Chemline Plastics celebrates 50 years of success providing superior flow control solutions. We serve many markets - industrial, municipal, and commercial. Applications include corrosive chemicals, high purity fluids and water.

Products
We market and distribute a large range of solid thermoplastic valves, controls, flow meters, pumps, tubing systems, specialty piping systems, pipe welding equipment, pipe fittings, and filtration and irrigation products. We also fabricate manifolds and pipe spools. Our valve line in particular is extensive in the number of types, size range, choice of materials and actuation and accessory options.

Materials
Our products are made of PVC, CPVC, PP, PP-RCT, PDCPD, PVDF, ECTFE, HDPE, PFA, PTFE, FRP and other materials.

Background
Founded in 1968, we were a pioneer in our market and have maintained our leadership position. We started by offering plastic valves as a long term cost effective corrosion resistant alternative to metal. A big part of our efforts continues to be solution sales.
Sales Channels
Chemline sells through a network of stocking distributors coast to coast. We partner with them to cover end users and contractors. We also deal with the larger Original Equipment Manufacturers (OEM’s) and EPC’s (Engineering, Procurement, and Construction) companies.

Support
Our full time Territory Managers cover all Canada, offering training and sales support with our distribution partners. Product application assistance is also available from our inside technical and engineering staff. Our head office/warehouse is located in the Toronto suburb of Thornhill where we carry a large inventory.

Market Sectors
- Municipal and Industrial Waste and Water Treatment
- Landfills
- Chemical Production and Distribution
- Metallurgical Processing (mining)
- Metal Surface Finishing
- Pulp and Paper Mills
- High Purity water and chemicals for microelectronics
- High Purity water for pharmaceutical and labs
- Aquatic Life Support (aquariums)
- Aquaculture, Fisheries
- Swimming Pools, Fountains
- Irrigation, Fertigation
- HVAC
Celebrating over 50 Years of Flow Control Solutions

- Municipal and Industrial Waste & Water Treatment
- Landfill Methane and Leachate Collection
- Soil Remediation
- Environmental Monitoring

- Chemicals & Fertilizers
- Pulp & Paper
- Mining & Refining
- Surface Finishing
- Oil & Gas
- Food, Dairy, Breweries, Cosmetics
- Fish & Meat Processing, Rendering

8” PVC gate valves with stem extensions for a landfill leachate collection system

Butterfly and diaphragm valves for sulphuric acid in a copper and zinc electrowinning plant

Installation of blue PE piping for compressed air in a copper mine operation

PVDF pipe, fittings and valves for sulphuric acid in a lithium processing plant

Butterfly and diaphragm valves for sulphuric acid in a copper and zinc electrowinning plant

ECTFE (Halar®) pipe and fittings for sodium hypochlorite piping system in a sewage treatment plant

ChemFlare™ System (valves, fittings, tubing) for sodium hypochlorite in a water treatment plant

18” Polypropylene butterfly valves with stainless steel stem extensions for a landfill methane collection system

16” Polypropylene butterfly valves with chainwheel operators on a weak acid system in a sulphuric acid plant

Installation of blue PE piping for compressed air in a copper mine operation

8” PVDF diaphragm valve for hot hydrochloric acid in a steel pickling line

8” PVDF diaphragm valve for hot hydrochloric acid in a steel pickling line
- Aquariums
- Fisheries Laboratories
- Aquaculture
- Fish Hatcheries

- Water & Chemicals
  - Hospitals & Universities
  - Government Research Laboratories
  - Semiconductor & Photovoltaic
  - Pharmaceuticals

- Water
  - Pools, Spas & Fountains
  - Municipal Water Supply
  - Greenhouse & Turf Irrigation

- Other
  - Tank Trucks
  - Chemical Storage & Distribution
  - Ports, Railways
  - Ship Building
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**Ball Valves**

- Chemline ball valves come in a wide selection of body materials, end connections, and actuation options.
- Sizes are up to 6" full port.
- Metering and Proportional valves offer linear flow control.
- Cavity Free model is designed for handling solids.

