

- Loosen the Locking Handle (A)
- Turn the Crank (B) to the desired blade (C) angle. The actual blade angle is showed on the Blade Angle Ruler (D).
- Tighten the Locking Handle (A)

#### See Figure 4-4.





#### 3. Splitting Guide

- To move the Parallel Guide Rail (A) use the handles (B).
- To move the Splitting Guide Clamp Handle (C) loosen the Handle (D).
- To set very accurately the Splitting Guide tighten the knob (E) and set the desired value by turning the Control Knob (F).

See Figure 4-5.



FIG. 4-5



### 4. Sliding Guide

 To move the Sliding Guide Rail (A) loosen the knobs (B) of the Mounting Assembly (C) and the lever (D) of the Clamping Block(E)





#### 5. Saw Guard

Set the saw guard so that it is just above the workpiece (max. 6 mm).

#### See Figure 4-7.



FIG. 4-7



## **SECTION 5 MAINTENANCE & ALIGNMENT**

This section lists the maintenance procedures that need to be performed.

To view exact type and dimensions of the fasteners please see MS300 Parts List (#2501).

This symbol identifies the interval (hours of operation duty) at which each maintenance procedure •> should be performed.



**CAUTION!** Always disconnect and lock out power supply before performing any maintenance work, cleaning or servicing the Table Saw. Failure to do so may result in serious injury.



WARNING! Before performing service near moving parts such as blade, pulleys, motor, belt, set the main switch in the "0" position and disconnect the power cord.



WARNING! Always shut off the motor and allow all moving parts to come to a complete stop before removing any guards or covers. Do NOT operate with any guards or covers removed.

#### **Replacing the Blade** 5.1

Replace the blade as necessary. If the blades are dull the motor work harder and it will result in decreased cutting quality and accuracy. Blade life will vary depending on maintenance of the machine, the operator work as well as species and condition of wood being sawn.



**DANGER!** Before changing the blade, make sure the blade mounting arbor have come to a complete stop and the motor is shut off completely. Turn the main switch to the "0" position and disconnect the power cord. Failing to do so can cause serious injury.



WARNING! Always wear eye, glove and foot protection when handling the blades.

#### 5.1.1 Removing Table Cover

- 1. Turn off the blade motor and wait for a complete stop of all rotating parts of the machine. Then set the main switch in the "0" position and disconnect the power cord.
- 2. At the both sides of the Sliding Table unbolt lower, side plates (A).

5

#### See Figure 5-1



FIG. 5-1

#### See Figure 5-2





3. Move the Sliding Table (A), so it is possible to unbolt the bolt (B) of the Table Cover (C). See Figure 5-3



4. Move the Sliding Table (A) to the other side, so it is possible to unbolt the bolt (B) of the Table Cover (C).
 See Figure 5-4





**5.** Move the Sliding Table (A), so it is possible to remove the Table Cover (B). **See Figure 5-5** 



#### 5.1.2 Removing the Blade

To remove the Blade (A) place the provided wrench (B) on the blade clamping plate (C) to keep it in place so that you can remove the Bolt (D).
 See Figure 5-6



2. Remove the Blade from the Main Shaft. See Figure 5-7



FIG. 5-7

## 5.2 Adjusting the Splitting Knife

To access the Adjustment Fasteners of the Splitting Knife remove the Table Cover as showed in <u>See</u> <u>Section 5.1.1</u>

 Adjust the Splitting Knife (A) by using fasteners (B). See Figure 5-8



FIG. 5-8

Adjust the Splitting Knife according to the picture below.



#### See Figure 5-9



## 5.3 Tensioning or Replacing the Motor Belt



**DANGER!** Always shut off the motor and allow all moving parts to come to a complete stop before removing any guards or covers. Failure to do so may result in serious injury.

Before tensioning the belt, make sure the motor is turned off and the main switch is in the "0" position. Disconnect the power cord. Failure to do so may result in serious injury.

Tension the motor belt after first 20 hours of operation and every 50 hours of operation thereafter.

**1.** Remove the Drive Guard (A) by using fasteners (B).

#### See Figure 5-10





2. Replace or tension the Belt (A) using the Nuts (B).

#### See Figure 5-11



FIG. 5-11

**3.** Mount the Drive Guard.

### 5.4 Wear life

**See Table. 5-1.** Estimated life expectancy of common replacement parts is given in table below. This information is provided so that you may plan ahead in ordering replacement parts. This chart lists estimated life expectancy of common replacement parts if proper maintenance and operation procedures are followed. Due to many variables which exist during machine operation, actual part life may vary significantly.

a	Estimated life	Part description
rs	1250 hours	Drive belt
I	1250 hou	Drive belt



## 5.5 Sawdust Removal

Remove the excess sawdust and chips from the inside and outside of the Table Saw using compressed air and a brush every eight hours of operation.

