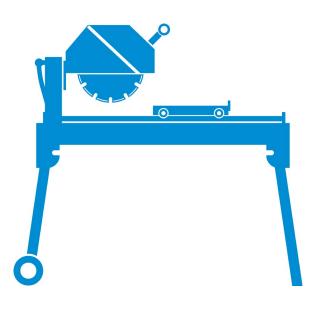




## **Operating Instructions**

### **TBE400**

Index 001





10999936 en / 15.06.2022

#### Manufacturer's address: TYROLIT Hydrostress AG

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#### SAFETY PRECAUTIONS

Saw blade should be inspected daily for excessive wear, core cracks, and arbor damage. Replace any blade that shows signs of damage.

- To mount blade, clean arbor and outer flanges, tightening nut securely.
- DO NOT place any portion of body in line with blade while it is rotating.
- To reduce risk of electrical shock, it is recommended to use GFCI and refer servicing to qualified professional.

We recommends the use of these safety items when operating the saw:



#### **GENERAL SAFETY RULES**

- Never use the machine improperly or work in an unsafe manner.
- Always wear safety goggles, dust mask, and ear protection while operating the saw.
- Always remain alert when the saw is in use. Failure to pay attention on the operator's part may lead to serious injury.
- Before you start working, familiarize yourself with the work site and its surroundings. Take notice of circumstances, which may impede working or traffic, observe soil conditions (good bearing or not), and take measures to ensure safety (i.e. the shielding of road works from public traffic).
- Take measures to ensure that the machine is in a safe and trouble-free condition prior to usage. Use the machine only when all protective devices (i.e. guards, noise absorbers, emergency-off devices) are operating in the intended locations.
- A visual check of the machine must be made at least once a shift to ensure that visible damages or faults are recognized. Any changes (including changes in the performance or behavior of the machine) must be reported to the supervisor. If necessary, stop the machine at once and secure it.
- In the case of a malfunction, stop the machine immediately and secure it. Fix the problem as soon as possible.
- For starting and stopping the machine follow the operating instruction steps and observe any indicator lights.
- Before switching the machine on make sure that the activated machine will be of no danger to anyone.
- Be sure to connect the plug to a properly grounded receptacle to reduce the risk of electric shock.

#### **HEALTH WARNINGS**

Some dust are created by power sanding, sawing, grinding, drilling, and cause other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead based paints.
- Crystalline silica from bricks and cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

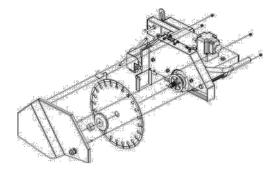
#### **UNPACKING, ASSEMBLY & SET-UP**

Open the container, carefully lift the saw frame handles and place it on a flat, level working area. Be certain that you have the following items before you discard the container:

- Saw
- 45° / 90° rip guide
- Universal wrench
- Owner's manual

#### DIAMOND BLADE INSTALLATION

- Move the blade shaft cover upwards. To remove the blade lock nut, open the shaft space.
- 2. Place the blade onto the blade shaft. Make sure that the directional arrow is pointing in the direction of the shaft rotation
- 3. Lock the blade lock nut with the outer flange. Use the multiple wrench provided to fasten the blade tightly



#### **INSPECTIONS & SPECIFICATION**

The compact TBE400 table saws are shipped completely assembled and ready for use except for the diamond blade. Inspect the saw for shipping damage. If any damage is found, contact the shipper immediately and file a freight claim. We are not responsible for any freight related damages. Remove the saw from the shipping container.



TBE400SPECIFICATIONS		
Power	2,2 kW	
Volts	230 V (110 V)	
Amps	10 A (20)	
Cycles	50 Hz (60 Hz)	
Blade Shaft Speed	2,800 rpm	
Max. Blade Size	15,7" / 400 mm	
Arbor Size	1" / 25,4 mm	
Max. Cutting Length	23,6" / 600 mm	
Length	1210 mm	
Width	655 mm	
Hight	1285 mm	
Wight	86 Kg	
Degree of protection	IP54	

NOISE LEVEL AND VIBRATIONS		
Parameter	Wert	
Noise level at the ear of the user (Leq)	81.9 dB(A)*	
Noise level at workplace (LPA)	69.3 dB(A)*	
Sound power level in acc. ISO 3744 (LwA)	89.3 dB(A)*	
Vibrations DIN EN ISO 5349-2	< 2.5 m/s²	

