

# ***Operating Instructions***

---

## ***Slurry filter press SPP400 ★★★***

*Index 000*



**CE**

## **Congratulations!**

You have decided to purchase a tried-and-tested TYROLIT Hydrostress unit and have thus acquired a highly sophisticated and reliable state-of-the-art device. 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. All repairs must be carried out by trained personnel only.

Our after-sales 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

Copyright © TYROLIT Hydrostress

TYROLIT Hydrostress AG  
Witzbergstrasse 18  
CH-8330 Pfäffikon  
Switzerland  
Telefon 0041 (0) 44 952 18 18  
Telefax 0041 (0) 44 952 18 00

## Table of contents

Table of contents .....	3
1 EC Declaration of Conformity .....	4
2 Preface .....	5
2.1 Warning signs and symbols.....	5
3 Technical data and accessory .....	6
3.1 Technical data of the machine .....	6
3.2 Provided accessory .....	6
4 Description.....	7
4.1 Main parts.....	7
4.2 Functional description.....	7
4.3 Control unit.....	8
4.4 Chassis unit .....	8
4.5 Suspension unit.....	8
4.6 Filter unit.....	8
4.7 Maintenance unit.....	9
5 Basic safety instructions.....	10
5.1 Intended use.....	10
5.2 Operating range.....	10
5.3 Organisational measures.....	11
5.4 Selection and qualification of person.....	12
5.5 Safety instructions governing specific operational phases .....	12
5.6 Special work related to the maintenance and repair of the machine.....	13
5.7 Gas, dust, vapour, smoke.....	13
5.8 Pneumatics.....	14
5.9 Noise .....	14
5.10 Illumination.....	14
5.11 Oils, greases and other chemical substances .....	14
5.12 Transport.....	15
5.13 Transport preparation.....	15
5.14 Transport Process .....	15
5.15 Store.....	15
6 Bringing into service .....	16
6.1 Export checking.....	16
6.2 Installation.....	16
6.3 Compressed- air supply.....	16
6.4 Compressor requirements .....	16
7 Operation.....	17
7.1 Before starting .....	17
7.2 Starting the compressed-air supply .....	17
7.3 Operating elements.....	18
7.4 Starting the filtering process.....	18
7.5 Completing the filtering process.....	19
7.6 Removing the filter cake.....	19
8 Maintenance and care .....	20
8.1 Pressure filter.....	20
9 Troubleshooting .....	21

## 1 EC Declaration of Conformity

Description                      Slurry filter press

Type designation                SPP400★★★

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

**Directive applied**

2006/42/EG

**Applied standards**

EN 12100

**TYROLIT Hydrostress AG**

Witzbergstrasse 18

CH-8330 Pfäffikon

Switzerland

Pfäffikon, 11.04.2017



Pascal Schmid  
Head of Development

## 2 Preface

This operating manual is designed to familiarize the user with the slurry filter press, hereinafter referred to as the machine, and to use its intended applications.

The operating manual contains important information on how to operate the machine safely, properly and most efficiently. Observing these instructions helps to avoid danger, to reduce repair costs and downtimes and to increase the reliability and the life of the machine.

This operating manual is to be supplemented by the respective national rules and regulations for accident prevention and environmental protection.

The operating manual must always be available wherever the machine is in use.

It is to be read and applied by any person in charge of work with or on the machine, such as:

- Operation including setting up, troubleshooting in the course of work, elimination of manufacturing waste, care and disposal of fuels and consumables.
- Servicing (maintenance, inspection, repair) and/or
- Transport

In addition to the operating manual and to the mandatory rules and regulations for accident prevention of the country and place of use of the machine, the recognized technical rules for safe and proper working conditions and procedures are also to be observed.

In this manual all the information required for the intended use of the unit is included. If though you have any specific questions, please refer to your representative, to one of our sales representatives or directly to us:

TYROLIT Hydrostress AG  
Witzbergstrasse 18  
CH-8330 Pfäffikon  
Switzerland  
Telefon 0041 (0) 44 952 18 18  
Telefax 0041 (0) 44 952 18 00

### 2.1 Warning signs and symbols



Warning of electrical power!



