### AnCAT® 058PC-144SD

The **NORCHEM AnCAT Model 058PC-144SD** automatic liquid polymer system is designed to process up to 6.0 GPH of a neat liquid polymer and deliver 1.0 to 16.0 GPM (60 to 960 GPH) of a nominal 0.1 to 2.0% aqueous polymer solution. The 058PC-144SD system is modular in design consisting of a liquid polymer injection module and booster module assembly.

#### AnCAT MODEL 058PC-144SD LIQUID POLYMER SYSTEM SPECIFICATIONS

FRAME: BASE: 24" W x 24" L x 26" H

CONSTRUCTION: 304SS BASE

INJECTION MODULE: PUMP: PROGRESSIVE-CAVITY-TYPE, 316 SS ROTOR, VITON STATOR

DRIVE: POSITIVE TORQUE TRANSMISSION, 4:1 GEAR REDUCTION

MOTOR: ¼ HP, 1725 RPM, TENV, CONTINUOUS DUTY

CAPACITY: NEAT POLYMER FLOWRATE: 1.0 TO 6.0 GPH (24 TO 144 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 1.0 - 16.0 GPM

SOLUTION OUTPUT: PRIMARY FLOW: 3.0 – 8.0 GPM (480 GPH)

SECONDARY FLOW: 0.0 – 8.0 GPM (480 GPH) TOTAL FLOW: 3.0 – 16.0 GPM (960 GPH)

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

**TOTAL 0.1 – 1.0% VOLUME ON VOLUME** 

UTILITIES: ELECTRICAL: 120/1/60 20 AMPS

WATER: 40 – 100 PSI 25 GPM CLEAN SOURCE

CONTROLS: CONTROLLER: (OPTIONAL) NEMA 4X W/ TOUCHPAD, POLYMER RATIO, REMOTE

START/STOP, POLYMER PUMP READOUT, WATER RATIO, PRIMARY AND SECONDARY FLOW READOUTS, REMOTE SETPOINT AND DOSING CONTROL, AUTO CALIBRATION AND

**ALARMS** 

LOW WATER: (OPTIONAL) PISTON FLOW SENSOR WITH AUTO RESTART OR

**MANUAL RESET** 

LOW POLYMER: (OPTIONAL) OPTICAL SENSORS WITH ADJUSTABLE RANGE

0.15 - 2.0% CONCENTRATION

#### **ENGINEERING SPECIFICATIONS:**

**AnCAT Model 058PC-144SD** shall be provided to rapidly dilute, activate and feed emulsion, dispersion and solution polymers at 960 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.

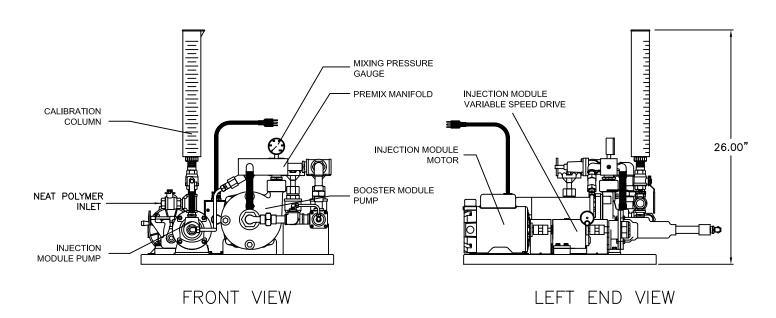
### **NORCHEM**

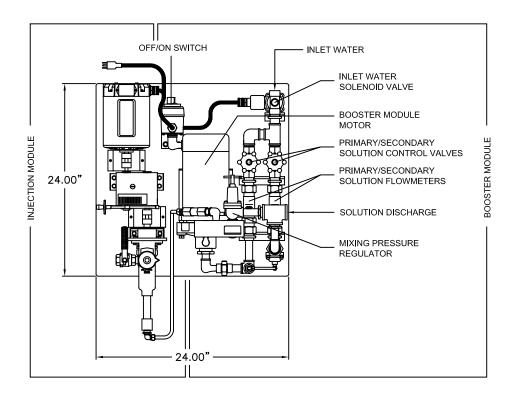
### PLAN & ELEVATION

05PCSD\_DIM

### AnCAT 05PCSD-SERIES

(TYPICAL TO ALL 054PCSD AND 058PCSD SYSTEMS)





PLAN VIEW

### **NORCHEM**

INC.