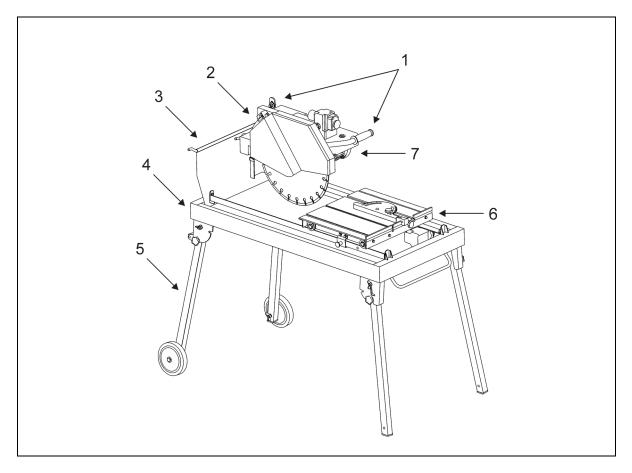
\*Value applies under the following condition: With Sawblade Ø350mm Type EB No. 5696.

Higher noise levels may be generated in cutting operation.

#### ATTENTION! Hearing protection must be worn when 85 dB(A) is exceeded!

#### FEATURES

The TBE400 table saw is designed for the professional contractor in mind. It enhances performance with a multitude of features facilitating operation.

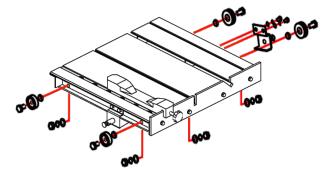


- 1 Sturdy handle and Spring Lever allow for quick pluge cuts
- 2 Miter Cutting Capability
- 3 Rear Splash Guard protects the jobsite against dust and water
- 4 Stainless Steel Water Tray
- 5 Folding legs with Wheels facilitate transport
- 6 45° / 90° Rip Guide
- 7 Powerful Induction Motor

#### **CUTTING TABLE ASSEMBLY**

To install the cutting table to the machine:

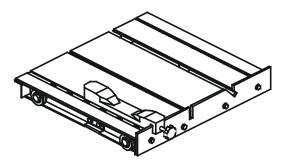
- 1. Set the cutting table on the rails
- 2. Install the screw and brackets to the cutting table
- 3. To remove the cutting table do the reverse of the above two steps.



#### THE CUTTING TABLE

Features:

• The heavy-duty cutting table with steel wheels provides the durability to handle large materials.





Only use the Ø16" (400 mm) blade for this saw. Setting smaller size of diamond blade may grab the material being cut, causing damage and possibly injury.

USE PROPER GROUND CICUIT !
USE BLADE GUARD WHEN OPERATING SAW !
ALWAYS WEAR SAFETY GEAR !

#### THE RIP GUIDE

Steps to use the 45° / 90° rip guide

- Set the rip guide by positioning it on the desired dimension and tighten the threaded knob. Make sure that the rip guide is firmly tightened to avoid slippage. The rip guide can be used for 90° rip cuts and 45° angle cuts from both the left and right side. (Note the straight and 45° angled slits on the bottom of the rip guide
- 2. After the rip guide is positioned for the desired cut, place material flat against the rip guide and the measurement rail. After the rip guide is positioned for the desired cut, place material flat against the rip guide and the measurement rail. For 45° rip cuts, place the corner of material in the open slot of the measurement rail.
- 3. Simply line up the material being cut with the appropriate pre-marked lines on the cutting table.
- 4. Now you are ready to make your cut



For 45° cuts, make sure that the turning hoder is set horizontally.

#### CUTTING DEPTH

The recommended cutting depth is 0.6 cm ( $\frac{1}{4}$ ") below the cutting table surface. The cutting clearance has been fixed from original designed.

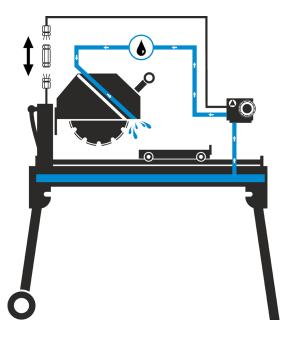


Only use the 400 mm (Ø16") blade for this saw. Setting smaller size of diamond blade may grab the material being cut, causing damage and possibly injury.

max. Blade Diameter	max. Cutting Depth
max. Diade Diameter	max. Cutting Depth
400 mm	125 mm