**Butterfly Valves**

- Body style is normally Wafer. Lug body is available.
- Narrow Body models can replace metal butterfly valves in-line.
- ChemValve butterflies are fluoropolymer-lined for severe chemical services.
- FRP dampers are for large diameter ducting systems.

**Diaphragm Valves**

- AV Series – Type 14, 15 and 72 valves stand up to heavy industrial applications.
- 700 Series – 1/2" to 4", either manual or pneumatically actuated – modular design – compact dimensions – designed for water treatment and original equipment manufacturers (OEM's).
### Valves

#### Check Valves
- **Ball Check & Foot Valves**: 1/2" to 4"
- **Swing Check**: 3/4" to 8"
- **WE Series Wafer**: 2-1/2" to 86"
- **WP Series Wafer**: 8" to 24"
- **PW Series Wafer**: 3" to 12"

#### Gate & Globe Valves
- **Gate**: 1-1/2" to 14"
- **Globe**: 1/2" to 4"

#### Lab Valves
- **PVC Lab Cocks**: 1/4"
- **PVDF Lab Cocks**: 1/4"
- **Needle Valves**: 1/4" to 1/2"
- **Goosenecks**: 3/8"

#### Strainers & Gaskets
- **Y-Sediment Strainers**: 1/2" to 4"
- **Low Torque Flange Gaskets**: 1/2" to 12"

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**XLLine**

- **XL Line** offers value and competitive pricing for non-critical industrial applications
- **PVC, PP-R**

- **XLT True Union Ball**: 1/2" to 4"
- **XW True Union Water Ball**: 1/2" to 4"
- **ICE Freeze-Proof Ball**: 1/2" to 4"
- **XLC Check**: 1/2" to 3"
- **XLF Foot**: 1/2" to 3"
- **XLB Butterfly**: 2-1/2" to 8"
- **XCB Pool Butterfly**: 3" to 8"
Actuation

Electric Actuation

ERS Series on a Type 21 Ball Valve
E Series on an XA Ball Valve
E Series on a SM2 Ball Valve
V Series on a Type 21 Ball Valve
V Series on a Type 57P Butterfly Valve

Accessories for Electric Actuators

Local Control Station
- Permits local or remote operation
- Local and remote feedback of valve position
- Override feedback

Other accessories available
- Heater/Thermostats
- Cycle Length Control
- 4-20 mA Positioners
- 4-20 mA Retransmit
- Battery Fail Safe
- 2-Wire Control Relay
- Extra Limit Switches
- Feedback Potentiometer
- 3 Position/Centre-off
- ASI-Bus

Pneumatic Actuation

PA & PG Series Coated Aluminum on a Type 21 Ball Valve
PA Series Coated Aluminum on an XA Ball Valve
PP Series PAG Plastic on a Type 57P Butterfly Valve
P3 Series 316 Stainless Steel on a Type 21 Ball Valve

Accessories for Pneumatic Actuators

Limit Switches
Positioners
Declutchable Gear Overrides
Solenoid Valves

Valve Actuation Service
- Chemline can actuate metal valves free issued by customers
for Ball Valves

**Stem Extensions**
- For ball, butterfly, diaphragm and gate valves
- Different materials and lengths are available
- Several designs:
  - with no housing for indoors
  - with waterproofed PVC housing for indoors or outdoors
  - with stainless steel housing for buried or actuated services
  - choice or handle, lever, gear operator or municipal operating nut

**Vented Ball**
for sodium hypochlorite services

**Municipal Operating Nuts**

**Valve Tags**
Plastic or Stainless Steel

**Handle Lockout with Hasp**

**Coloured Handles**

**Manual Limit Switches**

**Gear Operators**

**Chain Wheel Operators**

**Stem Extensions**

for Butterfly Valves

**Chain Wheel Operators**
- For ball, butterfly, diaphragm and gate valves
- For overhead operation, with 7” of chain drop
- Cast iron standard, stainless steel is also available
- Requires the use of gear operator, sold separately

