

# CFS-1

## CHEM-FEED® Aluminum Single Skid System

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### Features

- > The pre-fabricated design allows for easy installation
- > Strong, lightweight polyester powder coated welded aluminum structure
- > Dual side inlets enable connection of multiple skids to the same inlet
- > Flow Indicator provides a visual indication of chemical movement
- > Optional Flow Verification Sensor for monitoring system

### Highlights

**Piping**

PVC Schedule 80  
(optional CPVC)

**Pressure**

150 PSI  
(10.3 bar)

**Compatibility**

M1, M2, M3, M4,  
MC2, MC3, MD1, MD3

**Frame material**

Powder coated aluminum

**Mounting position**

Floor or wall

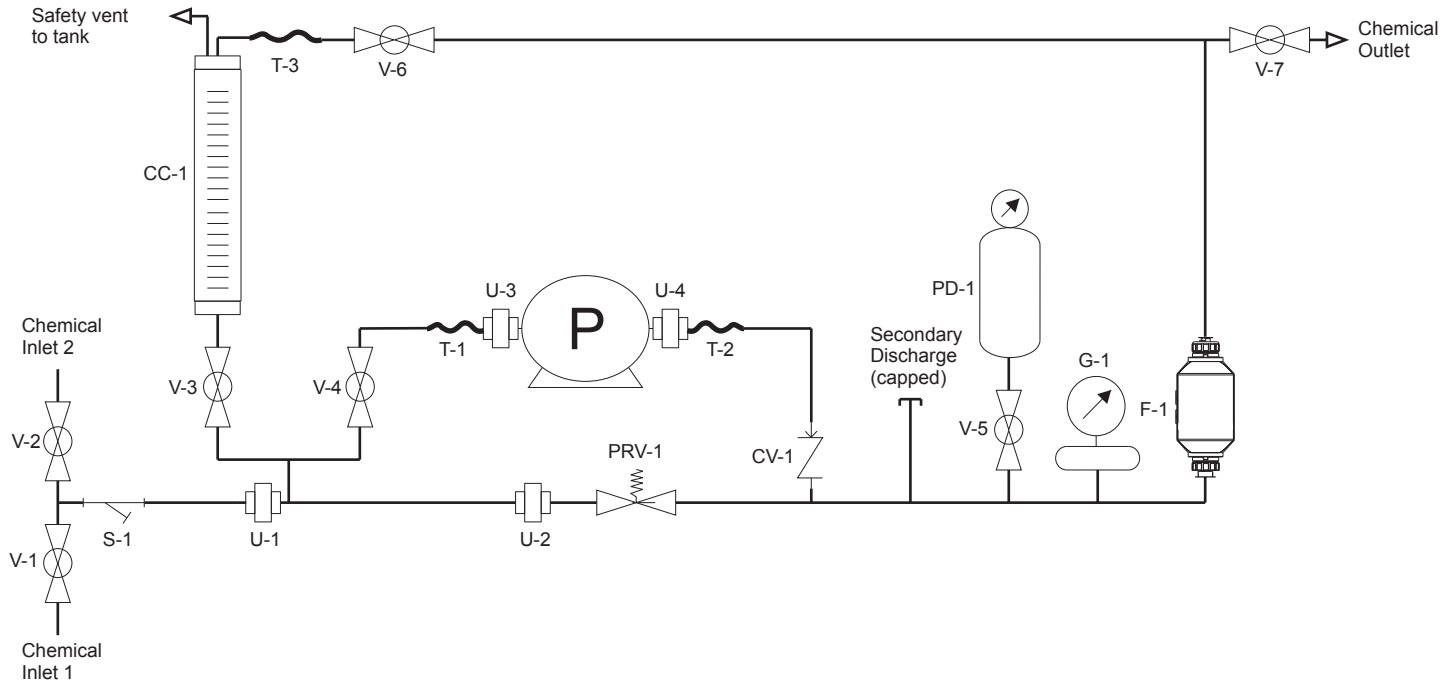
**Warranty**

2 Years

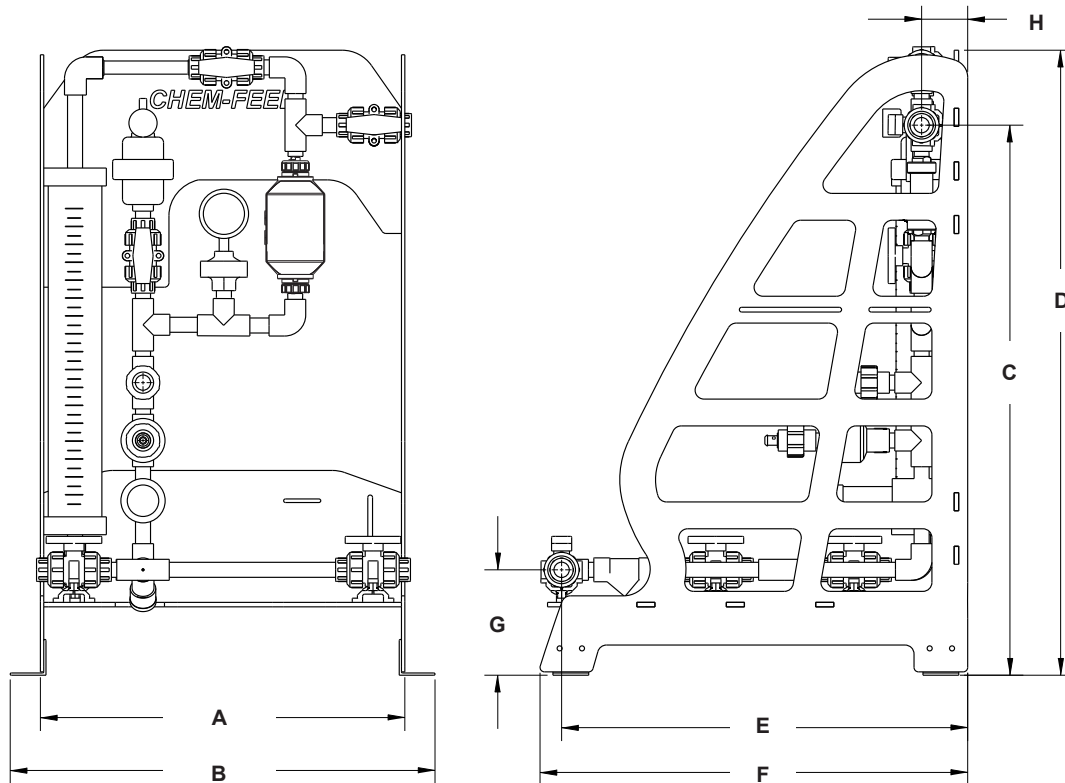


|  |   |
|--|---|
| <b>Skid</b>                            | Chemically resistant polyester powder coated 6061 T6 aluminum.<br>Welded joint construction   |
| <b>Pump (sold separately)</b>          | FLEXFLO® M1, M2, M3 or M4 peristaltic pumps<br>CHEM-FEED® MD1, MC2, MC3, or MD3 diaphragm pumps   |
| <b>Piping</b>                          | PVC Schedule 80 (optional CPVC)   |
| <b>Tubing (T)</b>                      | Reinforced braided PVC, 200 Psi max, certified NSF 51 / NSF 61. The pump inlet and outlet flexible tubing connections are terminated to half unions and secured to the barbed fitting with stainless steel clamps. The calibration cylinder fill.             |
| <b>Tubing Clamps</b>                   | 300 series SS band, 400 series SS screw   |
| <b>Unions (U)</b>                      | PVC body, schedule 80, FKM seals  |
| <b>Ball Valves (V)</b>                 | Vented type ball, True unions, PVC body, PTFE shaft bearings and seats, FKM seals   |
| <b>Pressure Relief Valve (PRV)</b>     | PVC body, PTFE primary diaphragm seal. Non-wetted components: FKM secondary seal, zinc plated steel spring, stainless steel external hardware, HDPE pressure adjusting screw and locknut. Infinite adjustment from 5-100 psi. Maximum inlet pressure 150 psi. |