## 5.6 Miscellaneous Maintenance

- 1. Clean resin from the table. Use solvent if necessary. Lubricate the table e.g. with mineral/paraffin oil.
- **2.** Regularly check all the cables and connections and ensure that the motor compartment is kept free from shavings so that the motor fan receives cooling air.
- **3.** Lubricate these parts every 50 hours:
  - Elevator pins for the saw and their bearings,



#### See Figure 5-12



Spindle (at an angle) and its bearings



#### See Figure 5-13





**4.** Every 50 hours check if all screws and bolt connections are tightened. Check that cables and <sup>50</sup> electrical connectors are in good condition.

## 5.7 Long-term storage

If the machine is not used for a long period of time, do as follows:

- Disconnect the power cord.
- Perform all routine actions described above.
- Loosen the motor belt tension.
- Spray a thin layer of anti-rust coating (such as P.D.R.P) onto the places not protected against rusting.
- Store the machine in a well ventilated room.
- Cover the Table Saw.

## 5.8 Safety Devices Inspection (Only CE<sup>1</sup> Version)

#### MS300 Table Saw – Safety Device Inspection

Safety device on the machine which must be checked before every shift:

• E-STOP button and its circuit inspection,

#### 1. E-STOP button and its circuit inspection

- Use "I" button to start the Main Motor. The motor should start.
- Press the E-STOP button located on the control box. The Main motor should be stopped. Pressing the "I" button should not start the motor until the E-STOP button is released.
- Release E-STOP button. Use "I" button to start the Main Motor. The motor should start.

#### See Figure 5-14



FIG. 5-14

<sup>1.</sup> Marking of products sold within European Economic Area



## 5.9 Blade Sharpening

The blade teeth should be sharpened as soon as their dullness, measured as shown in the figure on the right, is .10 -.20 mm (0.0039 - 0.0078").



Use diamond grinding wheels for sharpening the blades. Apply intensive cooling during sharpening to prevent overheating and structural changes in the cemented carbide tips.

# Blades with hard tips (GLOTECH series) must be intensively cooled with water during sharpening. Failure to do so will result in cracks in the tips.

In Multix type blades the carbide tips should be .4 - .6 mm (0.0157 - 0.0236") wider than the carbides in the wiper slots. (See the figure below.) If this difference is not kept, it will result in disk overheating and – in extreme case – in cracks in the blade gullets. The carbide plates in the wiper slots remove sawdust and splinters from the kerf. They also cause sawdust to be blown away.

When sharpening, maintain the proper tooth geometry as 0.20 - 0.30 mm indicated in the figure below.



WRONG

## 5.10 Using the Blades

CORRECT

The surfaces of the spacers should be clean and flat against one another. The blade should not rotate on the shaft during sharpening as it will lead to its damage.

#### Do not set teeth with cemented carbide tips!

WRONG

Do not make any modifications to the blade teeth!

WRONG

Do not operate the machine if either of the blades is dull. Using dull blades causes stronger cutting resistance, decreased cutting accuracy and may result in blade burning and even cracks in the gullets and the wiper slots.

#### Do not exceed the maximum blade rotation speed recommended for a given type of material!

When using Multix type blades, keep at least 5 mm (0.197") spacing between the bottom of the wiper slot and the spacer outer diameter.



To remove any sawdust buildup from the blade disk, preferably use a solution of hot water and soda or another cleaner.

Any blades which are not used for a longer period of time should be properly maintained.

The blades should be used in accordance with safety rules and their application and on machines in good operating condition and equipped with suitable safety guards.



## SECTION 6 MS300 SPECIFICATIONS

## 6.1 **Overall Dimensions**

**See figure 6-1.** The overall dimensions of the MS300 Table Saw are shown below (all dimensions in millimeters).



FIG. 6-1 MS300

See table 6-1. The overall dimensions and weight of MS300 are given in the table below.

Planer/moulder type	MS300
Weight	260 kg
Height	1000 mm
Width	1744 mm
Length	1749 mm

TABLE 6-1

## 6.2 Specifications of the MS300

See table 6-2. Wood-Mizer Table Saw nomenclature is given in the table below.