**Handle Lockout with Hasp**

**Chain Wheel Operators**

**Gear Operator and Municipal Operating Nut**

**Limit Switches**

**Stem Extensions**

for Gate & Diaphragm Valves

**Low Torque Flange Gaskets**
1/2” – 12”

**Valve Flange Splash Guards**

**PTFE Coated ChemBolts**

**Diaphragm Valve Handwheel Lockouts**

**Gate Valve with Municipal Operating Nut**

**Gate Valve with Chain Wheel Operator**

**Gate Valve with Stem Extension**

**Gate Valve with Stem Extension**

**TIG Welding for fabrication of shaft extensions**

Other Options
- Silicone free valves
- Lubricant free valves
- Alternate material o-rings and seats
- CRN tag plates
Regulation & Controls

Regulating Valves
- Leakproof True Union ends
- Reliable and repeatable operation
- Designed for low hysteresis
- SB Series Back Pressure/Relief valves are designed for long maintenance-free life. They are designed for superior performance in dosing systems.
- SR50 Series Pressure Regulating (Reducing) Valves are sensitive and provides precise control. One application is to protect filters from damaging pressure surges.

Characterized Control Valves
- Single seat globe type with a selection of linear or equal percentage seats and plugs
- High rangeability
- PTFE bellows provide precise and sensitive control
- Solid PVC, PP, PVDF or PTFE
- 1/2” to 4”

Controls
Ball Float Valves
- Both economical and performance models

Air Release Valves
- For any pressure instrument

Gauge Isolators
- For any pressure instrument

Injectors
- For sodium hypochlorite
- Precipitate build-up at injection points can be removed while in service
- PVC, 1/2” & 3/4”

Chemical Feed Accessories
Calibration Columns
- All PVC construction
- Up to 20,000 ml capacity
- For accurate calibration of metering pumps
- 1/2”, 1” & 2”

ChemLance Corporation Stops
- For sodium hypochlorite
- Precipitate build-up at injection points can be removed while in service
- PVC, 1/2” & 3/4”
Flow Meters

Flow Sensors

- Available in CPVC, PVDF, 316L Stainless Steel
- NEMA 6.6P (IP68) sensors are available for outdoor or submersible applications
- High Accuracy: ± 0.75% of full scale with standard K factor
- Excellent low flow measurement. Accurately measures flow velocities down to 0.15 m/s (0.5 to 25 ft./sec.)
- ECTFE (Halar®) rotor, ceramic shaft and bearings: Offers long service life on corrosive industrial services

Instruments

- Modular Design: 1/4” DIN size instruments can be mounted 3 ways: directly to sensor, remotely to panel or wall mounted

Installation Fittings

- Sensor installation fittings are available for all sizes and types of pipes

Tees:
1/2” to 1-1/2”
Bolt-On Saddles:
2” to 12”
Metal Strap-On Saddles:
3” to 18”
Weld-On Adaptors:
1-1/2” to 24”
Analytical Instruments

- The ChemX3 line includes pH, ORP and conductivity/ resistivity sensors and monitor/transmitters

Variable Area Flow Meters

- Standard dimensions
- Flow tubes are interchangeable with +Georg Fischer+
- For water, chemicals or air, maximum 220 USGPM (water)
- Limit switches and flow transmitters are available

Pumps

- Horizontal Centrifugal or Vertical Centrifugal Sump
- Extreme corrosion resistance
- PP or PVDF construction
- Up to very high flow rates
- Chemline will quote a pump suitable for your specific service

Analytical Sensors & Instruments
A complete range of analytical sensors and state-of-the-art monitor/ transmitters are now available – also sensor installation fittings for pipes.

Choice of 4 Tube Materials for Many Applications:

- Clear PVC: for water or chemicals up to 60ºC (140ºF); high chemical resistance at low cost
- Polyamide (PA): for water or air up to 75ºC (167ºF); high impact strength and optical clarity
- Polysulfone (PSU): chemicals and gases up to 100ºC (212ºF); high impact strength and good chemical resistance
- PVDF: for chemicals and ultrapure fluids up to 110ºC (230ºF); high impact strength and excellent chemical resistance.