Wear eye protection!



Wear ear protection!



Wear protective gloves!!



Warning of general danger!



Wear a protective helmet!



Wear protective footwear!



Wear protective clothing!



Warning of hand injury!



Important note!



Before use read the operating instructions!



Don't touch!

### 3 Technical data and accessory

#### 3.1 Technical data of the machine

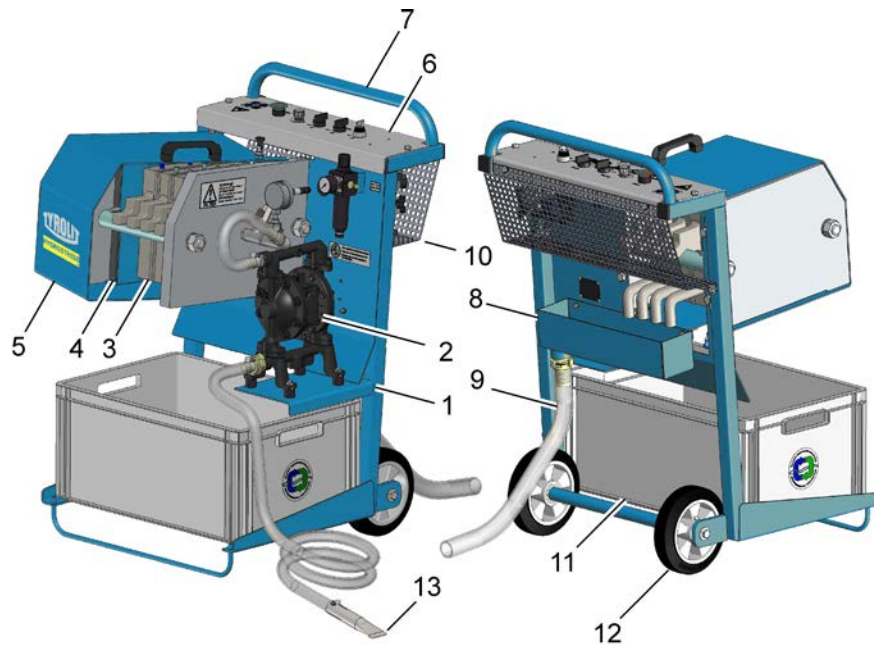
Technical data	
Pump	Air-operated diaphragm pump, 6 bar - 87 psi, pneumatic
Filter elements	250 x 250 x 40 mm - 9.8 x 9.8 x 1.57 in.
Capacity of the box	approx. 50 l
Recycling quantity	approx. 400 - 600 l/h
Dimensions	636 x 720 x 950 mm - 25,04 x 28,3 x 37,4 in.
Weight	approx. 76 kg - 167,5 lbs
Airbag	8 bar - 116 psi
System	Requires 8 bar - 116 psi for perfect operation

#### 3.2 Provided accessory

- **Operating instruction**
- **Spare parts list**

## 4 Description

### 4.1 Main parts



1	Chassis	6	Control panel	11	Box
2	Pump	7	Handle	12	Transport wheel
3	Filter unit	8	Water gutter	13	Suction cage
4	Air cushion	9	Hose		
5	Cover	10	Protecting sheet		

### 4.2 Functional description

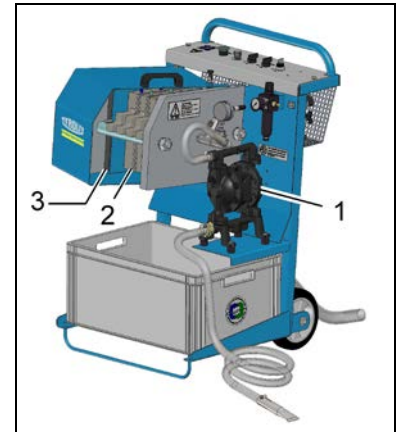
The Slurry Filter Press is a device for the filtration of sludge as it comes about when treating industrial effluents.

This press was specifically designed for concrete sawing machines and the wet sludge resulting therefrom with a solids content of 1 - 4%.

