

GEL PUMP

FOR ACRYLIC GEL INJECTION

DESCRIPTION

The Alchemy-Spetec Gel Pump is a pneumatically-operated, high pressure, stainless steel, dual-component chemical injection machine designed primarily for low viscosity Spetec acrylic gels and other chemical grout products. A third component, or flushing agent, is pumped through an additional piston assembly that is operated at the mixing manifold.

ADVANTAGES

- Stainless steel design suitable for acrylic oxidizing agents
- Convenient pneumatic operation
- Portable machine able to be picked up
- Wheeled cart design for easy mobility
- Complete hose sets and applicator
- Single air drive runs both pistons to maintain true ratio
- Able to produce >2000psi of output pressure

FIELD OF APPLICATION

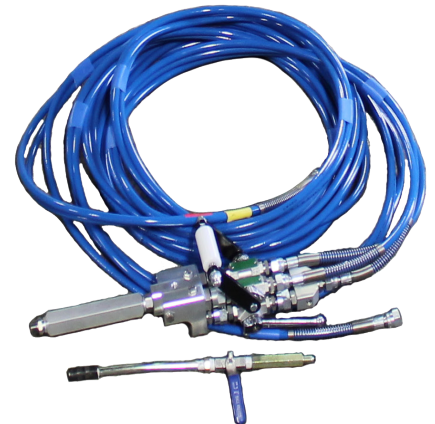
- Acrylic gels
- Low-viscosity, 1:1 chemical resins
- Combination grouting of microfine cements and polyacrylate gels

OPERATION

Be sure to note all operating warnings and familiarize yourself with the Prior to connecting pneumatic source, be sure to turn both air regulators down to zero. Mix the injection resin components per manufacturer recommendations, and clearly label the containers A and B. Take special care to note which sides (marked A-red and B-blue) are used for A and B components. Cross contamination can destroy the pump by having cured material throughout the suction and supply lines. If pumping polyacrylate gel, the flush pump is used for water supply to the mixing manifold and applicator. It is always recommended to perform batch tests with cups and clearly notate gel times to avoid material setting up in the pump lines. Once material is mixed, and applicator is ready for connection to the delivery port, packer, or pipe, the regulator to the supply pumps can be activated. To initiate the supply of chemical grout, the air valve to the regulators must be opened, and applicator must be placed in the open position to allow flow of material. Pump material per manufacturer and engineer directives.

Seal and pressure tests can be run on the machine when operated in a closed system with air on and application valves in closed position. This is recommended to conduct with water or flushing agent as time taken for pressure and seal test could allow for material after the mixing manifold.

If pumping is stopped for any reason, special care must be taken to immediately flush the manifold and applicator with water or flushing agent. This will prohibit material curing in the short flexible hose and mixing manifold. To activate the flush pump, the regulator to the flush pump must be activated and the flow of flush controlled by the valve handles on the underside of the applicator handle. Flush A, then quickly flush B. Once the entire hose length is flushed, the pump is ready for breaks. If breaking for extended periods of time, it is recommended to keep material in sealed containers, and purge all lines.



TECHNICAL DATA

PROPERTIES

Motor Pressure Ratio	1:15 (Air : Fluid)
Operating Pressure	0-1740 psi (0-120 Bars)
Mixing Ratio	1:1
Flow Per Double Stroke	8.78 Cubic Inches (144 Cubic Centimeters)
Max. Flow Rate	6.6 Gallons/Min. (25 Liters/Min.)
Compressor Requirement	16.9 Cubic Feet/Min x 101 psi (480 Liters/Min. x 7 Bars)
Length of High-Pressure Hoses	24.6 Feet (7.5 meters)
Compression Head	3-Link System
Dimensions	W 22 in x D 20 in x H 40 in (W 55 cm x D 50 cm x H 100 cm)
Pump Weight	110 lbs (50 kg)

PACKAGING

The Gel pump is shipped with the 7.5 m hose and carted on a heat treated pallet. Packaging will include a box with the necessary oils, in separate bottles, which must be filled into the pump on a daily basis before carrying out any injection work.

STORAGE

To ensure proper use and a long working life of the Gel Pumps, the pump must be stored after being cleaned correctly and after the water is completely drained out. No other special storage conditions apply.

ACCESSORIES

Mechanical Packers, Couplers, Pipes, and other fittings ordered separately.