Variable Area Flow Meters

3/8” to 2-1/2”

Flow Meters

- 3/8” to 2-1/2”
- Standard dimensions
- Flow tubes are interchangeable with +Georg Fischer+
- For water, chemicals or air, maximum 220 USGPM (water)
- Limit switches and flow transmitters are available

Flow Transmitters

4 to 20 mA output

Limit Switches

For high and low flow alarms

Choice of 4 Tube Materials for Many Applications:

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**Fluoropolymer Tubing Systems**

**PFA Tube & Fittings**

**Tubing**
- PFA (perfluoroalkoxy) tubing is the choice for applications involving extreme chemical resistance at higher temperatures
- PFA is the highest grade of fluoropolymer tubing and has excellent mechanical properties
- Tubing sizes are 1/8” to 1”

**Fittings**
- Fittings are moulded from virgin high purity PFA or PVDF resin providing chemical resistance and ultra-high purity
- Fitting sizes are 1/4” to 1-1/4” in all popular configurations

**Flaring Machines & Tools**

- Manual flare tools
- Torque wrenches
- Semi automatic bench top Flaring Machines

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Connectors

Unions

Union Reducers

Adaptors

Elbows

Sweeps

Union Tees

Reducing Tees

Branch Tees

Transitions

TruFLARE™ bench top flaring machine for tubes 1/4” to 1”

Universal Flare Tool

Hot Air Gun

Cold Flaring Tool

Single Size Flare Tool

Adjustable Grip Wrench

TruFASTEN™ Torque Wrenches

Mobile TruFLARE™ bench machine for flaring tubes 1/4” to 1”
ChemFlare™ Flexible Leak-Free Solutions

Single Wall Systems

- Chemline’s ChemFlare™ system is the long term leak-free alternative to standard PVC solvent welded piping on sodium hypochlorite chemical feed systems. Valves, controls and pumps with ChemFlare™ ends connect to ChemFlare™ fittings and PFA tubing.
- Systems are easy to install
- Mechanical connections
- No welding or curing waiting time, may be pressure tested immediately
- True Union valve sizes: 1/2", 3/4" & 1"
- Tubing sizes: 1/4", 3/8", 1/2", 3/4" & 1"

Do you have leaking chemicals? Consider a retrofit. Call Chemline to arrange a site visit.

Dual Containment Systems

For maximum safety level of chemical containment

Tubing

- The carrier (inner) tube of PFA is the primary chemical line. The containment (outer) tube of FEP is translucent, permitting good visibility of the carrier tube.

Specialty Fittings

- Dripleg Fittings
- Dual containment tubing assemblies
- Dual containment splitter boxes
- Junction Boxes
Fusion Welded Piping Systems

**Polypropylene**
for: Pure Water
Chemicals
Slurries

- **applications**
  - Aggressive industrial chemicals up to 90°C (194°F)
  - Slurries
  - Universities and hospitals
  - Deionized water systems
  - Reverse osmosis water systems
  - Food industry

- **size range (ODmm)**
  - pipe: 12 – 1,400
  - butt fusion fittings: 20 – 630
  - socket fusion fittings: 20 – 110
  - electro fusion fittings: 20 – 710
  - flanges: 20 – 630

- **temp. range °C (°F)**
  - PP-H: –5 to 90°C (23 to 194°F)
  - PP-R: –20 to 90°C (–4 to 194°F)

**Unpigmented Polypropylene**
for: USP Purified Water
Food

- **applications**
  - Universities and Hospitals
  - Deionized water systems
  - Reverse osmosis water systems
  - USP purified water systems in pharmaceutical plants
  - Electronics industry chemical distribution systems
  - Semiconductor manufacturing drain systems

- **size range (ODmm)**
  - pipe: 20 – 110
  - butt fusion fittings: 20 – 110
  - socket fusion fittings: 20 – 63
  - flanges: 20 – 110

- **temp. range °C (°F)**
  - –20 to 90°C (–4 to 194°F)

**PVDF**
for: Purified Water for Semiconductors
Strong Acids
Organic Chemicals
Abrasive Slurries

- **applications**
  - Chemical process piping
  - Concentrated acids
  - Organic chemicals
  - Ultrapure water for semiconductor manufacturing
  - Food industry

