

# Water & Wastewater

Advancing Water & Wastewater Solutions for a Sustainable Future









# ITT's Capabilities & Technology

ITT Inc. redefines the future of water and wastewater management through precision-engineered technologies that deliver performance, reliability, and sustainability. Our trusted brands – Goulds Pumps, Engineered Valves, and VIDAR – work together to provide comprehensive solutions across the entire water cycle.

## **Goulds Pumps**

With over 175 years of innovation, Goulds Pumps is a global leader in fluid handling. From raw water intake to advanced treatment and flood control, our pumps are engineered for life – delivering efficiency, durability, and reduced life cycle costs in even the most demanding environments.

### **Engineered Valves**

Designed for precision and reliability, our valve solutions ensure safe, efficient flow control in critical water and wastewater processes. Whether managing corrosive chemicals or high-pressure systems, ITT's valves are built to perform under pressure.

#### **VIDAR**

The future of motor technology is here. VIDAR is a revolutionary, embedded variable-speed motor that simplifies installation, boosts energy efficiency, and enhances system intelligence – all without the need for external VFDs or complex wiring.

Together, these technologies form a powerful ecosystem that supports municipalities, utilities, and industries in achieving their water management goals – sustainably and smartly.



## At ITT, We Move Water With Purpose

Whether it's safeguarding communities from floods, delivering clean drinking water, or treating wastewater for reuse, ITT Inc. partners with municipalities, utilities, and industries to solve the world's most critical water challenges. Through our trusted brands – Goulds Pumps, Engineered Valves, and VIDAR – we provide smart, sustainable, and reliable solutions that keep water flowing where and when it's needed most.

#### **Engineering:**

Our global engineering teams design solutions tailored to the complex challenges of water and wastewater systems. From pump hydraulics to valve actuation and smart motor integration, ITT engineers develop products that optimize performance, reduce energy use, and extend equipment life.

#### Manufacturing:

ITT leverages state-of-the-art manufacturing processes, including lean production, precision machining, and automated assembly. These facilities produce a wide range of pumps, valves, and motors that meet the highest standards of durability and efficiency

#### **Research & Development:**

At ITT, research and development go beyond the lab – we turn real-world challenges into engineered solutions. Our R&D teams collaborate closely with customers, field technicians, and industry experts to develop technologies that solve today's toughest water and wastewater problems. Whether it's advancing pump hydraulics, enhancing valve materials, or integrating smart motor intelligence, our innovations are driven by data, tested in real conditions, and built for long-term performance.

#### **Quality Assurance:**

ITT's commitment to quality is embedded in every step – from design validation and materials testing to final product inspection. Our quality systems ensure compliance with global standards and customer specifications, delivering peace of mind in mission-critical water and wastewater applications.



## Goulds Pumps

With a proven performance across the Water & Wastewater life cycle Goulds Pumps delivers reliable and efficient pumping solutions across every stage of the water cycle. Including:

**Raw Water & Water Transmission:** Robust, high-capacity pumps designed to move large volumes of water from natural sources to treatment facilities with minimal energy loss.

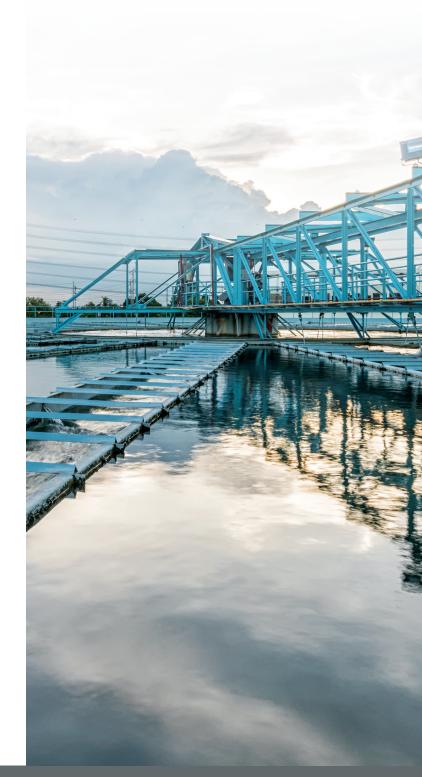
**Water Treatment Processes:** Precision-engineered pumps that ensure consistent flow and pressure for filtration, chemical dosing, and disinfection systems.

**Reverse Osmosis & Desalination:** Corrosion-resistant, high-pressure pumps built to handle the rigors of saltwater conversion and advanced purification technologies.

**Wastewater Treatment:** Durable and efficient pumps for handling sludge, effluent, and abrasive materials in municipal and industrial treatment plants.

**Flood Control:** High-performance pumps engineered for rapid response and large-scale water movement to protect communities and infrastructure.

