

Recirculation unit

Instruction Manual

Original Instructions



CE

Doc. no.: 15767027-01_A_en
Date of release: 2022.07.06

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1 About this manual

Instruction Manuals

Struers equipment must only be used in connection with and as described in the Instruction Manual supplied with the equipment.



Note

Read the instruction manual carefully before use.



Note

If you wish to view specific information in detail, see the online version of this manual.

2 Safety

2.1 Intended use

The recirculation unit is intended for recirculation of processing fluids from the connected Struers equipment.

The device is designed to be used with Struers consumables specially designed for this purpose and this type of device.

Do not use the machine for the following

Filtration of any type of explosive and/or flammable material, or materials which are not stable during machining, heating or pressure. Furthermore, the machine must not be used with consumables (processing fluids, filter materials) that are not compliant with function and materials of the recirculation unit.

Pumping of any type of explosive and/or flammable material, or materials which are not stable during machining, heating or pressure.

Furthermore, the machine must not be used with consumables (processing fluids) that are not compliant with function and materials of the recirculation unit.

2.2 Device description

The recirculation unit is a filtration and recirculation unit for processing fluids.

Processing fluid is led into the filter, which is placed on a perforated metal plate. The filtered processing fluid is collected in a tank underneath the filter unit and is then recirculated to the connected machine with a pump which is inserted in the tank.

The processing fluid with waste is led into a specifically designed filter which is attached to the water inlet of the recirculation unit. Debris is collected in the filter.

The operator must monitor the filter and fluid condition. When necessary, the operator must replace the filter and/or processing fluid.

The processing fluid must be filled/topped up, correctly mixed and replaced according to specifications.

The recirculation unit is controlled via a control cable connected to the Struers equipment, which activates and stops the pump of the recirculation unit.

If the Emergency stop is activated on the connected Struers equipment the recirculation unit also stops.

The recirculation unit stops if the operator opens the recirculation unit compartment.

2.3 Recirculation unit safety precautions

2.3.1 Read carefully before use

Residual risks

1. Note that large amounts of aluminum debris in the filter unit can self-ignite. Make sure to change the filter bag regularly when working with aluminum.
2. Ignoring this information and mishandling of the equipment can lead to severe bodily injuries and material damage.
3. Only use original Struers consumables as this ensures maximum safety and prolongs the machine's lifetime.
4. When working with cooling fluid always observe the safety regulations for handling, mixing, filling, emptying and disposing of the cooling fluid additive. Never use flammable cooling fluid. Note that the cooling fluid can be hot and must therefore be handled with care.
5. Always wear protective gloves and safety goggles when you clean and fill up the tank.
6. All safety functions must be intact and in working order. If they are not, they must be replaced or repaired before the machine can be used.
7. If you observe malfunctions or hear unusual noises, switch off the machine and call technical service.
8. Dismantling of any part of the equipment, during service or repair, should always be performed by a qualified technician (electromechanical, electronic, mechanical, pneumatic, etc.).

General risks

1. The machine must be installed in compliance with local safety regulations. All functions on the machine and any connected equipment must be in working order.
2. The operator must read the safety precautions and Instruction Manual, as well as relevant sections of the manuals for any connected equipment and accessories.
3. Processing fluid can be slippery - therefore always keep the area around the tank clean.

4. In case of fire, alert bystanders and the fire brigade. Disconnect the electrical power supply. Use a powder fire extinguisher. Do not use water.
5. Always switch off the electrical power supply and remove the plug or power cable before dismantling the machine or installing additional components.
6. The machine must be disconnected from the electrical power supply prior to any service.
7. If the equipment is subjected to misuse, incorrect installation, alteration, neglect, accident or incorrect repair, Struers will accept no responsibility for damage to the user or the equipment.

2.4 Safety messages in this manual



CRUSHING HAZARD

Take care of your fingers when handling the machine.
Wear safety shoes when handling heavy machinery.

3 Transport and storage

If, at any time after the installation, you have to move the unit or place it in storage, there is a number of guidelines we recommend that you follow.

