

DESCRIPTION



Normet single piston hand pumps have been designed specifically for use with Normet injection materials. They are easy to operate, portable and do not require any power. Their simple design means that they can be easily stripped down and cleaned on site. Normet single piston hand pumps come in two versions:

Normet HP1: for low volumes (up to 4 litres per minute) and high pressure (up to 200 bar)

Normet HP2: for high volumes (up to 8 litres per minute) and low pressure (up to 60 bar)

KEY BENEFITS

- > Light weight
- > Easy to repair and clean
- > Solid construction
- > Can be folded away for easy transport
- > Can be used with various resins types

TYPICAL APPLICATIONS

- > The injection of polyurethane grouts
- > The injection of epoxy resin grouts
- > The Injection of acrylic grouts
- > The injection of micro cement grouts

TECHNICAL DATA

	HP1	HP2
Max pressure	Up to 200 bar	Up to 60 bar
Max flow	4 Litre / minute	8 Litre / minute
Weight	22.5 kg	23 kg
Outlet hose	5 meters 2 wire 300 bar	5 meters 2 wire 300 bar
Piston	Stainless steel	Stainless steel
Pump housing	Brass	Brass
Valve housing	Alloy	Alloy
"O" ring	Viton	Viton
Ball seats	Stainless steel	Stainless steel
Balls	Stainless steel	Stainless steel
Stand	Steel powder coated blue	Steel powder coated blue
Length	110 cm	110 cm
Height	75 cm	75 cm

PUMP GUIDELINES

Setting up

Make sure that the pump is on a level, stable working surface and that there is clear access around the pump.

Make sure that no residue or contaminants are left in the pump that would interfere with the injection material used e.g. if water has been used to water test prior to injection with a polyurethane resin, it should be thoroughly purged before use, otherwise the resin will react with the water.

Priming the Pump

Place the injection material in a suitable container beneath the intake hose taking care to fully immerse the intake filter. Open the bleed valve and ensure the bleed hose is suitably directed. Lift up and lower the pump handle until material flows freely through the bleed hose. Then close the bleed valve, open the injection hose valve and continue lifting and lowering the handle until the material comes out of the valve. This will prime the pump ready for use.

Single Piston Pumps

Using the Pump

Specific requirements in the use of the pump depend largely on the type of material being injected and the application. Please consult our technical support team for more information.

Extreme care should be taken if using bucket mixed, multi component materials as they may set before cleaning of the pump is possible.

Always make sure that the pump is thoroughly cleaned after use.

ONGOING MAINTENANCE

Cleaning the Pump

Flush as much of the material out of the pump as possible by removing the intake hose from the material, lift and lower the pump handle as before until satisfied that all material has been purged from the pump.

1. Place the intake hose into a container of TamPur cleaner with the injection hose valve open and pointing into the cleaner to re-circulate the material.
2. Lift up and lower the pump handle until the cleaner flows through the injection hose. Continue this for about 1 minute.
3. Close the injection hose valve and continue to lift and lower the pump handle until it becomes too stiff to continue. Gently increase the pressure by pushing down on the handle and hold for a couple of seconds. This will ensure that the cleaner is forced into all parts of the pump, in particular the pressure gauge.
4. Carefully open the injection hose valve to release the pressure.

Repeat steps 3 and 4 several times until satisfied that the injection material has been purged. Repeat step 1 to clear the pump of the TamPur cleaner and then using fresh cleaner, repeat steps 2 to 5 to purge the pump of contaminated TamPur cleaner as many times as necessary.

At some stage during the cleaning process, flush the bleed valve to keep it clear and operational.

When the pump is not in use for any length of time, (particularly overnight), after cleaning, repeat steps 1 to 5 but this time with engine oil. To ready the pump for use, repeat steps 1 to 5 using TamPur cleaner.

Cleaning the pump is extremely important. If it is not done correctly it will adversely impact the effectiveness and working life of the pump. Grit and other solid particles within the pump will score and wear away at the pump parts and eventually stop it from operating.

TROUBLE SHOOTING

The pump will not suck up the injection material.

Make sure that the intake hose is fully immersed and is not split. If the material lifts up the intake hose and then drops when you lower the handle, remove the bottom seat and check that the bottom seat is clean and not scratched or pitted. Also check that the ball bearing is clean and not scratched or pitted. If they are, replace them.

If both the bottom seat and ball bearing are o.k., there may be particles within the pump. These must be removed as they will stop the ball from seating correctly.

The pump will not hold pressure.

The 'O' ring requires replacing. If this does not work, then there is possibly an air leak. Check that all connections are done up securely.

The pump builds up pressure but material does not come out of the injection hose.

There is a blockage, probably within the injection hose if the bleed valve allows material through. If this is the case, carefully remove the injection hose. If this solves the problem, replace the hose without the connector on the end of it and try again. If it now works, replace the connector but if it doesn't work then the hose will need replacing.

If the problem is not the hose or connector, dismantle the bleed valve and thoroughly clean it. If this does not solve the problem then the valve housing will need to be taken apart and checked for blockages.

For any other problems, please consult our technical support team.

HEALTH & SAFETY

Normet HP1 / HP2 should only be used as directed. Our recommendations for protective equipment should be strictly adhered to for your personal protection.