From intake to discharge, Goulds Pumps provides the power and reliability needed to keep water moving safely, efficiently, and sustainably.





## Goulds Pumps Products





#### 3196 i-FRAME™ ANSI Process

This is the original ANSI pump that has become the standard of the industry. Over 1,000,000 installations attest to the remarkable performance of the 3196. Available with a wide range of features for handling difficult applications. i-FRAME® power ends maximize reliability and MTBF (Mean Time Between Failure).

- Capacity: 7,000 GPM | 1364 m<sup>3</sup>/h
- Head: 730 feet | 223 m
- Temperature: 700°F | 371°C
- Pressure: 375 PSIG | 26 bar



#### 3298

#### Magnetic Drive ANSI Lined

Designed to handle moderate to severe corrosives with or without solids. Sealless design provides effective alternative to pumps with mechanical seal problems. Thick linings for extended pump life.

- Capacity: 1,200 GPM | 270 m<sup>3</sup>/h
- Head: 500 feet | 162 m
- Temperature: 250°F | 121°C
- Pressure: 225 PSIG | 16 bar



#### 3410

#### **Small Capacity Double Suction**

Double suction pump designed for a wide range of industrial, municipal, and marine services.

- Capacity: 8,000 GPM | 1817 m<sup>3</sup>/h
- Head: 570 feet | 174 m
- Temperature: 350° F | 176° C
- Pressure: 250 PSIG | 1724 kPa



#### 3430

#### Large Capacity Double Suction

Heavy duty design features for a wide range of water supply and process services

- Capacity: 65,000 GPM | 14,763 m3/h
- Head: 745 ft | 227 m
- Temperature: 350°F | 177°C
- Pressure: 520 PSI | 3585 kPa



#### NM 3196 FRP ANSI Process

The Fiberglass reinforced Vinyl Ester construction provides excellent corrosion resistance in many aggressive acidic and caustic services.

- Capacity: 1,400 GPM | 318 m3/h
- Head: 500 ft | 152 m
- Temperature: 200°F | 93°C
- Pressure: 220 PSIG | 15 bar



#### HS

#### Horizontal Hydro-Solids

For handling sludges and slurries containing large solids, entrained air, fibrous materials, corrosives and abrasives. Features recessed, non-clog impeller.

- $\bullet$  Capacity: 7,000 GPM | 1,590 m³/h
- Head: 140 feet | 43 m
- Temperature: 200° F | 93° C
- Pressure: 100 PSIG | 7 bar
- Solids to 10 in | 254 mm





#### VIC-L (VS6) Vertical Turbine

A wide range of hydraulic conditions allows meeting requirements of virtually every pumping service. Designed to meet custom specifications of the user.

Model VIC can-type turbine meets AWWA E-103 and Hydraulic Institute Standards.

- Flows to 70,000 GPM | 15,900 m3/Hr
- Heads to 3,500 feet | 1,060 m
- Pressures to 2,500 psi | 76kg/cm<sup>2</sup>
- Bowl sizes from 6" to 55" | 152.4 mm to 1,400 mm
- $\bullet$  Temperatures to 500° F | 260° C
- Horsepower to 5,000 HP | 3,730 KW



## VIT (VS1) Vertical Turbine

A wide range of hydraulic conditions allows meeting requirements of virtually every pumping service. Designed to mee

every pumping service. Designed to meet custom specifications of the user. Model VIT vertical turbine meets AWWA E-103 and Hydraulic Institute Standards.

- Flows to 70,000 GPM | 15,900 m3/Hr
- Heads to 3,500 feet | 1,060 m
- Pressures to 2,500 psi | 76kg/cm<sup>2</sup>
- Bowl sizes from 6" to 55" | 152.4 mm to 1,400 mm
- $\bullet$  Temperatures to 500° F | 260° C
- Horsepower to 5,000 HP | 3,730 KW



VCP

#### Vertical Column Pump

Custom designed for maximum reliability and high efficiency.

- Capacity: 400,000 GPM | 91,000 m<sup>3</sup>/h
- Head: 600 feet | 180 m
- Powers to 10,000 hp | 7,500 KW



Patented O-Head and OC-Head

By mounting the motor on four legs, the O-Head effectively decouples the turning elbow from the motor.

# **Engineered Valves**

With a Precision Flow Control for Water & Wastewater Systems, Engineered Valves delivers high-performance valve solutions designed to meet the most rigorous demands. With a focus on durability, accuracy, and corrosion resistance, these valves are essential for maintaining safe and efficient flow control across a wide range of applications.