- Package the unit securely before transportation.
- Struers recommends that all original packaging and fittings are kept for future use.

3.1 Transport

- Disconnect the unit from the electrical power supply.
- Disconnect the hose from the pump to the machine, and remove the machine drain from the tank.
- Clean the machine and all accessories thoroughly.

Transporting the unit to a new location

- Lift the recirculation unit onto a pallet and move to its new location.
- At the new location, make sure that the facilities required are in place.

3.2 Long-term storage or shipping



Note

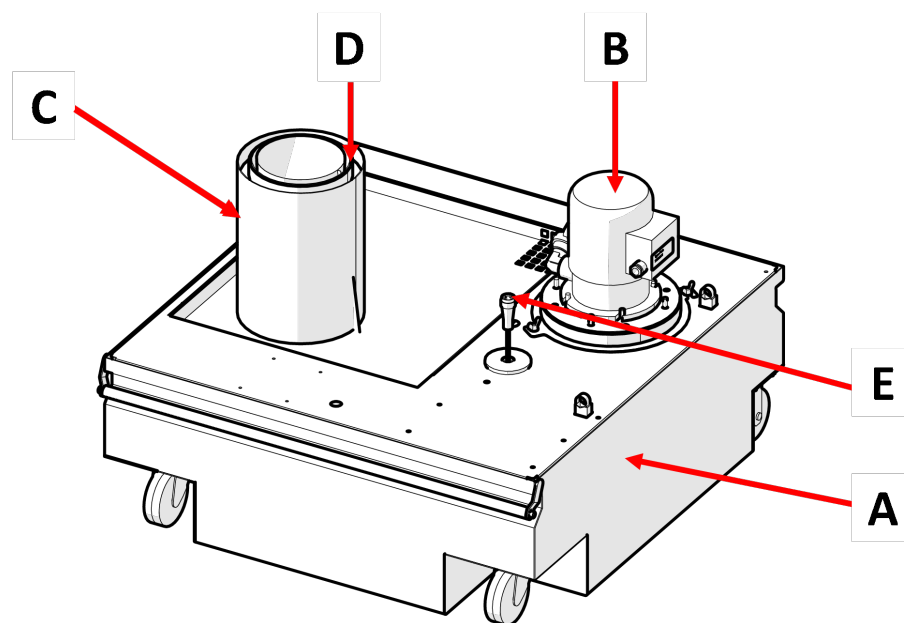
Struers recommends that all original packaging and fittings are kept for future use.

- Disconnect the unit from the electrical power supply.
- Disconnect the hose from the pump to the machine, and remove the machine drain from the tank.

- Clean the machine and all accessories thoroughly.
- To keep the machine dry, plastic-wrap the machine and place a bag of desiccant (silica gel) in the case.

4 Installation

4.1 Overview



- A Recirculation tank, 75 l (20 gal)
- B Recirculation pump
- C Filter bag system
- D Filter bag
- E Float switch

4.2 Unpacking

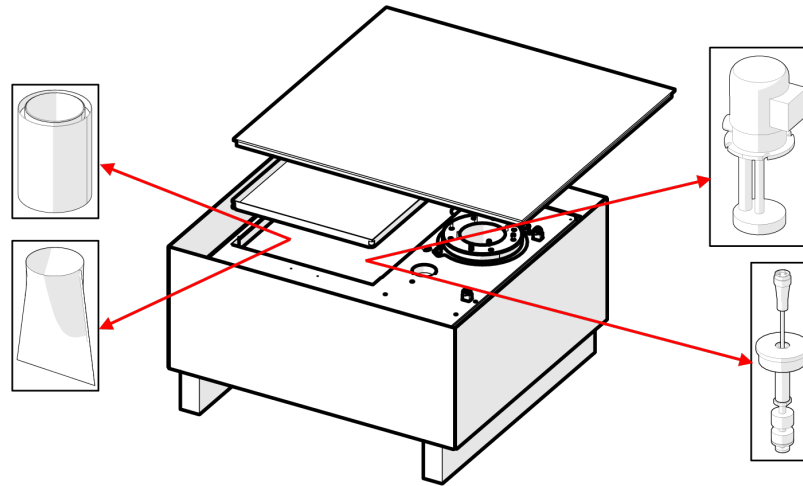


Note

Struers recommends that all original packaging and fittings are kept for future use.

