The NORCHEM Sharpshooter Model 448 liquid polymer system is designed to process up to .58 GPH of a neat liquid polymer and deliver 0.5 to 4.0 GPM (30 to 240 GPH) of a nominal 0.1 to 2.0% aqueous polymer solution. The Sharpshooter 414 system is modular in design consisting of a liquid polymer injection module and booster module assembly.

SHARPSHOOTER MODEL 414 LIQUID POLYMER SYSTEM SPECIFICATIONS

FRAME: SIZE: 16” W x 20” L x 30” H
CONSTRUCTION: MILD STEEL, DuPONT IMRON POLYURETHANE COATING

INJECTION MODULE: PUMP: DIAPHRAGM-TYPE, HIGH VISCOSITY
DRIVE: ENCAPSULATED SOLENOID PULSE DRIVE
CAPACITY: NEAT POLYMER FLOWRATE 0.0 – .58 GPH (14 GPD)

BOOSTER MODULE: PUMP: CENTRIFUGAL-TYPE, CAST IRON, MODIFIED FOR POLYMERS
DRIVE: CLOSE-COUpled
MOTOR: .75 HP, 3450 RPM, CONTINUOUS DUTY, ODP
DISCHARGE: 10 – 60 PSI 0.5 – 4.0 GPM

SOLUTION OUTPUT: PRIMARY FLOW: 0.5 – 4.0 GPM (240 GPH)
SECONDARY FLOW: NONE
TOTAL FLOW: 0.5 – 4.0 GPM (240 GPH)

CONCENTRATION: SOLUTION: PRIMARY 0.2 – 2.0% VOLUME ON VOLUME
TOTAL 0.2 – 2.0% VOLUME ON VOLUME

UTILITIES: ELECTRICAL: 120/1/60 20 AMPS
WATER: 40 – 100 PSI 25 GPM CLEAN SOURCE

ENGINEERING SPECIFICATIONS:

Sharpshooter Model 414 shall be provided to rapidly dilute, activate and feed emulsion, dispersion and solution polymers at 240 GPH of polymer solution at concentrations to 2%. The system shall contain a four step controlled energy hydraulic circuit which instantaneously dilutes and blends the polymer to it's most efficient state for use in the process. The unit shall be designed with full pressure-controlled, inline inversion capability and shall not be limited by a minimum retention time restriction. The polymer system shall be capable of providing a 15 – 20 PSI pressure boost and shall not rely on available inlet water pressure to discharge the polymer solution product. The system shall be modular in design and shall consist of a polymer injection module, booster module, premix manifold assembly, inlet water solenoid valve, primary and secondary inlet water flowmeter, primary and secondary inlet water flow controllers, proportioning pressure regulator to balance primary and secondary flow circuits, mixing pressure regulator adjustable from 10 to 70 PSI, mixing circuit pressure gauge and inlet water throttling valve.
INCOMING POWER
115 VAC/1 PH/60 HZ

L1  L2  G

BOOOSTER MODULE
PUMP MOTOR

INLET WATER
SOLENOID VALVE

INJECTION MODULE
SOLENOID PUMP