From potable water treatment to wastewater processing and chemical dosing, Engineered Valves offers:

**Reliable Shutoff and Modulation:** Ensuring precise control of flow in critical treatment and distribution systems.

**Corrosion-Resistant Materials:** Ideal for handling aggressive chemicals, slurries, and abrasive media.

**Low Maintenance Designs:** Engineered for long service life and reduced operational downtime.

**Custom Configurations:** Tailored solutions to meet the specific needs of municipal and industrial water systems.

Engineered Valves help utilities and operators maintain system integrity, improve process efficiency, and ensure regulatory compliance—making them a vital component in modern water infrastructure.





## Fabri-Valves





#### C/F37

#### Heavy Duty Knife Gate Valve

The Fabri-Valve Figure 37 is a metal face seated valve available with many options and configurations. This valve comes standard with a metal seat but can be upgraded to a soft seat to achieve a bubble tight seal.

- Size Range: 1.5" 134"
- Pressure Rating: 1.5"-24": 150 psi. | 24"-134": Mfg. to Spec | Designs available up to 750 psi.
- Temperature Rating: 450°F Standard; Designs available up to 1800°F
- Flange Drilling: ANSI 125/150 Standard
- Operators: Handwheel, Gear, Pneumatic, Hydraulic, Electric



#### C67

#### Bi-Directional Knife Gate Valve

The Fabri-Valve OM150 Urethane Lined Knife Gate Valve provides an economical solution for abrasive and corrosive applications.

- Size Range: 2" 36"
- Pressure Rating: 2"-36": 150 psi
- Temperature Rating: 280°F Standard
- Flange Drilling: ANSI 125/150 Standard
- Operators: Handwheel, Gear, Pneumatic, Hydraulic, Electric



#### C/F134

#### Bonneted Knife Gate Valve

The Fabri-Valve Figure 134 bonneted knife gate valve is used in difficult and buried services to provide high cycle stem sealing and long maintenance intervals.

- Size Range: 1.5" 134"
- Pressure Rating: 1.5"-24": 150 psi. | 24"-134": Mfg. to Spec | Designs available up to 750 psi.
- Temperature Rating: 450°F Standard; Designs available up to 2000°F
- Flange Drilling: ANSI 125/150 Standard
- Operators: Handwheel, Gear, Pneumatic, Hydraulic, Electric



#### **Fabricated Valve Capabilities**

Fabri-Valve offers custom fabricated engineered valves to solve tough applications. Our engineered valves have been used to replace discontinued valves, reduce downtime and improve plant performance. Fabri-Valve's custom engineered valves offer the best solution for your toughest applications.

- Extensive number of available materials for a multitude of media and slurries
- Extremely large valve sizes, largest Fabri built valve: 134"
- Custom configurations to fit just about any application

## Diaphragm / Ball Valves





#### Dia-Flo®

#### Diaphragm Valve

Dia-Flo® diaphragm valves are an economical solution for various water and wastewater applications due to their versatility in body and diaphragm materials. Capable of handling clear fluids as well as slurries, diaphragm valves are well suited for corrosive, abrasive and clogging services.

The common Dia-Flo valve utilized in clear fluids are weir type diaphragm valves with PP (Polypropylene) / ETFE lining and EPDM / PTFE diaphragms. In slurries, Dia-Flo straightway style valves are abrasion resistant with a non-clogging design to handle sewage, sludge, scum and grit.

- Size Range: 1/2" 12"
- Pressure Rating: 200 psi. max
- Temperature Rating: 350°F max
- End Connections: Flanged, Weld End, Threaded
- Materials of Const: Unlined, Plastic/Rubber/Glass Lined, Solid Plastic



#### Cam-Tite®

#### Ball Valve

Cam-Tite ball valves are engineered to provide the very best performance in demanding hazardous and corrosive applications. The unique non-spherical ball mechanically compresses both upstream and downstream seats to provide a tight, dependable seal independent of line pressure.

- Minimizes pressure on seats to reduce cold flow and extend seat life.
- Eliminates the problem of "breakaway torque" in valves that must rest in the open position for long periods.
- Assures positive sealing regardless of line pressure or pressure differential.
- Avoids seat damage caused by the leading edge of the port cutting into the seat as the ball closes.
- Size Range: 1/2" 6"
- Pressure Rating: Class 150 | 300 | 600
- Temperature Rating: 550°F max
- End Connections: Flanged, Weld End, Threaded
- Materials of Const: Carbon Steel, Stainless Steel, Alloy 20, Monel, Hastelloy C, Nickel, Inconel



#### Cam-Line®

#### Ball Valve

The unique Cam-Line trunnion ball valve was designed to overcome problems inherent in conventional lined plug and ball valves (high operating torque and stem leakage). The design objective was to produce a lined quarter-turn valve that is easy to operate with positive shut off at high and low pressures. To provide a reliable stem seal design, every Cam-Line valve comes with a low emission stem seal packing design.