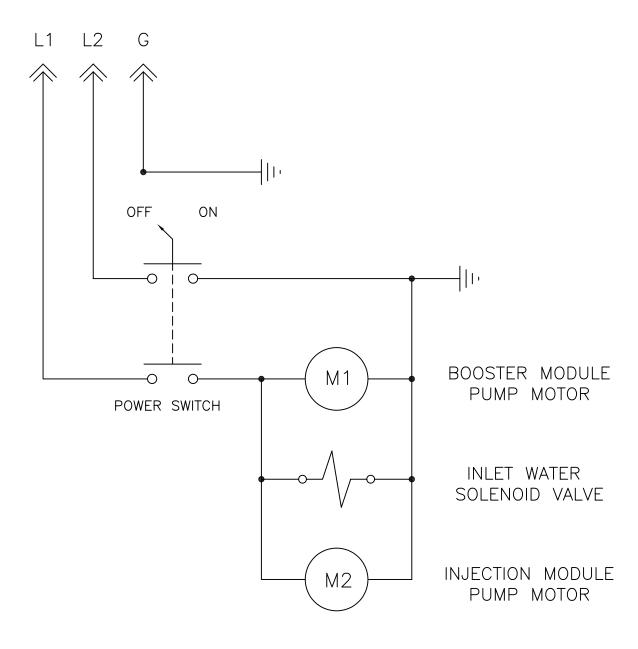
## ELECTRICAL SCHEMATIC

# AnCAT 05PCSD-SERIES

05PCSD\_ELE

(TYPICAL TO ALL 054PCSD AND 058PCSD SYSTEMS)

INCOMING POWER 115 VAC/1 PH/60 HZ

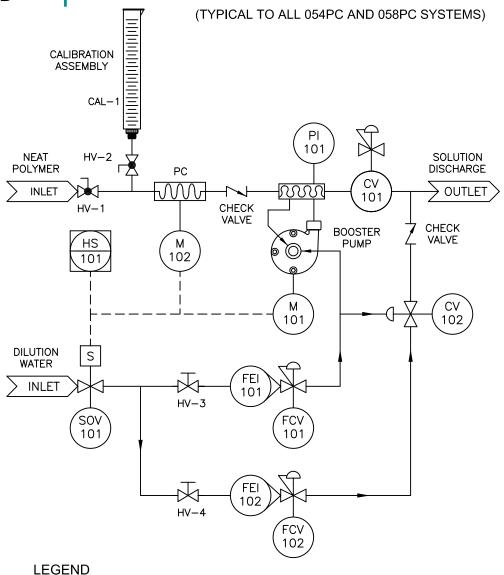


### **NORCHEM**

#### **PIPING & INSTRUMENT**

### **AnCAT** 05PCSD-SERIES

05PCSD\_PID



HV-1	POLYMER SUPPLY SHUTOFF HAND VALVE
HV-2	CALIBRATION ASSEMBLY ISOLATION HAND VALVE
HV-3	PRIMARY DILUTION WATER THROTTLING VALVE
HV <del>-</del> 4	SECONDARY DILUTION WATER THROTTLING VALVE
CAL-1	CALIBRATION CYLINDER
PC	INJECTION MODULE PROGRESSIVE CAVITY PUMP
PI-101	MIXING PRESSURE GAUGE
M-101	POLYMER INJECTION PUMP MOTOR
M <b>-</b> 102	DILUTION WATER INLET SOLENOID VALVE
SOV-1	DILUTION WATER INLET SOLENOID VALVE
CV-101	MIXING PRESSURE CONTROL VALVE
CV-102	SECONDARY DILUTION EQUAIZATION VALVE
FE <b>I-</b> 101	PRIMARY DILUTION WATER INDICATING FLOW METER
FE <b>I-</b> 102	SECONDARY DILUTION WATER INDICATING FLOWMETER
FCV-101	PRIMARY DILUTION FLOW CONTROL REGULATOR
FCV-102	SECONDARY DILUTION FLOW CONTROL REGULATOR
HS-101	OFF/ON SWITCH

### **NORCHEM**

INC.