On account of the filtration with a pressure up to 6 bar - 87 psi, depending on the model of the press, a puncture-proof dry sludge (filter cake) is obtained, usually dropping down when opening the press. The solids content that can be achieved depends on the sludge and on the procedure.

By activating the Air cushion (3) the filter elements (2) are compressed.

The diaphragm pump (1) presses the wet sludge that is in the collecting tank through the filter elements (2). The sludge particles are held back in the filter slabs, the water that is pressed out flows into the water gutter and can be reused or be transported to the canalisation. Larger particles are held back in the collecting tank by means of the suction device. When the space between the filter elements is filled with sludge particles and has become a solid filter cake, the operator must open the system and take the filter cake out. The filter cake can be disposed of as construction waste.



### 4.3 Control unit

The control unit mainly consists of the work components, the air cushion and the pump. The air cushion is controlled in such a way that at any time a safe and constant tensioning of the filter elements is guaranteed.

The operating speed of the double diaphragm pump can be adjusted separately.

The system pressure and the pressure at the pump can be adjusted and controlled, too.

### 4.4 Chassis unit

On the chassis unit you find the control, the operating unit and the filter unit. The chassis unit is designed in such a way that it can absorb all emerging powers and that it does not affect the overall weight of the Slurry Filter Press.

### 4.5 Suspension unit

As a suspension unit a plastic container is mainly used by customers. This container is characterized by the fact that it has got a sufficient volume, a high load capacity and stability as well as a reduced self-weight.

In order to prevent that the suspension deposits at the bottom of the plastic container leading to a bad filter result, the suspension should be kept constantly in motion.

### 4.6 Filter unit

The filter unit consists of four chamber filter slabs: one input element, two middle elements and one end element.

Only the middle elements and the input element have through-holes. Furthermore, the input element and the end element have got only one convexity for the filter cake whereas the middle elements have got these convexities on both sides.

Between the respective chamber filter slabs there are the filter cloths. The air cushion and the pressure plate compresses the chamber filter slabs.



## 4.7 Maintenance unit

The maintenance unit is designed to clean solid and liquid components from the compressed air and to regulate the air. Use only oil-free compressed air!

Proper application in compliance with the respective operating conditions maintain the efficiency level of pneumatic systems and increase their lifetime.

Operating pressure: min. 7 bar - max. 8 bar (116 psi)

Operating temperature: 0 up to + 50C°

### Compressed air filter

Compressed air contains condensate, pipe scale, rust particles and the like affecting cylinders, valves and mountings and interfering with their function.

It is therefore indispensable to purify the compressed air. The purification is effected by the filter. The degree of purification depends on the pore size of the sintered filter (40µ).

Maintenance: Drain condensate regularly and clean the sintered filter if it is dirty.

Removal: Unscrew the tank, unscrew the baffle plate from the sintered filter, remove the sintered filter and put it in a dissolver (e.g. petrol, TRI etc.), pan it well and dry it, then insert it again. See that the sealing is in good and proper condition!

### Pressure regulator

The line pressure of a compressed air system varies according to the size of the compressor (e.g. 6-10 or 10-16 bar etc.) Pressure regulators reduce the varying line pressure (incoming pressure) to the desired operating pressure (back pressure) and keep it constant.

For maintenance units back pressure regulators are used. Back pressure regulators have the advantage that the back pressure can be reduced without releasing air by turning back the adjusting screw.

Furthermore, the back pressure control, which can also be considered as a safety valve, provides for the release of the recoils, which occur with pneumatic controls, into the atmosphere thus protecting the manometer.

Pressure setting: Pull the handwheel (controller unlocked), adjust the pressure regulator by turning the handwheel to the desired pressure, press the handwheel (controller locked).

Operating pressure: min. 7 bar - max. 8 bar (116 psi)

### General information:

Plastic containers:

Plastic containers are only to be cleaned with water, kerosene or benzine. Petrol is no benzine. Petrol, benzol, acetone, TRI-containing detergents or the like must not be used for cleaning the tanks at all. For damage which arises from the non-observance of this prescription no liability can be assumed.