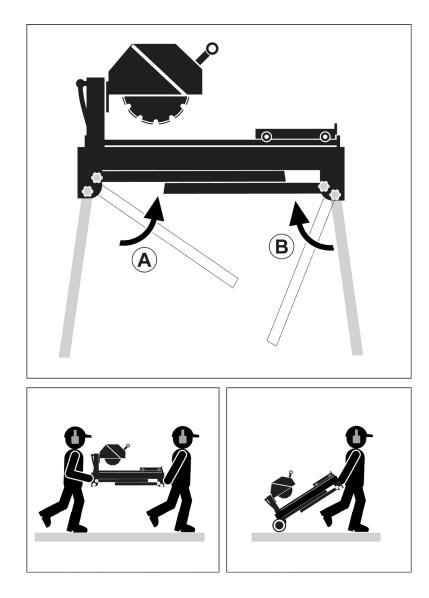
#### WATER PUMP INSTALLATION

- 1. Remove the water pump from the box and check that it is not damaged.
- 2. Place the pump into the middle of the water tray along its side so that the water outlet is positioned horizontally. Connect the water hose from the blade guard to the pump and plug the power cord into the 3-prong receptacle.
- 3. Fill the water tray so that the water intake is fully immersed.
- 4. Be sure to support the pump during installation to prevent pump failure or damage.





Disconnect the pump before attempting to handle the pump. Never operate pump without water in the tray



#### **ELECTRICAL MOTOR SPECIFICATIONS**

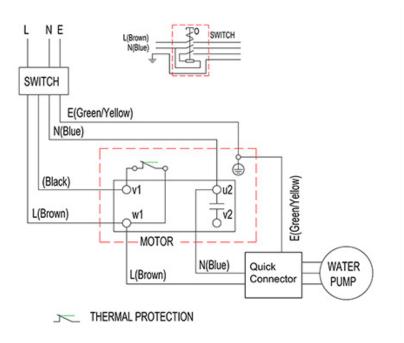
Features:

Power	2,2 kW
Volts	230 V (110 V)
Amps	10 Amps (20A)
Motor RPM	2800 RPM
Cycle	50 Hz (60 Hz)

**Recommendations:** 

It is recommended that a 15 A (30 A) CIRCUIT be used while operating this saw. This will prevent any loss of power or interruption.

Always plug saw as close as possible to the power source while operating. This will allow you to receive optimum electricity.





To avoid permanent motor damage you must use the correct extension cord. Never use more than one extension cord at a time. Follow the chart for proper size:

Wiregauge	Length of cord 2,2 kW – 230 V (110V)
1.5 mm²	30 m
2.5 mm <sup>2</sup>	50 m

#### DO'S AND DON'TS FOR BLADES

#### WET CUT BLADES

#### DO'S

- Inspect blades daily for cracks or uneven wear.
- Always use appropriate blade for material being cut.
- Inspect arbor shaft for uneven wear before mounting blade.
- Always use blades with the correct arbor shaft size.
- Ensure that blade is mounted in the correct direction.
- Secure the blade to the arbor with a wrench.
- Use proper safety equipment when operating the saw.
- Periodically check the blade for cracks or bond fatigue.
- Always have a continuous flow of water on both sides of blade.

#### DON'TS

- Do not operate the saw without safety guards in position.
- Do not operate the saw with blades larger than Ø 16" (400 mm)
- Do not cut dry with blades marked "Use Wet".
- Do not exceed manufacturer's recommended maximum RPM.
- Do not force blade into material let blade cut at its own speed.

#### DRY CUT BLADES

#### DO'S

- In addition to the following, always follow wet recommendations.
- Use appropriate blade for material being cut.
- Inspect segment blades for segment cracking or loss.
- Do not use damaged blades.
- Use proper safety equipment when operating the saw.

#### DON'TS

- In addition to the following, always follow wet recommendations.
- Do not make long cuts with dry blades--allow them to air cool periodically.
- Do not use the edge or side of blade to cut or grind.
- Do not attempt to cut a radius or curve.
- Do not cut too deep or too fast into the material.
- Do not cut any material not recommended by blade manufacturer.

