



ProFlow

Division of Burt Process Equipment



LIQUID METERING SYSTEMS

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When you need consistent, accurate liquid metering, ProFlow can deliver the right solution.

Industrial processes have a wide range of unique challenges, all of which are driven by the need to produce the right amount of product, at the right quality, to meet demand. Precise, reliable metering is the keystone of many processes. Unreliable metering can force a process to a halt.

ProFlow understands the importance that liquid metering plays in your processes. Our team understands that no two operations are identical, and that even a standard solution needs to be customized to meet your unique challenges. Our team of engineers work with you to understand your goals, and create a metering skid that will fit your needs, with the right pumps, packing, flowmeters, and other components.

- ✓ Ensure asset reliability
- ✓ Reduce maintenance requirements
- ✓ Deliver on-spec production
- ✓ Avoid unplanned downtime

Three Options, Fully Customizable to Meet Your Unique Needs

Different processes in various industries have differing requirements, including chemical compatibility, shear, viscosity, performance, and durability. ProFlow's metering skids are available in three models that are fully customizable.



Simplex Metering Skid (SMS)

With a single pump, the SMS meters an accurate amount of fluid to a process or tank. This system is ideal for non-critical applications that need accurate metering, but don't require redundancy.



Duplex Metering Skid (DMS)

When process interruptions can't happen, the DMS skids, with one primary pump and one backup inline spare pump, are an ideal choice. If one pump fails, the backup pump can be activated with a simple push of a button.



Triplex Metering Skid (TMS)

With two primary pumps, plus one backup inline spare pump, TMS skids are used for larger applications that include dual pumps, with the third pump offering redundancy to ensure uninterrupted operation.





Pump Customization to Support Your Process Requirements














Metering systems have a wide range of options when it comes to the type of pumps that are used. ProFlow's standard choice is the LiquiFlo gear pumps, which handle a large range of flow rates at the same pressure. These pumps can handle a range of 10:1 without any problems. ProFlow can also incorporate pumps that can handle corrosive or challenging fluids, like sulfuric acid, sodium hydroxide, and hydrochloric acid.

ProFlow's designs can accommodate challenging applications that require high temperatures, high pressures, vacuum conditions, mild abrasives, dry running conditions, or even liquids that crystallize. You can also choose the type of seal—single magnetic seal, double magnetic seal, or mag drive design.



Progressive Cavity Triplex Metering Skid (TMS)

Metering Skids Are Used in Many Types of Industrial Applications

- | | | |
|---|---|--|
|  Adhesives & Coatings |  Metal Finishing |  Power Plants & Utilities |
|  Chemical Plants |  Municipalities |  Pulp & Paper |
|  Fertilizers |  Personal/Household Products |  Refineries |
|  Food & Beverage |  Pesticides |  Textiles |
|  Iron & Steel Mills | | |

Services and Capabilities

System Design, Fabrication, & Assembly

- Component selection
- Control panel design

Process Control

- Operator interface terminal
- Integration of PLC with existing DCS
- Data logging
- Closed loop control

AutoCAD® Design Programs

- AutoDesk® Inventor software
- Electrical design software
- P&ID design software

Full System Documentation

- Drawings
- PLC/HMI programs
- Parts list
- Installation, operation, & maintenance manual
- Weld maps
- Test documentation

Testing Facilities

- Pressure and flow testing equipment
- Water supply loop
- Multi-voltage transformer/ power source
- Steam boiler for testing

Full System Support

- Start-up assistance
- Engineer on call 24/7
- Remote system monitoring/ adjustment via modem

Fabrication Expertise

- ASME-certified welding of carbon and stainless steels, and various alloys to ASME B31.1 and B31.3 standards
- ASME-certified U and R pressure vessel stamps
- Orbital welding

The ProFlow Difference

ProFlow's turnkey solutions are value-driven. Our true differentiator lies in our ability to control and manage all aspects of a project. Our customers have a requirement, and we create the best solution to meet their specific process requirements and budget. Our highly skilled team – including engineering, fabrication, assembly, and welding experts – manages your entire project, from concept to operation.

Engineering – Our project engineers have the latest in CAD programs for preparing P&IDs, 3-D modeling of piping and structural layouts, and mechanical, electrical, and control panel designs.

Quality – We follow very specific quality procedures to comply with our certifications, including ISO 9001, ASME U and R stamps for the fabrication and repair of pressure vessels, and ASME certification for TIG and MIG welding of carbon steel, stainless steel, and various alloys.

Documentation – ProFlow delivers detailed drawings, 3D solid models, PLC programming documentation, parts lists, and field-proven operating instructions to ensure installation, startup, operation, and maintenance of the system meets expectations.

Service and Support – In addition to our field service group, who can assist at start-ups and field repairs, our project engineers are available 24 hours a day, 7 days a week through remote diagnostics to troubleshoot and resolve any technical problems.