## 5 Basic safety instructions

In this manual the following terms and symbols are used for particular important information.



### **INFORMATION**

Note / Important: Contains important information which stands out from the other text!



### **DANGER**

Attention: Contains instructions which must be strictly observed to prevent damage from the unit and the operator!

Important text passages are highlighted in italics or bold or can be found in a grey highlighted text field.

### 5.1 Intended use

The machine has been built in accordance with state-of-the-art standards and the recognized safety rules. Nevertheless, its use may constitute a risk to life and limb of the user or of third parties, or cause damage to the machine and to other material property.

The machine must only be used in technical perfect condition in accordance with its designated use and the instructions set out in the operating manual, and only by safety-conscious persons who are fully aware of the risks involved in operating the machine. Any functional disorders, especially those affecting the safety of the machine, should therefore be rectified immediately!

The machine is exclusively intended for filtering drill sludge and cutting sludge as well as industrial effluent with a solid content of 1-4%. Using the machine for purposes other than mentioned above is considered contrary to its designated use. The TYROLIT cannot be held liable for any damage resulting from such use. The risk of such misuse lies entirely with the user.

Operating the machine within the limits of its designated use also involves observing the instructions set out in the operating manual and complying with the inspection and maintenance directives.



### **DANGER**

Attention: Read and observe all the operating instructions which belong to this unit!

### 5.2 Operating range

Do not modify, add components to or retrofit the unit in a way which could affect its safety and do not use non-official accessories! This is not allowed without prior approval of TYROLIT!

### 5.3 Organisational measures

This operating manual must always be at hand at the place of use of the machine and must be accessible to the person operating the machine!

In addition to this operating manual, all other generally applicable legal and other mandatory regulations relevant to accident prevention and environmental protection must be observed! Such obligations may also comprise the handling of hazardous materials, provisioning and/ or wearing of personal protective equipment, or road traffic regulations.

This operating manual must be supplemented by instructions covering the duties involved in supervising and notifying special organizational features, such as job organization, work flows or the person entrusted with the work.

Person entrusted with work on the machine must have read the operating manual prior to taking up work. This applies especially to persons working only occasionally on the machine, e.g. during set-up or maintenance activities.

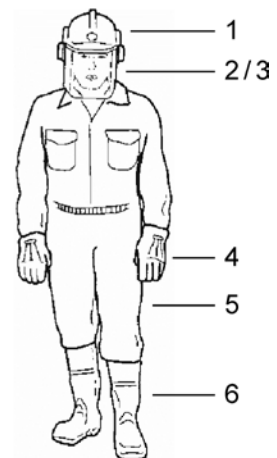
Check - at least from time to time - whether the personnel is carrying out the work in compliance with the operating manual and paying attention to risks and safety-relevant factors.

For reasons of safety, long hair must be tied back or otherwise secured, garments must be close-fitting and no jewellery - including rings - may be worn.

Severe injury may result from being caught by moving parts of the machine. Personal protective equipment must be used wherever required by the circumstances or by law (e.g. safety glasses, ear protectors, safety boots, suitable safety clothing). Observe the regulations for prevention of accidents! Observe all safety precautions and warnings attached to the machine and always keep them in good and perfectly legible condition.

#### The personal protection equipment should consist of the following parts:

- 1 Hard hat with ear muff
- 2 Visor or safety glasses
- 3 Dust mask
- 4 Protective gloves
- 5 Safety clothes
- 6 Safety boots



In case event of safety-relevant modifications or changes in the behaviour of the machine, stop the machine immediately and report the malfunction to the competent authority/ person. Do not remove or make inoperative any safety devices the machine is equipped with. Never make any modifications, additions or conversions which might affect safety without TYROLIT prior approval! This also applies to the installation and adjustment of safety devices as well as to welding and drilling work on supporting structures.

Damaged or worn parts of the product must be replaced immediately. Use genuine spare parts only.

All spare parts and tools must comply with the technical requirements specified by the manufacturer/ distributor. Adhere to the legally prescribed preventive maintenance and

inspection intervals or those specified in this operating manual!