	Volts
MS300EA3S	1 ph 230V CE
MS300EB3S	3 ph 230V CE
MS300EH3S	3 ph 400V CE
	TABLE 6-2

**See table 6-3.** European motor specifications are given in the table below.

	MS300EA3S	MS300EB3S	MS300EH3S
Motor Type	Electric Motor	Electric Motor	Electric Motor
Rated Voltage	1x230V	3x230V	3x400V
Rated revolutions	2900r.p.m.	2900r.p.m.	2900r.p.m.
Rated power	2.7 kW	3 kW	3 kW
Wood-Mizer Part No.	533651		
Max. Current	16 A	10.8 A	5.8 A

TABLE 6-3



MS300 SPECIFICATIONS

Specifications of the MS300

See table 6-4. The noise level generated by Wood-Mizer Table Saw is given in the table below  $^{1\ 2\ 3}$ 

	Noise Level
MS300 Table Saw Equipped with electric motor	L <sub>WA (idling)</sub> = 99.7dB (A) L <sub>WA (under load)</sub> = 103.3dB (A)

TABLE 6-4

**IMPORTANT!** The total value of hand-arm vibration the operator may be exposed to does not exceed 2.5 m/s<sup>2</sup>. The highest root mean square value of weighted acceleration to which the whole operator's body is subjected does not exceed 0.5 m/s<sup>2</sup>.

See table 6-5. Other specifications of the MS300 are listed below.

Min. Blade Diameter	250 mm
Max. Blade Diameter	315 mm
Blade Spindle Diameter	30 mm
Max. Blade Width	4 mm
Blade Rotational Speed	4500 r.p.m.
Maximum Material Width	1400 mm
Maximum Board Thickness	80 mm
Angle Cutting 45 <sup>0</sup> - Maximum Material Width	1400 mm
Angle Cutting 45 <sup>0</sup> - Maximum Board Thickness	65 mm

TABLE 6-5

<sup>1.</sup> The noise level measurement was taken in accordance with PN-EN ISO 3744:2011 Standard . Value for associated uncertainty K=2dB.

<sup>2.</sup> The measured values refer to emission levels, not necessarily to noise levels in the workplace. Although there is a relation between emission levels and exposure levels, it is not possible to determine with certainty if preventives are needed or are not needed. Factors that influence the actual level of exposure of the workforce include the characteristics of the work room and the other sources of noise etc. i.e. the number of machines and other adjacent processes. Also, the permissible exposure level value may vary depending on country. This information enables the machine's user to better identify hazards and a risk.

<sup>3.</sup> The total value of hand-arm vibration the operator may be exposed to does not exceed 2.5 m/s<sup>2</sup>. The highest root mean square value of weighted acceleration to which the whole operator's body is subjected does not exceed  $0.5 \text{ m/s}^2$ .

## 6.3 Sawdust Exhaust System Specifications

**See Table 6-6** See the table below for specifications of a sawdust exhaust system that can be used with the MS300 Table Saw<sup>1</sup>.

Airflow	1000 m <sup>3</sup> /h
Inlet Diameter	100 mm
Pressure Drop	1.5 kPa (0.25 psi) <sup>1</sup>
Recommended Conveying Air Velocity in the Duct	25 m/s

<sup>1</sup> The pressure drop between the inlet of the capture device and the connection to the CADES should not exceed 1.5 kPa (for the nominal air flow rate). If the pressure drop exceeds 1.5 kPa the machine might not be compatible with conventional CADES.

<sup>1.</sup> External chip and dust extraction equipment with fixed installations are dealt with in EN12779:2016-04.



Manufacturer:

# **EC declaration of conformity** according to EC Machinery Directive 2006/42/EC, Annex II, 1.A

Wood-Mizer Industries sp. z o.o.

Nago Tel.	órna 114, 0 +48 63 26	62-600 Koło; Poland 26 000
This declaration of conformity is issu	ed under t	he sole responsibility of the manufacturer.
Following machine in our delivered v requirements of the EC Machinery D circulation by us. In case of alteratior valid.	rersion con irective 20 n of the ma	nplies with the appropriate essential safety and health 06/42/EC based on its design and type, as brought into achine, not agreed by us, this declaration is no longer
We, the undersigned herewith dec	lare, that:	
Designation of the machine:	Table	saw Wood-Mizer MS300
Туре:	MS300	)
No. of manufacturer:		
Is in conformity with the following EC directives:		EC Electromagnetic Compatibility Directive 2014/30/EU
And is in conformity with the follo Harmonized Standards:	wing	PN-EN ISO 12100:2012; PN-EN ISO 13849-1:2016-02 PN-EN 60204-1:2010
Responsible for Technical Documen	tation:	Piotr Adamiec / Engineering Manager

imie Ingine nng manager Wood-Mizer Industries Sp. z o.o. 62-600 Koło, Nagórna 114, Poland Tel. +48 63 26 26 000

Place/Date/Authorized Signature:

Koło, 09.12.2020 Adam

Title :

**Engineering Manager**