| <b>Calibration Cylinder (CC)</b>       | PVC body, PVC end caps, 1/4" ID tubing outlet vent.<br>Available volumes: 3 GPH (100ml), 8 GPH (250ml), 16 GPH (500ml), 32 GPH (1000ml), 64 GPH (2000ml).   |
| <b>Pulsation Dampener (PD)</b>         | CPVC body, 10 cubic inch volume, FKM bladder (optional EPDM bladder)  |
| <b>Gauge W/Guard (G)</b>               | Gauge: liquid filled stainless steel with blowout plug, bottom mount, 1/4" NPT threads. Available pressure ranges: 0-30 psi, 0-100, psi, 0-200 psi.<br>Guard: PVC body, FKM diaphragm seal, temperature compensated oil filled.                               |
| <b>Check Valve (CV)</b>                | PVC body, FKM diaphragm (optional EPDM). Cracking pressure: 1.0-1.5 psi. Maximum working pressure: inlet = 150 psi, back = 100 psi.   |
| <b>Flow Indicator (F)</b>              | Machined cast acrylic, PVC connections, ceramic ball, polypropylene ball stop, PVC half unions, FKM seals (optional EPDM).  |
| <b>Y Strainer (S)</b>                  | PVC body, FKM seals (optional EPDM)   |
| <b>MS6A Chemical Flowmeter (FVS)</b>   | PVDF & PEEK body, PVC socket weld connections, FKM seals (optional EPDM). Available working flow ranges:<br>10-5,000 ml/min (0.158 - 79.2 GPH)<br>100-10,000 ml/min (1.58 - 158.0 GPH)  |
| <b>Universal Mounting Blocks</b>       | PA12  |
| <b>Pump Extended Mounting Brackets</b> | 316 Stainless Steel   |
| <b>Skid Mounting Foot Pads</b>         | 316 Stainless Steel   |
| <b>Mounting Hardware</b>               | 18-8 Stainless Steel  |
| <b>Drip Tray</b>                       | Polypropylene, 16" x 21" x 3" - 4 gallons (15.1L) total containment   |
| <b>Maximum Working Pressure</b>        | 150 psig (10.3 bar)   |
| <b>Operating Temperature</b>           | 14 °F to 115 °F (-10 °C to 46 °C)   |
| <b>Approximate Shipping Weight</b>     | 60 lb. (27.2 Kg)  |