All maintenance and repair activities must be performed by qualified personnel using suitable tools and other suitable workshop equipment. Observe the fire alarm and fire fighting measures. The personnel must be made familiar with the location and handling of fire extinguishers!

## **5.4 Selection and qualification of person**

Only permitted personnel is allowed to work on and with the machine! The legal minimum age is to be observed!

Only assign trained and instructed personnel! Clearly define the responsibilities of the personnel with regard to operating, setting-up, maintaining and repairing the machine! The TYROLIT can assist you in training your personnel.

Make sure that only instructed and competent personnel works on the machine. Define the responsibility of the machine operator, also in terms of traffic regulations and enable him to refuse instructions of third parties which breach safety regulations.

Personnel that is to be trained or to be instructed or that is serving a general training is only to be permitted to operate the machine under the supervision of an experienced person.

To operate the machine you must be rested, in good physical condition and mental health. If you have any condition that might be aggravated by strenuous work, check with your doctor before operating with the machine. Do not operate the machine if you are under the influence of any substance (drugs, alcohol) which might impair vision, dexterity or judgment.

Works on electrical, pneumatic, combustion and hydraulic fittings and equipment are only to be carried out by qualified personnel or instructed people being directed and supervised by qualified personnel in compliance with the respective rules!

## **5.5 Safety instructions governing specific operational phases**

### **Before work**

Avoid any operational mode that might be prejudicial to safety!

Before beginning work, familiarize yourself with the surroundings and circumstances of the site, such as obstacles in the working and travelling area, the soil bearing capacity and any barriers separating the construction site from public roads.

Take the necessary precautions to ensure that the machine is used only when in a safe and reliable state. Operate the machine only if all protective and safety-oriented devices, such as removable safety devices, emergency shut-off equipment, sound-proofing elements and exhausters, are in place and fully functional. Regard all safety specifications!

Check the machine at least once per working shift for obvious damage and defects. Report any changes (incl. changes in the machine's working behavior) to the competent organization/person immediately. If necessary, stop the machine immediately and lock it. Have any defects rectified immediately.

At any time, ensure the operator has sufficient view to his working area, in order to have intervention to the working process.

During start-up and shut-down procedures always watch the indicators in accordance with the operating instructions!

Before starting or setting the machine in motion, make sure that nobody is at risk. Keep children and unauthorized persons away from the work area.

Noise protection equipment on the unit must be in protective position during operation. Wear the required individual ear protection!

Always keep at a distance from the edges of building pits and slopes. Avoid any operation that might be a risk to machine stability! Keep the work area clean.

Cluttered areas and benches invite injuries! Do not operate when you are tired! Watch what you are doing!

Risk of stumbling! Cables and hoses must complete rolling up. After assembly do not leave any tools, a wrench for example, on the unit.

Before leaving the machine always secure it against unauthorized use!

## **5.6 Special work related to the maintenance and repair of the machine**

Observe the adjustment, maintenance and inspection activities and intervals set out in the operating instructions, including information on the replacement of parts and equipment! These activities may be executed by skilled personnel only.

Brief operating personnel before beginning special operations or maintenance work, and appoint a person to supervise the activities.

In any work concerning the operation, conversion or adjustment of the machine and its safety-oriented devices or any work related to maintenance, inspection and repair, always observe the start-up and shut-down procedures described in the operating instructions and the information on maintenance work. Ensure that the maintenance area is adequately secured.

Carry out maintenance and repair work only if the machine is positioned on stable and level ground and has been secured against inadvertent movement and buckling. If the machine is completely shut down for maintenance and repair work, it must be secured against inadvertent starting.

To avoid the risk of accidents, individual parts and large assemblies being moved for replacement purposes should be carefully attached to lifting tackle and secured. Use only suitable and technically perfect lifting gear and suspension systems with adequate lifting capacity. Never work or stand under suspended loads.

The fastening of loads and the instructing of crane operators should be entrusted to experienced persons only. The marshaller giving the instructions must be within sight or sound of the operator.

For carrying out overhead assembly work always use specially designed or otherwise safety-oriented ladders and working platforms. Never use machine parts as a climbing aid. Wear safety harness when carrying out maintenance work at greater heights.

