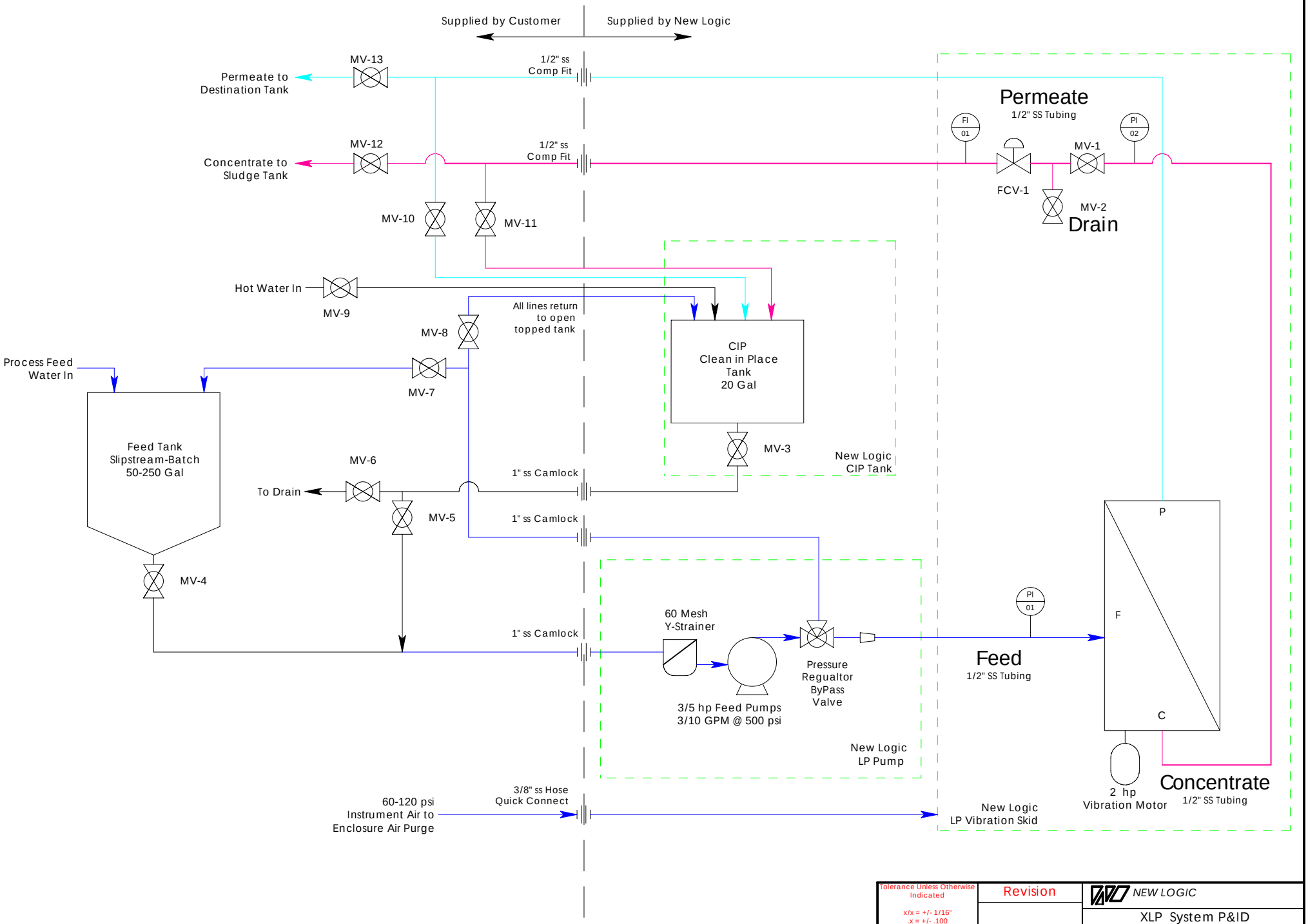