#### SAW MAINTENANCE

Maintenance interval	Wath to do for maintenance and care
After ecery use ot the machine	<ul> <li>Remove dirty water from container.</li> <li>Remove dirt and mud from the bottom of the container</li> <li>Rinse teh immersion pump with fresh water to prevent water pump dogging from residual dirt.</li> </ul>
After wet clearing and before using the machine again	Connect the machine to an electric power outlet equipped with a"GFI" safety power breaker. If the safety power breaker cuts off the electrical power supply, do not try to operate the machine but have it checked by an authorized dealer first.
Before not using the machine for a prolonged period of time	Clean and lubricate all movable part.
Before not using the machine for a prolonged period of time	<ul> <li>Check that the stand is safely fixed.</li> <li>Check that all screw joints and nuts are fixed.</li> <li>Check that the roller table is in its guides and that it easliy moves to and fro.</li> <li>With the saw blade removed, switch on the motor for an instant and switch it off again. If the motor does not run, have the machine inspected by a qualified electrician.</li> <li>Check that the immersion pump works properly. Turn on the cooling water tap and switch the machine on. If the pump does not give any water or only a little, switch the machine off at once. Clean the pump, or replace if necessary.</li> </ul>
Ambient temperture below 0°C (operation in winter)	To prevent the water in the pump and cooling system from freezing, remove the water after using the machine or when there will be a long break. Make sure that the cooling system is entirely drained so that there is no water left inside the pump, water hose and bearing housing



For your safety, before performing any maintenance on the saw turn off the power switch and unplug the power card

### TROUBLESHOOTING

Problem	Possible cause	Solution
Machine does not run when switched on	Power cord not properly fixed / plugged in	Check that the machine is properly connected to the power supply.
	Power cord defective	Have the power cord checked, replace if necessary.
	Main power switch defective	Have the main power switch checked and replace if necessary by a qualified electrician.
	Loose eleectrical connection inside the electric system	Have the whole electric system of the machine checked by a qualified electrician.
	Motor defective	Have the motor checked and replace if necessary by a qualified techician.
Motor stops (power cut out)	To much pressure exerted while cutting	Exert less pressure when cutting
	Incorrect specification for saw blade	Use a saw blade which corresponds to the material being cut
	Saw has a defective electric system	Have the electric system of the saw checked by a qualified technician
Poor machine performance little power	Power cord/extension cable too long or cable still wound up inside cable drum	Use a power cord/ectension cable of the rated length, use a cable drum with cable fully extended
	Power network is insufficient	Observe the electrical ratings of the machine and connect it only to a power network which complies with these ratings
	Drive motor no longer runs at rated speed (r.p.m.)	Have the motor checked by a qualified electrician and have it replaced if necessary

### TROUBLESHOOTING

Problem	Possible Cause	Solution
Irregular run of the saw blade	Poor tension in the blade material	Return the saw blade to the manufacturer
Saw blade wobbles when running	Saw blade is damaged or bent	<ul> <li>Have the saw blade aligned/flattened</li> <li>Clean the receiving flange</li> <li>Solder the diamond segments of the old blade onto another swa blade or use a new blade</li> </ul>
	Flange of the saw blade is damaged	Replace the saw blade flange
	Shaft of the motor is bent	Replace the electric motor
Diamond segment becomes loose	Overheating of the saw blade, cooling water not sufficient	Have the diamond segment soldered on the blade again, ensure optimum flow of cooling water
Excessive wear	Wrongtype of saw blade	Use harder saw bldes
	Shaft of motor causes wobbling	Have bearings of the motor or the motor replaced
	Overheating	Ensure optimum flow of cooling water
Cracks in or near the diamond segment	Saw blade too hard	Use a softer blade
	Fixed flange is worn out	Have the fixed flange replace
	Motor shaft bearing	Replace the bearing of the motor shaft

#### TROUBLESHOOTING

Problem	Possible cause	Solution
Saw blade is blunt	<ul> <li>Saw blade type is unsuitable for the meterial being cut</li> <li>Saw blade type is unsuitable for the machine performance</li> <li>Saw blade too hard</li> </ul>	Use appropriate type of saw blade
	Diamond segments are blunt	Sharpen the diamond saw blade
Appearance of cut is not optimal	Poor tension in the blade material	Return the saw blade to the manufacturer
	Too much load placed on the saw blade	Use a suitable saw blade
	Diamond segments are blunt	Sharpen the saw blade
The center hole in the saw blade has become wider due to wear	The saw blade has slipped on the motor shaft when running	The arbor otr the saw blade must be fitted with an appropriate adapter ring
		Check the receiving flange and have it replaced if necessary
Saw blade shows blooming colors	Lateral friction when cutting	The material feed is too high; proceed more slowly
Grinding marks on the saw blade	Material is not being feed parallel to the saw blade	Ensure that the direction of feed is absolutley parallel to the saw blade
		Adjust the roller table/have it adjusted
	Poor tension in the blade material	Have the saw blade tensioned
	Too much load on the saw blade	The material feed is too high, proseed more slowly

#### CUSTOMER SERVICE

#### AFTER SALE SERVICE

All customer service (technical questions, re-order of parts, etc.) will be provided by us.