Clean the machine, especially connections and threaded unions, of any traces of oil, fuel or preservatives before carrying out maintenance / repair. Never use aggressive detergents. Use lint-free cleaning rags.

Before cleaning the machine with water, steam jet or detergents, cover or tape up all openings which for safety and functional reasons - must be protected against water, steam or detergent penetration.

Do not clean the machine with a high-pressure cleaner. The hard water jet can put damage to parts of the machine. After cleaning, remove all covers and tapes applied for that purpose. After cleaning check the machine for loose connections, chafe marks and damage! Have identified defects repaired immediately!

Always tighten any screwed connections that have been loosened during maintenance and repair.

Any safety devices removed for set-up, maintenance or repair purposes must be refitted and checked immediately upon completion of the maintenance and repair work. Ensure that all consumables and replaced parts are disposed of safely and with minimum environmental impact.

## **5.7 Gas, dust, vapour, smoke**

Welding, burning and grinding operations on the machine are only to be carried out, if this is explicitly authorized (there can be danger of fire and danger of explosion)!

Before welding, burning and grinding clean dust and combustible materials from the machine and its environment and provide for sufficient air ventilation (danger of explosion)!

When working in confined spaces observe the national regulations if available!

Check all pipes, hoses and fittings regularly for leaks and obvious damage! Repair all damages or have them repaired immediately!

## **5.8 Pneumatics**

Only personnel with special knowledge about and experience in pneumatics is allowed to work on pneumatic equipment!

Check all cables, hoses and screw joints regularly for leaks and obvious damage! Remove all the damage immediately.

Before starting repair work depressurize to be opened system sections as well as pressure lines according to the description of the assembly!

Lay and fit pneumatic lines in a technically correct manner! Don't confuse the connectors! Mountings, length and quality of the hose lines must meet the requirements.

## **5.9 Noise**

During operation sound protection devices at the machine must be in protective position. Wear the prescribed personal ear protection! (UVV 29 § 10) UVV = accident prevention regulations).

## **5.10 Illumination**

The machine is designed for use in daylight! The machine operator / owner must ensure sufficient workplace lighting for non-illuminated work sites.

## **5.11 Oils, greases and other chemical substances**

When handling hydraulic fluids, lubricants, greases or preservatives (referred to hereinafter as fuels and lubricants), the safety regulations which apply to the respective machine are to be observed!

Avoid long contact of the fuels and lubricants with your skin! Careful cleaning of the skin from adhering fuels and lubricants is necessary.

Be careful when handling hot consumables (risk of burning or scalding) particularly at liquid temperatures above 60°C, avoid any skin contact with these liquids!

If you get fuels or lubricants in your eyes, rinse them immediately and carefully with potable water. Then consult a doctor.

Remove flown out fuels and lubricants immediately! Therefore use a binder.

Fuels and lubricants must not seep into the soil or into the public sewage system! Fuels and lubricants which can no longer be used are to be collected, properly stored and to be properly disposed of.

The respective regulations and laws for handling fuels and lubricants which are valid in the country of use are to be observed and adhered to. This also applies to the disposal of such fuels and lubricants. To inform yourself turn to the responsible authorities.

## 5.12 Transport

Use only suitable means of transport and lifting gear of sufficient capacity when loading or transporting the machine! Appoint an experienced instructor for the lifting operation!  
Always observe the instructions given in the operating manual when lifting the machine (use only the prescribed lifting eyes for attaching the lifting gear)!  
Use only suitable transport vehicles with sufficient load capacity! Secure the load carefully. Use suitable fastening points for securing!  
Before loading the machine or parts of it, secure the machine against inadvertent movement! Attach a suitable warning sign!  
Before using the machine again, make sure that such protection material or devices are properly removed! Parts which had to be removed for transporting of the machine must be refitted and secured carefully before the machine is used again!  
Before setting the machine in motion always check that all accessories are safely stowed.  
The recommissioning procedure must be strictly in accordance with the operating instruction! Observe the instructions given in the operating instruction when reassembling and operating the machine.  
The machine is not designed for transport by crane! There are no suitable load handling points on or at the machine.