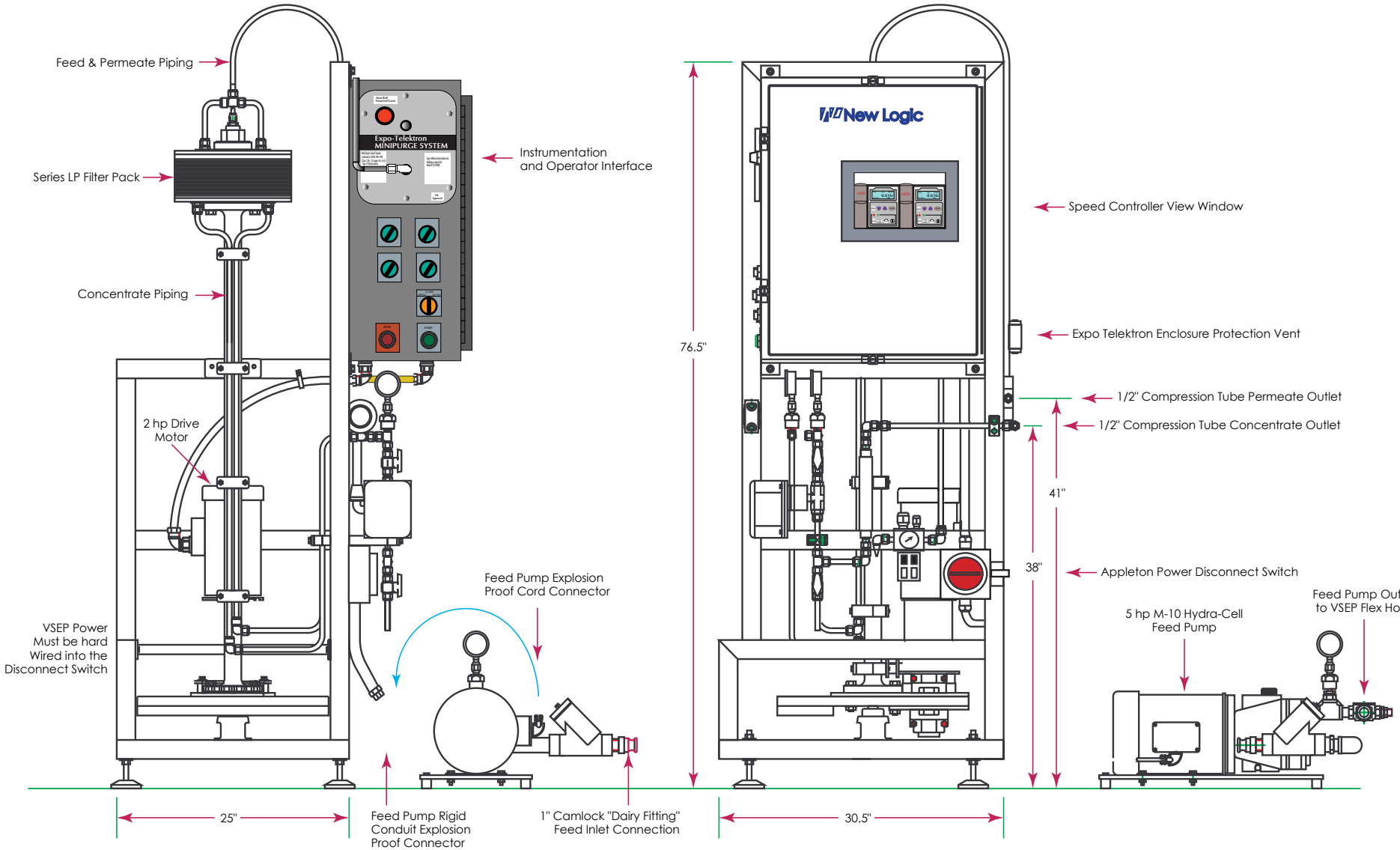