- Size Range: <sup>3</sup>/<sub>4</sub>" − 6"
- Pressure Rating: 250 psi. max
- Temperature Rating: 250°F max
- End Connections: Flanged
- Materials of Const: Ductile Iron, ETFE Lined

## **VIDAR**

The next-generation integrated motor solution for smarter water systems, brings intelligence, efficiency, and simplicity to water and wastewater operations. Designed specifically for demanding fluid-handling environments, VIDAR combines a high-efficiency motor with built-in variable speed control.

Key benefits for the water and wastewater industry include:

**Serviceability and Maintenance Advantages:** VIDAR is engineered with a strong focus on long-term reliability, ease of maintenance, and operational efficiency. Its serviceability features are designed to minimize downtime, reduce maintenance costs, and ensure optimal performance throughout its lifecycle.

**Modular Design for Easy Access:** VIDAR's modular architecture allows for quick access to critical components, enabling faster diagnostics, repairs, and part replacements. This reduces service time and simplifies routine maintenance tasks.

**Predictive Maintenance Capabilities:** Integrated with smart diagnostics and real-time monitoring, VIDAR supports predictive maintenance strategies. This helps identify potential issues before they become critical, reducing unplanned outages and extending equipment life.

**Tool-Free Maintenance Areas:** Many of VIDAR's service points are designed to be accessed without specialized tools, streamlining technician workflows and improving safety during

**Comprehensive Service Documentation:** VIDAR comes with detailed service manuals, digital schematics, and step-by-step guides, ensuring technicians have the resources they need for efficient troubleshooting and upkeep.

**Optimize Pumping Systems:** Run your pump closer to BEP at both its design flow rates and partial loads with VIDAR variable speed drivers. Witness an increase in mechanical seal MTBR, energy savings >50% by removing manual throttling controls, and lower operating noise by 20 dB.



## **VIDAR**

#### Additional Features:

#### **Built for Harsh Environments:**

- Built with IEEE-841 in mind, VIDAR can handle the elements.
- Class 1 Division 2 Groups A,B,C,D T4
- ASTM B845 Method K for protection against corrosive gases
- IP66 Enclosures for Electrical Components
- Severe duty paint system

#### Modular Design for Serviceability & Ease of Use:

- LED Fault Indicator for motor or converter fault
- Replace AC-LINK (VFD) in under an hour
- Drop in NEMA replacement

#### Variable Speed Benefits without the headaches:

- No need for additional filters (dV/dt, harmonic, line reactors), shielded VFD cabling, space in MCC room
- Standard I/Os, Modbus TCP or Ethernet IP communication
- Basic pump protection such as no flow detection
- 30-50% lower total cost of ownership vs. Standard VFD

#### **Improve Process Control:**

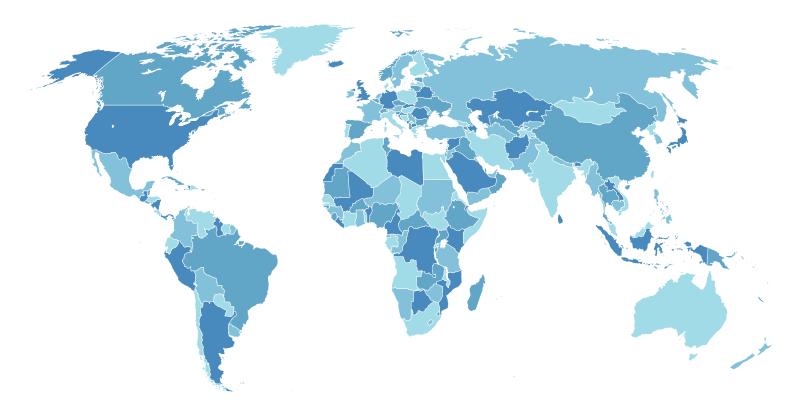
- 10:1 turndown ratio
- Eliminate control valve leak points & reduce water hammer via inherent soft start/stop
- Future proof process with overspeed capabilities & built in PID loop
  - For example, one WW customer took total solids removed from 1% to a continuous 3.5%



\*VIDAR is currently intended for horizontal pumping applications from 15-75 HP



# Wherever you are, We're there too.



## **Every Drop Counts – Partner with ITT for a Sustainable Water Future**

At ITT, we believe in transforming how the world moves water. From advanced pumping systems to smart monitoring solutions, we empower communities and industries to reduce waste, optimize performance, and protect our most precious resource.

- Let's build a cleaner, smarter, water-secure world – together.

For more information, to request a demo or to connect with one of our sales leaders scan the QR code or visit our website: https://ittindustrialprocess.com



ITT Industrial Process Brands







**Pumps** 

**SVANEHOJ** 

Valves





**Smart Motor** 



Repair



Water Systems



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