### CAUTION:

Before transport make sure that all parts on and at the machine are tightly fit!  
The machine is not suitable for crane transport - there are no load handling points available!



### CAUTION:

When carrying heavy parts a stooping posture should be avoided.

## 5.13 Transport preparation

Remove the suction hose and the discharge hose and put it into the filter cake container.



### DANGER

Only dismount the machine on stable grounds!

## 5.14 Transport Process

Before transport make sure that all parts which are transported with the Slurry Filter Press are securely fixed. The slurry filter press can be moved on the wheels which are fixed to the chassis..



### GEFAHR

Injury hazard: Down coming parts!



## 5.15 Store

Store the machine in a dry, high or locked place, out of the reach of children or unauthorized persons. Clean and preserve the machine with corrosion preventive if storing over a longer time like winter time!

## 6 Bringing into service



### ATTENTION:

Do not yet turn the machine on! The following work is to be done with the machine being stopped!

### 6.1 Export checking

Remove the transport packaging and dispose of it in an environmentally responsible way. Check the machine for completeness and intactness. For the scope of delivery, see "Scope of delivery and provided accessory"  
Secure the machine against accidental start-up and rolling away.



### INFORMATION

Read and observe all operating instructions which are relevant for the machine!

### 6.2 Installation

Install the Slurry Filter Press on even, solid and stable ground. Clear the place where the machine is operated of everything that could impede the operation. See that the place of operation is sufficiently illuminated.

Observe the conditions specified by the manufacturer as to the connection of compressed air supply. Use only oil-free compressed air! Connect the compressed air to the maintenance unit! Lay the connection lines in such a way that damage is excluded.

### 6.3 Compressed- air supply



### INFORMATION

Read and observe the operating instructions of the compressor!

In order to prepare the operation of the compressor, refer to the corresponding operating instructions!

### 6.4 Compressor requirements

Technical data	
Pressure	Min. 8bar
Filling capacity	Min. 250 l/min
Motor speed	Max. 1450 min <sup>-1</sup>



## 7 Operation



### CAUTION:

Clear the site of operation of all things which could interfere with the operation! Make sure that the machine is properly mounted! Except the operator, nobody is allowed to remain in the working area!



### WARNING:

During operation, do not touch moving components such as filter plates, etc.!



### WARNING:

Do not touch moving components such as filter plates, etc.! Risk of crushing!

### 7.1 Before starting

Set the machine up according to the chapter "Operation" and check for safe operating condition:

- All components must be mounted properly.
- The functions of the machine must work properly.
- Do not make any changes to the control device and the safety devices!

The machine must only be operated in safe operating condition! Observe and comply with the conditions specified for the connection of the compressed-air supply.



### CAUTION:

Caution: Only use oil-free compressed air!

Lay connection lines so that damages and injuries can be excluded.

#### Pressure setting on the manometer



### INFORMATION

The pressure regulator on the manometer is preset to 6 bar by default!

Unlock the pressure regulator by pulling the rotary knob on the manometer. Set the desired pressure by turning. Press the rotary knob on the manometer down again in order to lock the pressure regulator.

### 7.2 Starting the compressed-air supply

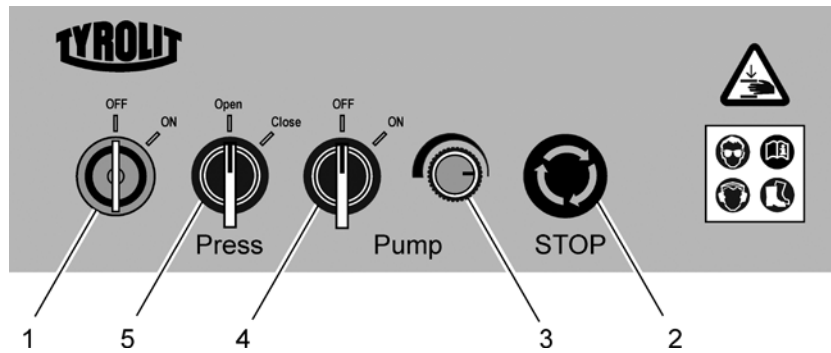


### INFORMATION

Read and observe the operating instructions of the compressor!