Confidential Material

Tolerance Unless Otherwise Indicated x/x = +/- 1/16" .x = +/- .100 .xx = +/- .030 .xxx = +/- .005 x¼ = +/- 30'	Revision	NEW LOGIC XLP System P&ID Sheet One Scale: 1:18 XLP-010 12/31/08 M Ayers



Process Connections:
Feed Inlet - 1" male Camlock "Dairy Fitting" at Feed Pump Inlet
Permeate - 1/2" Tube Parker Fitting
Concentrate - 1/2" Tube Parker Fitting

Revision	New Logic
	Series LP Explosion Proof VSEP
	D | No Scale | L-0001
	02/17/03 | B Christensen | G Johnson

New Logic Confidential

NEW LOGIC RESEARCH
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Pilot Testing

V ✧ SEP L/P Explosion Proof Machine Specifications (12/15/08)
These specifications are for a standard Series L/P equipped with electrical controls and motors suitable for use in a Class 1, Division 2, Group D environment.

Current operating Manual: L/P Explosion Proof Version 4.0

Operating Conditions:

Equipment Rating: Nema 4X for liquids - Class 1 Div 2 for Hazardous Materials
Operating Ambient Temperature Limits: 0-40C, Protected from sun & rain.
Storage Temperature: 0-40C
Relative Humidity: 90% or less, non-condensing
Elevation: 3300 ft. (1006 M), without derating.

Filter Pack:

Membrane Area: L Mode: 0.48 sq. ft. P Mode with 38 membranes: 16.44 sq. ft..
Hold Up Volume: P Mode: Approx. 0.8 Gallons (3.0 liters)
Filtrate Removal Capacity: Approx. 2.25 GPM (8500 ml/min)
Maximum Operating pressure: 600 psi
Maximum Shear Rate: 150,000 Inverse Seconds
Wetted Materials: 316 Stainless Steel, Polypropylene, EPDM

Vibration System:

Drive Bearings: MORSE SEALMASTER RFB2102
Vibration Motor Control: Allen Bradley Power Flex 40
Vibration Motor: BALDOR CM7071T, 2HP 3400RPM, 480 VAC 3 phase Class 1 Div 1 Group D

Feed System:

Pump: HYDRA-CELL (D10) LSGSHEM8 10 GPM @ 1750 RPM
Motor: BALDOR M7044T, 5HP 1750 RPM, 480 VAC 3 phase 6.7 Amp
Pump Bypass Valve: WANNER C2ADBESSEF
Feed Pump Motor Control: Allen Bradley 3ph Contactor 100-C23*10/100F/193ED1DB

Instruments:

Pressure Gauges: 1 on Process Outlet & 1 on Process Inlet ASHCROFT 1009 or WIKA 600 psi Model 233.54
Flow Meter (Plastic Tube Indicator): COLE-PARMER Model 32445-58
Timers: Artisan Model 438U Universal Time Capsule Delay-On-Make Timer
Control Valve at Process Outlet: FloTite Model 320SSFFFL13-1/2"
Actuator: Indelac R Series Nema 7 Model R7BF03-2

Electrical Power Requirements: Standard Unit (With a 5HP Feed Pump Motor)

Voltage: 380 - 480 VAC 3 phase
Normal Full Load Operating Current: 4 - 10 amps
Required Receptacle: NEMA L15-30, 15 amp circuit recommended
Power Disconnect Switch: Appleton Model GUSC Heavy Duty Tumbler Switch (30 Amp, 600V AC Max.)
Rapid Exchange Purging System: Bebco Model 3003-LPS-C1-TypeZ (Class 1 Div 2)
Supply Requirements: Clean Air or Inert Gas at 60-120 psi
Air Supply: Rapid Exchange 240 SCFH, Normal 0.1-3.5 SCFH
Enclosure Protection Vents: Bebco EPV-2-SA Relief Valve

System Size and Weight:

Overall Dimensions: 38” w x 36” d x 81” h
System Weight: 800lbs. (364 kg) approximate

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