# Piping and Instrumentation Diagrams



## Dimensions



| Dim | Inch   | cm    | Dim | Inch   | cm    |
|-----|--------|-------|-----|--------|-------|
| A   | 20.25" | 51.40 | E   | 22.75" | 57.80 |
| B   | 23.75" | 60.30 | F   | 24.00" | 61.00 |
| C   | 30.75" | 78.10 | G   | 6.00"  | 15.20 |
| D   | 35.00" | 88.90 | H   | 2.50"  | 6.40  |

## CHEM-FEED® Engineered Skid System - Municipal

**CFS-1** Municipal Single pump system - single chemical / single outlet

### Piping / Valves / Unions / Seal Materials

|          |  |          |  |
|----------|--|----------|--|
| <b>A</b> | PVC piping, FKM seals,<br>1/2" ID PVC braided tubing connections   | <b>E</b> | CPVC piping, FKM seals<br>1/2" ID PVC braided tubing connections     |
| <b>B</b> | PVC piping, EPDM seals,<br>1/2" ID PVC braided tubing connections  | <b>F</b> | CPVC piping, EPDM seals<br>1/2" ID OD PVC braided tubing connections |
| <b>C</b> | PVC piping, FKM seals,<br>1/4" ID polyethylene tubing connections  | <b>G</b> | CPVC piping, FKM seals<br>1/4" ID Polyethylene tubing connections    |
| <b>D</b> | PVC piping, EPDM seals,<br>1/4" ID Polyethylene tubing connections | <b>H</b> | CPVC piping, EPDM seals<br>1/4" ID Polyethylene tubing connections   |
| <b>X</b> | Skid frame only without piping                                     |          |  |

### Structure Assembly Materials

|          |  |
|----------|--|
| <b>A</b> | Chemical resistant powder coated aluminum stand with 316SS mounting pads |
|----------|--|

### Chemical Feed Flow Meter

|          |   |
|----------|---|
| <b>A</b> | MS612 chemical feed flow meter with meter mount display, 10-5,000 ml/min (0.158 - 79.2 GPH)   |
| <b>B</b> | MS622 chemical feed flow meter with meter mount display, 100-10,000 ml/min (1.58 - 158.5 GPH) |
| <b>X</b> | None  |

| Calibration Cylinder |                  | PVC      | Glass    |
|----------------------|------------------|----------|----------|
| <b>A</b>             | 64 GPH (2000 ml) | <b>A</b> |          |
| <b>B</b>             | 32 GPH (1000 ml) | <b>B</b> | <b>P</b> |
| <b>C</b>             | 16 GPH (500 ml)  | <b>C</b> | <b>Q</b> |
| <b>D</b>             | 8 GPH (250 ml)   | <b>D</b> | <b>R</b> |
| <b>E</b>             | 3 GPH (100 ml)   | <b>E</b> | <b>S</b> |
| <b>X</b>             | None             |          |          |

### Pulsation Dampener

|          |  |          |      |
|----------|--|----------|------|
| <b>A</b> | 10 cubic inch, CPVC body, PTFE diaphragm | <b>X</b> | NONE |
|----------|--|----------|------|

### Pressure Gauge w/Guard

|          |                               |          |                              |
|----------|-------------------------------|----------|------------------------------|
| <b>A</b> | 200 PSI gauge, PTFE diaphragm | <b>C</b> | 30 PSI gauge, PTFE diaphragm |
| <b>B</b> | 100 PSI gauge, PTFE diaphragm | <b>X</b> | None                         |

### Miscellaneous Options (leave blank if not specified)

|          |  |
|----------|--|
| <b>A</b> | Isolation ball shut-off valves at check valves                                   |
| <b>1</b> | Install a specific pump model on the skid and perform pressure and fluid testing |

**CFS-1** **A** **A** - **A** **A** **A** **A** - **A** **Sample Model Number**

**NOTE:** All skid systems ship with the following in/out union connections: 1/2" PVC female NPT, 1/2" PVC slip glue. Pump sold separately. When ordering pumps for skids, pump head orientation is standard LEFT facing only.