For operating the compressor, refer to the corresponding operating instructions!

## 7.3 Operating elements



- |   |                           |   |                         |   |                     |
|---|---------------------------|---|-------------------------|---|---------------------|
| 1 | Key switch                | 3 | Pressure regulator pump | 5 | Turn-switch „Press“ |
| 2 | Mushroom emergency button | 4 | Turn-switch pump        |   |                     |

## 7.4 Starting the filtering process



### INFORMATION

Observe all the previous chapters in this operating manual, in particular the safety and warning instructions!



### WARNING:

During operation, do not touch moving components such as filter plates, etc



### WARNING:

Warning of hand injury (Danger of squeezing)!



### CAUTION:

Only transport the machine when the pressure system is switched off! This also applies to a short change of location



### CAUTION:

Wear appropriate personal protective equipment!!

The work area of the Slurry Filter Press is reserved for the operator. Other people are to be kept away from the work area of the Slurry Filter Press.

It is to be ensured that the operator has sufficient and permanent view on the work area and that he can intervene at any time in the operating process.

Close the protective hood, fill the wet sludge into the collecting tank and engage the suction hose. Turn the key switch (1) to "ON" and unlock the mushroom emergency button (2). Turn the rotary switch "Press"(5) to "Close" and wait min. 30 sec. until the chamber filter plates are closed. Turn the rotary switch (4) for the pump to "ON" and adjust the air supply to the pump by using the pressure regulator (3), if necessary.

If no more water flows out of the chamber filter slabs and the pressure which is indicated on the manometer doesn't go up anymore, the filter process is completed.

## 7.5 Completing the filtering process

In order to complete the filtering process, turn the rotary switch (4) for the pump to "OFF" and turn the rotary switch "Press" (5) to "Open". Wait until the chamber filter plates are open, and only then open the protective hood.

If no further filtering process is carried out, also switch off the compressor according to its operating manual.

## 7.6 Removing the filter cake

Open the protective hood. Drop the press cake between the chamber filter plates into the filter cake container and close the protective hood again. The next filter process can be started.



### INFORMATION

Dispose of the filter cakes in an environmentally sound way!

## 8 Maintenance and care



### ATTENTION:

All maintenance, repair and care work must only be carried out when the pneumatic system is switched off!

In accordance to the given cycles, the subsequently described maintenance work has to be enforced. Also the wearing parts subject to no certain maintenance-intervals have to be checked regularly for wear and to adjust if necessary or to exchange.

		Before starting work	After work	Weekly	In the event of a malfunction	If damaged
Machine	Check	X			X	X
	Clean		X			
Reservoir	Clean		X			
Slide	Clean		X			
Chamber plate	Säubern		X			
Cover plate	Check for gasket	X	X			
	Clean		X			
End plate	Clean		X			
Pressure filter	Clean		X			
Hoses	Clean		X			

### 8.1 Pressure filter

The pressure filter in the maintenance unit should be regularly cleaned of condensed water and dirt.

Unscrew the tank at the maintenance unit and loosen the baffle disc from the filter. Take the filter out and put it into a solvents such as petrol in order to clean it. Before mounting the filter again, it must be dry.



### ATTENTION:

Ensure proper seal!



### ATTENTION:

Petrol available at petrol station is not cleaning benzene!

## 9 Troubleshooting

<b>Fehlersuche</b>	
<b>Cause</b>	<b>Remedy</b>
<b>The machine does not start</b>	
Protective hood is not closed	Close the protective hood and start the machine again.
No compressed-air supply	Check the connection of the compressor to the machine. When doing so, observe the operating instructions of the compressor! Should the machine not start, contact our service.
Emergency stop mushroom button is not deactivated	Deactivate the emergency stop mushroom button.
<b>The pump is not running.</b>	
Rotary switch pump defective	Change or have changed the rotary switch pump.
Inlet strainer and hose are clogged	Check the inlet strainer and the hose for clogging and clean them, if necessary.