

# **Operating Instructions**

# Wall saw WSE1217★★★ USA

Index 000



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#### **Congratulations!**

With a Hydrostress unit from TYROLIT, you have chosen a tried and tested piece of equipment which has been designed and built to leading technical standards. Only genuine TYROLIT Hydrostress replacement parts can guarantee quality and interchangeability. If maintenance work is neglected or carried out inexpertly we will be unable to honour our warranty obligations. Any repair work must be carried out by trained personnel only.

Our aftersales service is available to help ensure that your TYROLIT Hydrostress units remain in perfect working order.

We hope that working with your TYROLIT unit will be a satisfying and fault-free experience.

**TYROLIT Hydrostress** 

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# 1 Safety



These instructions are just one part of the documentation which is supplied together with the wall saw. These instructions go together with the «Safety Manual / System Description for Wall Saws» to form a complete set of documentation.



#### DANGER

Failure to comply with the safety instructions in the "Safety Manual / System Handbook" may result in serious injury or even death.

Please ensure that the «Safety Manual / System Description for Wall Saws» has been read and understood in full.



#### DANGER

#### Cuts from the saw blade.

- Always wear protective gloves when working on the wall saw, particularly when working on the saw blade.
- Always use the blade guard when operating the wall saw.



#### DANGER

Serious injury or material damage as a result of uncontrolled movements of the wall saw.

Never connect or disconnect cables when the control unit is switched on.

### 2 Description

#### 2.1 Wall saw system

The design and function of the wall saw systems are described in the "Safety Manual / System Description for Wall Saws".

#### 2.2 Wall saw



Components

- 1 Guide roller
- 2 Lock unit
- 3 Water supply line
- 4 Blade guard holder
- 5 Geared swivel arm
- 6 Water Bypass
- 7 Saw blade holder
- 8 Carrying handle
- 9 Blade drive motor cable

- 10 Feed motor cable
- 11 Chassis
- 12 Carrying handle / lock unit
- 13 Identification plate Blade drive motor
- 14 Blade drive motor
- 15 Feed motor, travel
- 16 Water connection
- 17 Feed motor, swivel

# 3 Assembly / Disassembly

### 3.1 Place the wall saw on the guide rail



2. If the grips fail to engage or the wall saw sits too loosely on the guide rail: adjust the guide rollers.

#### 3.2 Adjusting the guide rollers



\* The guide rollers are set correctly when they align in the guide groove and it is possible to turn them by hand.



#### 3.3 Mounting the drive motor

#### 3.4 Mounting the saw blade



#### DANGER

It can cause death or serious injury if the saw blade flies away.
 Only use original screws and bolts from TYROLIT Hydrostress AG.



#### DANGER

Serious injury can be caused by sudden start-up of the saw blade.
Switch off the control unit before working on the saw blade.
Isolate the control unit from the mains supply.

▶ Isolate the control unit from the mains supply.

#### 3.4.1 Preparations for assembly

**b** During initial installation, remove the flush cut anchoring screws on the quick-release flange.

#### 3.4.2 Preassemble the saw blade unit



The direction of rotation of the saw blade must match the direction of rotation of the machine. Correct alignment: Countersinking of the fastening holes against the blade cover.

#### For normal cuts with saw blades up to Ø 42"



For normal cuts with saw blades bigger than Ø 42"



#### For flush cuts



#### 3.4.3 Fastening the saw blade unit



#### DANGER

It can cause death or serious injury if the saw blade flies away.

- Check whether the sleeve and central screw are countersunk.
- ▶ Tighten the central screw to a torque of 44 lbf ft.



### 3.5 Removing the saw blade unit



WARNING
Injuries can be caused if the saw blade drops down.
▶ Lift out the saw blade unit to the top when removing it.



2. Disassemble the saw blade unit in the reverse order to the assembly process.

#### 3.6 Mounting the blade guard



Mount the blade guard according to the instruction leaflet.

### 3.7 Connecting the wall saw to the control unit

- ✓ The control unit is isolated from the power supply.
- ✓ Connectors/plugs are clean.
- $\checkmark$  Cables are undamaged.