- **size range (ODmm)**
  - pipe: 16 – 400
  - butt fusion fittings: 20 – 315
  - socket fusion fittings: 20 – 110
  - flanges: 20 – 315

- **temp. range °C (°F)**
  - –40 to 121°C (–40 to 250°F)

**ECTFE (Halar®)**
for: Sodium Hypochlorite
Hot Caustic Solutions
Purified Water for Semiconductors

- **applications**
  - Best overall chemical resistance
  - Excellent resistance to mineral and oxidizing acids like PVDF but recommended for chlorine and hot alkalai solutions where PVDF is not
  - Chemical feed systems
  - High-purity water systems
  - Chemical process piping

- **size range (ODmm)**
  - pipe: 20 – 110
  - butt fusion fittings*: 20 – 110
  - valves: 20 – 63
  - flanges: 20 – 110

- **temp. range °C (°F)**
  - –76 to 150°C (–105 to 302°F),
  - short term exposure to 170°C (338°F)

* size range depends on the specific fitting

**Advanced PE**
for: Sodium Hypochlorite

- **applications**
  - Sodium hypochlorite services
  - Chemical feed systems
  - Process piping

- **size range (ODmm)**
  - pipe: 20 – 315
  - butt fusion fittings: 32 – 315
  - socket fusion fittings: 20 – 25
  - valves: 20 – 110

- **temp. range °C (°F)**
  - –50 to 60°C (–58 to 140°F)

- **size range (ODmm)**
  - pipe: 20 – 110
  - butt fusion fittings: 20 – 110
  - socket fusion fittings: 20 – 63
  - flanges: 20 – 110

- **temp. range °C (°F)**
  - –50 to 60°C (–58 to 140°F)
Fusion Welded Piping Systems

**Blue PE**
for: Compressed Air

- **applications**
  - Food
  - Packaging
  - Mining
  - Engineering
  - Automotive
  - Transportation
  - Construction
  - Laboratories
  - Maintenance workshops
  - Other manufacturing and processing operations
  - Semiconductor

- **size range (ODmm)**
  - pipe: 20 – 315
  - butt fusion fittings: 125 – 315
  - socket fusion fittings: 20 – 110
  - electro fusion fittings: 20 – 110
  - valves: 20 – 110
  - flanges: 20 – 315

- **temp. range °C (°F)**
  - -30 to 60°C (-32 to 140°F)

**PP-RCT**
for: Drinking Water HVAC

- **applications**
  - Potable water
  - HVAC, hot and cold water
  - Hydronics
  - Commercial buildings
  - Universities and hospitals

- **size range (ODmm)**
  - pipe: 20 – 500
  - butt fusion fittings: 160 – 500
  - socket fusion fittings: 20 – 125
  - electro fusion fittings: 20 – 450
  - valves: 20 – 63

- **temp. range °C (°F)**
  - -20 to 90°C (-4 to 194°F)

**NoFire™ PP-RCT**
for: Fire Attenuation Sprinkler Systems

- **applications**
  - Fire attenuation wet pipe sprinkler systems
  - Commercial buildings
  - Residential apartments, houses

- **size range (ODmm)**
  - pipe: 20 – 160
  - socket fusion fittings: 20 – 160
  - grooved pipe fittings: 50 – 160
  - threaded fittings: 20 – 110
  - valves: 20 – 160

- **temp. range °C (°F)**
  - -20 to 95°C (-4 to 203°F)

**Dual Containment**
for: “Maximum Safety” Chemical Containment

- **applications**
  - Often used for piping hazardous fluids underground or over a walkway in a plant
  - Municipal water and wastewater treatment plant chemical lines
  - Steel mills and plating shops
  - Industrial waste treatment
  - Bulk storage of chemicals
  - Sulfuric, nitric, and hydrofluoric acids for wet stations in semiconductor plants
  - Sewage systems for pharmaceutical wastewater

- **size range (ODmm)**
  - pipe: 90/32 – 315/250
  - butt fusion fittings: 90/32 – 315/250
  - dog bones: 90/32 – 315/250
  - support discs/spider clips: 90/32 – 315/250

- **temp. range °C (°F)**
  - refer to individual material for specific operating temperatures
Pipe Welding Machines