#### CLAIMS FOR LOST OR DAMAGED GOODS

If merchandise is delivered in damaged condition or cartons are missing, a notation must be placed on all papers signed by the receiver. If unreported or concealed damages are noticed after delivery, the carrier should be contacted by telephone and if carrier fails to send an inspector within five days, a request should be made in writing to the carrier, confirming the telephone request for an inspection.

All requests for credit due to transportation loss or damage should be accompanied by properly signed papers. A claim for loss or damage must be filed with the carrier within 60 days from the shipping date for UPS or other common carriers. Credit cannot be allowed for damage claims that are not properly substained with supporting papers or received by us too late for timely filing with the carrier.

#### CONTACT US

We pride ourselves on our customer service. If you have any questions regarding our products, whether it may be product inquiry or troubleshooting, please don't hesitate to contact us at our corporate office. We will do our best to answer your questions. In some cases we may even refer you to a local sales representative that can better service you.

#### DISPOSAL

#### GENERAL

Voltage warning



The operator can recycle or dispose of the Table saw himself provided he observes the statutory provisions. In order to dismantle the Table saw correctly and to properly remove the materials some knowledge in the area of mechanics and knowledge about differentiation of waste materials is necessary.

If during correct disposal doubts arise that represent a hazard for persons or the environment, the after-sales service of TYROLIT Hydrostress AG will be happy to provide information.

DANGER

Before working in an area identified in this way, the installation or device must be fully disconnected from the power (voltage) and secured against being accidentally powered up again.

Failure to head this warning may lead to death or serious injury.

#### PERSONNEL QUALIFICATIONS

Only personnel with basic technical training and who are in a position to identify the various material groups should be involved in disposal.

#### DISPOSAL REGULATIONS

The normal local and regional rules and guidelines must be observed when disposing of the machines making up the Table saw.

#### DISPOSAL OF TABLE SAW

DISPOSAL REGULATIONS

The dismantled parts of the table saw are sorted by material and sent separately to the appropriate collection points. Ensure that the following parts in particular are properly disposed of.

#### The Table saw consists of the following materials:

Cast aluminium Bronze Rubber Synthetic grease Rolled aluminium products Steel Rubber / Nylon fabric Plexiglas

**OBLIGATION OF NOTIFICATION** 

When a Table saw is taken out of service and disposed of the manufacturer TYROLIT Hydrostress AG or the corresponding service centre must be informed of this.

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17.05.2006 26.02.2014 04.07.2012

2006/42/EG 2014/30/EU 2012/19/EU

We declare under our sole responsibility that this product complies with the following directives and standards

Nous déclarons, sous notre seule responsabilité, que ce produit répond aux directives et norms suivantes

Dichiariamo sotto la nostra completa responsabilità che il presente prodotto è conforme alle seguenti direttive e norme

Angewandte Richtlinie(n) Directive(s) applied Directive(s) appliede(s) Directiva(s) applicata/s Directiva(s) applicada(s)

Wir bestättgen in alleiniger Verantwortung, dass diese Maschine den folgenden Richtlinien und Normen

entspricht

EN ISO 12100:2010 EN 12418:2000+A1:2009 EN 61000-6-3:2007 + A1:2011

Declaramos bajo propia responsabilidad que este producto cumple con las siguientes directivas y normas

Angewandte Normen Applied standards Normes appliquées Norme applicate Normas aplicadas

# ЧU

Konformitätserklärung Declaration of conformity Déclaration de conformité Dichiarazione di conformità Declaración de conformidad

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<b>S</b>					Γ		
×	10998400	001	230V/50Hz		400 mm		äffikon ZH
	Article No.	Index	Voltage	Year	Max. Blade Ø		CH-8330 Pfäffi
	TBE400S		2.2 kW	86 kg	2800 1/min	25.4 mm	YROLIT Hydrostress AG
<b>TUROLLY</b> IVPROSTRESS	Type	Serial No.	Power	Weight	RPM	Bore Ø	ТҮК
							0

**Tischsäge** Table saw Scie de table Sega da banco Cortadora de mesa

TBE400 + +



TYROLIT Hydrostress AG Witzbergstrasse 18 CH-8330 Pfäffikon Switzerland

Pfäffikon, 13.12.2018

Pascal Schmid Leiter Entwicklung und Verantwortlicher für die technischen Unterlagen

TYROLIT 10999940

Originaldokument