# 4 Maintenance and servicing

		Before every commissioning	At end of work	Weekly	Yearly	After faults	After damage
Wall saw	<ul> <li>Retighten loose bolts and nuts (re- fer to the tightening torque specifi- cations)</li> </ul>	X				Х	X
Lock unit	<ul> <li>Clean latching recesses and guide grooves</li> </ul>	Х	X			Х	X
	► Lubrication			Х		Х	X
Guide rollers	• Check the bearing clearance for wear	Х	Х			Х	X
	▶ Clean	Х	Х			Х	X
	► Replace						X
Swivel arm	Clean with water		Х				
	• Check the saw blade uptake for wear	Х				Х	X
	Replace the gear oil	Every 10	) h		•	•	•
Feed motor	Check cleanliness	Х	Х			Х	X
Drive motor	Check cleanliness	Х	Х			Х	X
Water supply	<ul> <li>Check the water line for cleanliness and leak-tightness</li> </ul>	Х				Х	Х
	Blow out water		Х				
Saw blade	Clean with water		Х				
	Check for wear	Х	Х			Х	X
Service	To be performed by TYROLIT Hydros- tress AG or an authorised workshop	After 100	/ 300 / 500	) / 700 hour	s		

#### 4.1 Lubricating the lock unit



### 4.2 Changing the gear oil



The use of unsuitable oil can damage the wall saw.DP SUBSTITUTE #2503930▶ Use only TYROLIT Hydrostress AG oil containers (no. 10981362, 3.4 fl oz).



#### 4.3 Replacing the guide rollers



• Defective guide rollers should be replaced with replacement set no. 10977911.

# 5 Technical data

### 5.1 Dimensions



Measurements in inch

## 5.2 Design

Design	
Parameter	Value
Construction	Light aluminium/steel construction
Rotatable swivel arm	360°
Power transmission	Toothed wheel
Carrying handle	2-pieces, with locking function
Guide rollers	Low-wearing, suitable for all VS and VAS rails
Rail mounting	Locking and safety function on carrying handle
Main motor	High-frequency, water-cooled, with quick-release device
Feed motor / swivel motor	Electric motor with gears and brake
Flush cutting	Quick-release flange ST without blade cover
Normal cutting	Quick-release flange ST with blade cover
Water	Water connection on chassis

### 5.3 Weight

Weight	
Parameter	Value
Wall saw head complete	48.5 lbs
Drive motor	33 lbs

### 5.4 Blade drive motor

Blade drive motor		
Parameter	Value	
Electric motor	High-frequency, water-cooled	
Voltage	400 V	
Frequency	50 - 400 Hz	

### 5.5 Feed motor, travel

Electric feed motor with gears and brake		
Parameter	Value	
Gear reduction	1:256	
Voltage	48 V	
Feed	Toothed wheel on rail	

### 5.6 Feed motor, swivel

Electric feed motor with gears and brake		
Parameter	Value	
Gear reduction	1:256	
Voltage	48 V	
Swivel range (swivel arm)	360°	

### 5.7 Noise level

Noise data according to ISO 3744		
Parameter	Value	
Sound pressure level L <sub>pA</sub>	77.5 dB (A) *	
Highest value of sound pressure L $_{\rm pCpeak}$	116.2 dB	
Acoustic power level L <sub>WA</sub>	97.5 dB (A) *	

Conditions for the measurement:

\* Saw blade Ø48" mm not in cutting operation under full load

### 5.8 Saw blades

Saw blades			
Parameter		Value	
Saw blade max.		Ø 48″	
Fully detachable saw blade		Ø 32″	
Blade holder		Ø 1″	
Blade flange mounting at wall sav	v	Quick-release flange ST	
Saw blade fixing on blade flange (also for flush cuts)		6 countersunk head screws reference circle 3.5 inch	
Blade cover mounting on blade flange		1 hexagonal nut	
Cutting depth	Ø 26″	9.194 inch	
	Ø 32″	12.803 inch	
	(Ø 36″)	(13.993 inch)	
	Ø 42″	17.643 inch	
	Ø 48″	20.796 inch	
Circumferential speed		125 ft/s	

### 5.9 Lubricants, fluids and sealants

Lubricants, fluids and sealants			
Parameter		Value	
Gear oil (swivel arm)		Klüber EG 4 (TYROLIT No. 10981362)	
Lubricating grease (lock unit)	Penetration	265 to 295	
	NLGI	2	
Lubricating grease (swivel gear)	Penetration	400 to 430	
	NLGI	00	

### 5.10 Connectable control units

The wall saw must only be operated with the coordinated control units from TYROLIT Hydros-tress.

Control unit	
Parameter	Туре
Control unit	WSE1217★★★ (Ø 26"/Ø 32"/Ø 42"/Ø8")

Water connection		
Parameter	Value	
Pressure	min. 29 psi / max. 87 psi	
Quantity	At least 1,05 gpm	
Max. temperature	77 °F	

### EC declaration of conformity

Description	Wall saw
Type designation	WSE1217★★★
Year of construction	2011

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

#### **Directive applied**

2006/42/EC	from 17th May 2006
2004/108/EC	from 17th December 2004

#### **Applied standards**

EN 15027/A1:2009 EN 12100:2010 EN 60204-1/A1:2009 EN ISO 3744:2010 EN 55014-1/A1:2009 EN 55014-2/A2:2008 EN 6100-3-11:2000 EN 6100-3-12:2005

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