- For PP, PP-R, PE, PVDF, PFA or ECTFE (Halar®) pipe, fittings and valve ends
- Butt or socket fusion models
- Available for rent or purchase
- Butt welding machines are contact heating element or non-contact infrared (IR) types
- Field or shop fabrication machines available for all pipe size ranges
- T.S.S.A. Approved Welding Procedure

Welding Tech

Pipe Welding Machines

- Maxiplast Butt Fusion Welder with contact heating element
  - PE, PP, PP-RCT, PVDF, ECTFE
- W351W Socket Fusion Welder with contact heating element
  - PE, PP, PP-RCT, PVDF, PE
- JIG Tool for Handheld
  - PE, PP, PP-RCT, PVDF, PE
- W Series Hydraulic Butt Fusion Welder with contact heating element
  - PE, PP, PP-RCT, PVDF, ECTFE
- SPA 600 Weld Log Recorder for 4900
- CNC 3.0 Control Unit for 4900
- SP63M Mobile Butt Fusion Welder with non-contact (Infrared) heating element
  - PE, PP, UPP, PVDF, ECTFE, PP-RCT
- SP110.S10 Butt Fusion Welder with non-contact (Infrared) heating element
  - PE, PP, UPP, PP-RCT, PVDF, ECTFE, PFA
- High Performance Electro Fusion Welder
  - PE, PP, PP-RCT, PVDF
- Contact Socket Fusion Handheld Welder
  - PE, PP, PP-RCT, PVDF, PE
- SP250S Butt Fusion Welder with non-contact (Infrared) heating element
  - PP, UPP, PP-RCT, PVDF, ECTFE

Pipe Welding Tools

- Electric Miniplaner
- Adjustable Rollerstand
- Pipe Chamfer
- Pipe Peeler
- 315 Rotation Circular Saw
- Outside Debeader
- Hot Air Fusion Welder for field or shop – PVC, PE, PP, PVDF
### Grooved End Piping System
- Flexible pipe couplings & fittings for connecting grooved pipe
- 1-1/2” to 6”
- PAG joint pieces
- EPDM gaskets, FPM (Viton®) also available
- 304 SS fasteners
- PP, PE, PP-R fittings
- PP AlfaRapid™ ball valve, 1-1/2” to 4”
- Maximum pressure of Couplings/Fittings/Valves:
  - 1-1/2” to 2-1/2”: 230 psi
  - 3” to 4”: 150 psi
  - 6”: 90 psi
- Working temperature: 
  -10 to 95°C (14 to 203°F)

### Grooving Tool
- Groove your PVC/CPVC Schedule 80 or HDPE SDR 11 pipe to connect AlfaRapid™ fittings and valves

### PP-R Pipe Fittings & Valves
- Pipe Unions Socket & butt weld PP-R
- Grooved End Adaptors PP-R
- Rapid Union Ball Valves PP-R
- Compression End Ball Valves PP-R
- Compact Ball Valves PP-R

### Pipe Saddles
- PP with 304 SS reinforcing ring and hardware
- Pipe sizes: 1-1/2” to 6”
- FNPT branch: 1/2” to 2”
- Maximum working pressure: 235 psi

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<td>3” on PE pipe, 4” on PVC pipe</td>
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Thermoplastic Manifolds

Chemline thermoplastic manifolds are fabricated using butt fusion, not hot air hand welding or socket fusion. Saddles are welded by a CNC machine. The resulting product is stronger, more reliable and cost effective. Dimensional tolerances are tighter also.

