

## One Component Injection Pump Model SME 500-2



*Model SME500-2*

### Features :

This pump permits easy and fast injection of synthetic resin at a pressure of max. 10,000 psi (building up) into concrete with the aid of our injection packers.

The handling of the injection-pump is easy, and it requires virtually no maintenance.

### Technical Data

Standard mix ratio 1: 1-2:1

Flow Rate – 1300 ml per minute.

Resin viscosity – 10 to 1100 cps

Pressure >Up to 10,000 Psi

Weight /9,200 kg

Hopper 2 liter plastic Tank

Hoses - 400 bar pressure

Ball valve – 400 bar pressure

Pressure gauge – 10,000 psi

### Disclaimer.

All data provided (technical, recommendations and statements) are based on test conducted at our/ other place which we believe to be correct and reliable but does not guarantee accuracy or completeness of the said test and should not be construed as a warranty for replacement under any circumstances. End user shall rely on his own information, experience and tests if needed to determine suitability of product for intended use. warrants supplied / manufactured products to be free from any manufacturing defects. Manufacturers / sellers sole responsibility shall be to replace that portion of the product which is proved to be defective by manufacturer, logistics and handling charges if any shall be borne by the consumer and not manufacturer/ or seller for any given reason. Damages caused by neglect, lack of maintenance, acts of nature, physical movement of the substrate , or structural damages caused by any means shall not be considered as defects and exclude limited warranty. Neither manufacturer nor seller shall be liable to buyer / user for injury, loss or damage directly or indirectly resulting from use or inability to use the product. Recommendations and statements other than those contained in a written agreement signed by authorized officer shall not be binding upon manufacturer.

### Contents :

- SME-500-2 pump.
- Electronic Bosh drill ( 220-230 220 v. )
- Wrench set.
- Allen keys.
- Hose set with coupler.

### General Information:

Read carefully before using your equipment. The pump has been tested by hydraulic oil in trail run prior to dispatch to ensure highest quality control. So some residues are visible which is normal and does not impair operations.

Getting started. Connect the drill to drill holding guide bush and tighten the ‘U’ clamp (not excessively) with appropriate wrench provided. Screw the hose assemblies to the pump with wrench provided. Always run the drill in CLOCKWISE rotation direction check prior to introducing drill to the machine. Never use water for cleaning or testing. Do not run pump dry, Our pump is ready for use.

### Operations:

It is recommended to use drill supplied by manufacturer to obtain optimum performance. Do not use drill in hammer mode.

For first time users we suggest them to perform test run with hydraulic oil or resin without hardener to get use to machine.

Make sure that your pump does not exceed 400 mark in pressure gauge. Adjust the dial or push button variable switch in the drill if required, this will help prolong pump life.

# One Component Injection Pump Model SME500-2

## SME500-2 Piston Replacement Procedure

- Remove the 3 allen screws from the front of the gauge seat.
- Note the order of ball/spring when removing the gauge seat for reassembly. Ball faces piston.
- Clean ball/spring chamber – confirm no PU build up
- Remove 4 allen screws on front plate of the pump (front plate also seats the hopper threading)
- Note the length of screws removed from the face plate – 2 are long, and 2 are shorter.
- Remove set screw from side of the front plate to release the piston (the entire front plate can now be pulled off)
- Loosen the brass locking nut at the base of the piston shaft
- Unscrew piston from the pump. The entire piston assembly can now be removed
- Screw / attach the new piston kit (be sure to set piston depth at 1.5 threads showing)
- Accuracy of piston depth is very important!
- Tighten brass locking nut once again
- Be sure to orient piston assembly to have material flow chamber facing the hopper and recessed hole for set screw
- facing the correct side.
- Reassemble the front plate, allen screws, and ball/spring assembly
- Pressure test the pump with R70 pump flush prior to filling with PU

## Maintenance:

- Immediately clean the pump with flush liquid recommended by resin manufacturer.
- Clean the inner wall of hopper thoroughly and remove thick residues.
- It is recommended by practice to run hydraulic oil finally after every use if the pump is stored for long time before next use

## Caution :

It is strictly recommended to follow safety norms to avoid damage or loss of life due to negligence. This pump generates very high pressure above 5000 psi which can cause damage to attached hoses and valves and can cause damage in structure area of injection. Check and tighten the hoses and fittings properly and maintain them in good condition. Damaged items must be replaced immediately before current or next use.

# One Component Injection Pump Model SME500-2

- 1 IMPACT DRILL
- 2 PITMAN SHAFT
- 3 "U" CLAMP
- 4 SLEEVES
- 5 #6000 BEARING
- 6 PINION
- 7 BEARING
- 8 HUBCAP
- 9 "C" TYPE SNAP
- 10 LATERAL HOUSING
- 11 BODY
- 12 BEARING
- 13 GEARS
- 14 BEARING
- 15 PIN
- 16 ECCENTRIC SHAFT
- 17 "C" TYPE SNAP RING
- 18 JUNCTION PANEL SHAFT
- 19 GUIDE BAR
- 20 "C" TYPE SNAP RING
- 21 JUNCTION PANEL
- 22 #608 BEARING
- 23 #6000 BEARING
- 24 "C" TYPE SNAP RING
- 25 LOWER HOUSING
- 26 LEGS
- 27 SOCKET SCREW M5 x 25MM
- 28 HANDLE BAR
- 29 SOCKET SCREW M5 x 12MM
- 30 SOCKET SCREW M5 x 25MM
- 31 CLAMPING BAR
- 32 5/16" UNC NUT
- 33 BUSH
- 34 SHANK NUT
- 35 PISTON SHANK
- 36 PRESSURE SLEEN NUT
- 37 METAL LID
- 38 FILTER BOWL
- 39 PLASTIC CONTAINER
- 40 ADAPTER
- 41 BUSH BLOCK
- 42 SOCKET SCREW M5 x 25 MM
- 43 CLAMPING BAR
- 44 O. RING
- 45 PRESSURE FEED BODY
- 46 BRASS PACKING
- 47 STEEL BALL
- 48 SPRING
- 49 PRESSURE SLEEVES
- 50 NUT
- 51 COMPRESS SCREW
- 52 PRESSURE GAUGE
- 53 DIAPHRAGM PRESSURE GAUGE SEAT
- 54 HIGH PRESSURE HOSE
- 55 AIR VALVE
- 56 BEND SPOUT
- 57 COUPLER