The equipment is delivered on a pallet and fastened with cable ties.

1. Remove the plastic wrapping.
2. Remove the transport case.
3. Lift off the filter unit and pump cover and remove the waste collection bin and the water level gauge.



4.3 Checking the packing list

Optional accessories may be included in the packing box.

The packing box contains the following items:

Pcs.	Description
1	Tank, 75 l
1	Filter bag system
1	Recirculation pump
1	Float switch
1	Filter bag for recirculation, MD station
1	Instruction Manual set

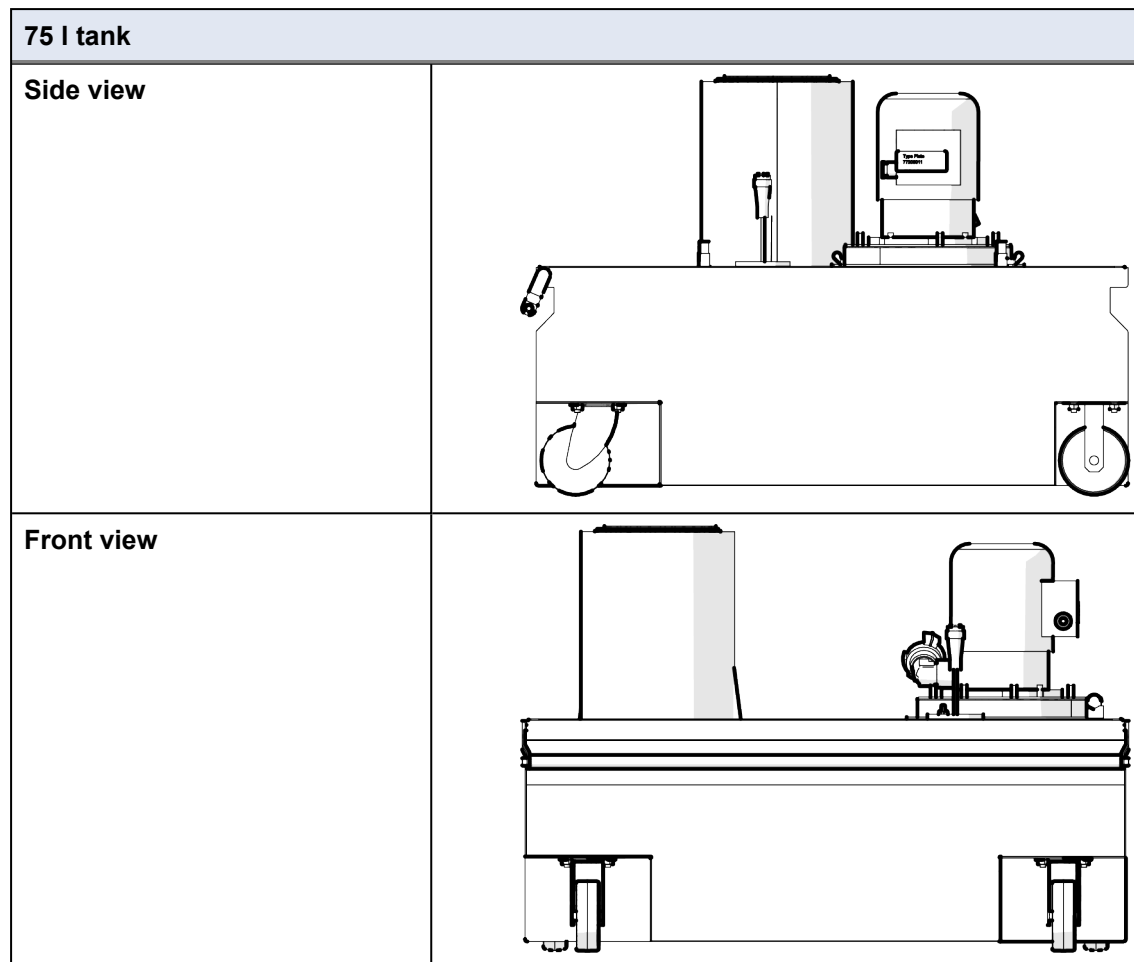
4.4 Lifting



CRUSHING HAZARD

Take care of your fingers when handling the machine.
Wear safety shoes when handling heavy machinery.

Weight	
Recirculation unit	26 kg (57 lbs)

Front and side view**Procedure**

To facilitate easy access for service technicians, allow sufficient space around the machine.

1. Lift the tank from the pallet.
2. Place the tank on the floor next to the machine you wish to connect it to.
3. Roll it into place.

4.5 Connection to the machine

For more information on how to connect the recirculation unit, see the Instruction Manual for the machine to which it is to be connected.

4.6 Noise

For information on the sound pressure level value, see the Instruction Manual for the machine to which the recirculation unit is connected.

5 Operating the device

For instructions on how to operate the device, see the specific machine manual.

6 Maintenance and service - Recirculation unit

For information on how to maintain the recirculation unit, see the manual for the machine to which the recirculation unit has been connected.

7 Technical data

7.1 Technical data

Subject	Specifications	
Directives/Safety standards	See the Declaration of Incorporation of Partly Completed Machinery.	
75 l tank	Height	240 mm (9.5")
	Width	720 mm (28.3")
	Depth	720 mm (28.3")
	Volume	75 l (20 gallons)
	Weight	26 kg (57 lbs)
Pump	Flow	10 l/min at 1 bar (2.6 gal/min at 14.5 psi)
	Power consumption	130 W, nominal
	Water outlet	GEKA ^{3/4"} bayonet
Operating environment	Surrounding temperature	5-40 °C (41-104 °F)
	Humidity	10-85 % RH non-condensing