### CNC Welding Technology offers:
- Exact weld temperatures, pressures and times are controlled
- Better weld quality and resulting reliability

### Dimensions are controlled exactly
- Precise dimensional tolerances for spigot spacing, orientation and offsets
- Welding parameters are recorded and downloadable (heat, pressure, operation times for heat soak, cooling, etc.)
- Manufacturing traceability and quality assurance

### Repeatable manufacturing process
- An identical replacement manifold of the same quality can be made years later

### Other Features:
- Pressure tested
  - For quality assurance
- Unlimited branch options
  - Spigot, threaded, flanged, hose barbs, ends for valves, installation adaptors for flow meters, multiple branch rows and different port sizes

### Materials/Dimensions
- **PVC, CPVC, PE, PP, PP-R, PP-RCT, UPP, PVDF, ECTFE (Halar®)**
- Pipe sizes: 3” to 12” (90 to 280mm)
- Branch sizes: 1/2” to 4” (20 to 110mm)*
- 1-to-3 rule, the branch size should not be bigger than 1/3 of the manifold pipe size

### Applications
- Water treatment systems
- Ice rinks
- Hydro metallurgical processing plants

### Approvals
- Available in NSF-61 approved material for water purification equipment or NSF-pw approved material for potable water use
- Canadian Food Inspection Agency approved for use with food products (PVDF)

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1. PE single branch spigots
2. PE dual branch spigots
3. PVC single branch spigots
4. PE grooved end spigots with AlfaRapid™ caps and pipe clamps
5. CNC saddle welding
6. CPVC single branch spigots
7. Manifold pressure testing
Shop & Field Pipe Fabrication

Shop Piping Fabrication
- Panels
- Manifolds
1. PVDF butt fusion pipe skid
2. PP fabricated pipe fittings
3. PP pipe butt fusion procedure

Panel Refurbishment
- Shop fabrication
- Field fabrication
1. Shop fabricated PVDF butt fusion skid pre-fabrication
2. Field fabricated PFA fabricated ChemFlare™ system fittings

Field Piping Fabrication
- On site piping system installation services
1. Dual Containment PP pipe on-site installation
2. PP pipe system installed
3. Dual Containment PE/ECTFE (Halar®) welding
4. PP pipe butt weld prep
5. Blue PE socket fusion pipe welding
6. Blue PE socket fusion pipe welding
**Screen Filters**

- Y-Pattern and cartridge style models, PP bodies
- Polyester or SS mesh screens available: 120 mesh (135 micron)
- Maximum pressure: 116 psi
- Working temperature of polyester mesh: 5 to 60°C (41 to 140°F)
- Working temperature of SS mesh: 5 to 80°C (41 to 176°F)

**Disc Filters**

- 3 models available: Y-Pattern, cartridge and self-cleaning cartridge styles
- PE filtering discs
- 75 mesh (200 micron)
- 120 mesh (130 micron)
- 150 mesh (100 micron)
- Working temperature: -10 to 95°C (14 to 203°F)
- Maximum pressure standard models: 116 psi

**Hydro Cyclones**

- For sand separation
- PPG bodies
- 1”, 2” & 3”, MNPT & AlfaRapid™ grooved ends
- Maximum pressure: 72.5 psi
- Working temperature: -20 to 95°C (-4 to 203°F)
- Flow rate: 13 to 25 USGPM
- Filtering capacity: 70 micron
Irrigation

Pipe Fittings
- Compression Fittings
- AlfaRapid™ Grooved End Fittings
- AlfaRapid™ Flexible Pipe Couplings
- Pipe Saddles

BluLine PP Compression Fittings 20 – 110mm
AlfaRapid™ Flexible Pipe Couplings 1-1/2” – 6”
AlfaRapid™ Grooved End Fittings 1-1/2” – 4”
Bolt-on Saddles ANSI, 1-1/2” – 6”

Ball Valves, Fertigation
- PPG valves for water and fertilizer
- Injectors, 1/4” x 1/2” up to 2” x 1”
- Optional supply kit: suction control valve and inlet filter

Compact PPG Ball Valves 1/2” – 4” Threaded
Compression End PP Globe Valves 25mm, 32mm
Compact PP Ball Valves 20mm – 110mm Compression Ends
Injectors
Fertigation Systems

Irrigation Fittings
Barbed Tape Drip Line Micro Lay Flat

Cylinder Valves
Barbed Tape Drip Line Micro Threaded

Drippers & Sprinklers
Alfa JO Dripers Alfa MIR Self Regulating Dripers 180° – 360° Sprinklers Upside-Down Rotating Sprinklers

Turf Irrigation
Pop Up Sprinklers Valve Boxes with valve Electric Valves