

PREMIUM SPIRAL SYSTEM COMPONENT SPECIFICATIONS: (S-36,000 Unit)

Updated: 11/29/08

1] Filter Pack

Membrane:	LFC-3, LFC-3LD
Membrane Surface Area:	36000sf (4460m ²) (90ea 8"Dia x 40"L)
Estimated Production:	125-250gpm (at 5-10GFD)
Maximum Operating Temperature:	120 °F (49°C) (Options for up to 80°C)
Allowable Feed Slurry pH Range:	2-11 (Options for 1-14)
O-ring Material:	Ethylene Propylene
Filter Pack Housing:	Polyurethane Coated, Filament Wound, Epoxy FRP
Wetted Ports:	316L Stainless Steel
Wetted Plastic End Plates:	PVC Thermoplastic

2] Piping

Maximum Pressure:	550 psi (Options for up to 1200 psi)
Pressure Piping:	316L Stainless Steel Schedule 80
Atmospheric Piping:	316L Stainless Steel Schedule 40
Pipe Clamps:	Victaulic Zero-Flex Style 07 EPDM
On/Off Control Valves:	FloTite Series-300 316SS 3-Piece Ball Valves w/ Teflon seats
Flow Control Valves:	FloTite Series 300 316SS 60 degree 3 piece V-Ball BLX V100E positioner
Check Valves:	JFW Valve Series-200 CF8M Swing Check Valve
Pneumatic Actuators:	Habonim Compact2 Pneumatic Rack and Pinion Spring Return
Skid Piping Terminations:	150lb 316SS 4"/3"/2" Flange with EPDM Gaskets
Pneumatic Air Supply:	90lb Instrument Grade Air (3/8" connection)
Clean in Place Tank:	260 Gallon Cross Linked Polypropylene w/ Lid (36" ø x 74")

3] Clean In Place "CIP" System

CIP Pump Type:	Grundfos 316SS 66 gpm Centrifugal
CIP Pump Motor:	Baldor 20 HP 3500 rpm TEFC 460VAC, 3phase, 30A
Motor Speed Controller:	AC Tech 20HP NEMA 4 (or Equal)
Enclosures:	Hoffman NEMA 4 Powdercoat Finish 24x30x8
Level Sensor:	Efector PN-2228
Temperature Sensor:	Efector TN-2530/ E-40107
pH Meter	GF Signet 3-2774-1/ 3-2750-2
Solenoid Valve:	SMC VV5Q21-20/VQ2101N Gang Mounted 20 Port 24 volt

4] Electrical Specifications:

Controls Voltage:	None
Programmable Controller Type:	None (Control signals from VSEP PLC)
Touch Screen Display Type:	None (Set Point change at VSEP HMI)
Enclosures:	Hoffman NEMA 4 Powdercoat Finish 20x16x8
Switches, Relays, & Contactors:	Allen Bradley 220/110 Volt
Pressure Sensors:	Efector PN-2222
Flow Transmitter:	Yamatake MGG14C-MH4G-1A1N-YAH
Flow Tube:	Yamatake MGG18D-050P21CS5ACA-XX
Temperature Sensor:	Efector TN-2530/ E-40107
Conductivity Meter	Signet 3-2850-52-41

5] Pump Specifications:

Feed Pump Type:	Grundfos 316SS 198 gpm Vertical Multi-stage Centrifugal
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Feed Pump Motor:

Grundfos 40 HP 3500 rpm TEFC 460VAC, 3phase, 50A

PREMIUM SPIRAL SYSTEM COMPONENT SPECIFICATIONS: (S-48,000 Unit)

5] Pump Specifications: (continued)

Motor Speed Controller:

AC Tech Model 30HP NEMA 4 (or Equal)

Chemical Metering Pump:

Bran+Luebbe MD 200S 19111 007

Metering Pump Motor:

Baldor 3/4HP 3500rpm TEFC 120/220V, 1phase, 15A, 60/50Hz

6] Pre-Screen Basket Strainer:

Filter Housing Type (or equal):

NLR Custom Made

Basket Strainer:

60 Mesh 316 SS

Capacity:

220 GPM

Filter Housing Material:

316L Stainless Steel

Elastomers (Seals):

EPDM

7] Operating Site Conditions:

Equipment Rating:

NEMA 4, Indoor/Outdoor protect from sunlight & rain.

Ambient Temperature:

5 - 37°C

Storage Temperature:

2 - 70°C (Protect Filter Pack from Freezing)

Max Relative Humidity:

<95%, non-condensing

Elevation:

3300 ft maximum without derating