Storage	Surrounding temperature	-25 – 55°C (-13 – 131°F) [-25 – 70°C (-13 – 158°F during max 24 hours)].
	Humidity	35-85 % RH non-condensing
REACH	For information about REACH, contact your local Struers office.	

8 Disposal



Equipment marked with a WEEE symbol contains electrical and electronic components and must not be disposed of as general waste.

Contact your local authorities for information on the correct method of disposal in accordance with national legislation.



For disposal of consumables and recirculation fluid, follow local regulations.

9 Manufacturer

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Responsibility of the manufacturer

The following restrictions should be observed, as violation of the restrictions may cause cancellation of Struers legal obligations.

The manufacturer assumes no responsibility for errors in the text and/or illustrations in this manual. The information in this manual is subject to change without notice. The manual may mention accessories or parts not included in the supplied version of the equipment.

The manufacturer is to be considered responsible for effects on safety, reliability, and performance of the equipment only if the equipment is used, serviced, and maintained in accordance with the instructions for use.

Declaration of Incorporation of Partly Completed Machinery

Manufacturer	Struers ApS • Pederstrupvej 84 • DK-2750 Ballerup • Denmark
Name	Recirculation unit
Model	N/A
Function	Filter unit for Xmatic and Xmatic Compact
Type	05766937
The above listed machinery is only intended to be used with: And shall not be put into service until the final machinery into which it is to be incorporated has been declared in conformity with this regulation, where appropriate.	
Serial no.	Xmatic Xmatic Compact



Module H, according to global approach

EU

We declare that the product mentioned is in conformity with the following legislation, directives and standards:

2006/42/EC

2009/125/EC

2011/65/EU

2014/30/EU

Additional standards NFPA 70, NFPA 79, FCC 47 CFR Part 15 Subpart B

Authorized to compile technical file/
Authorized signatory

Date: [Release date]

