

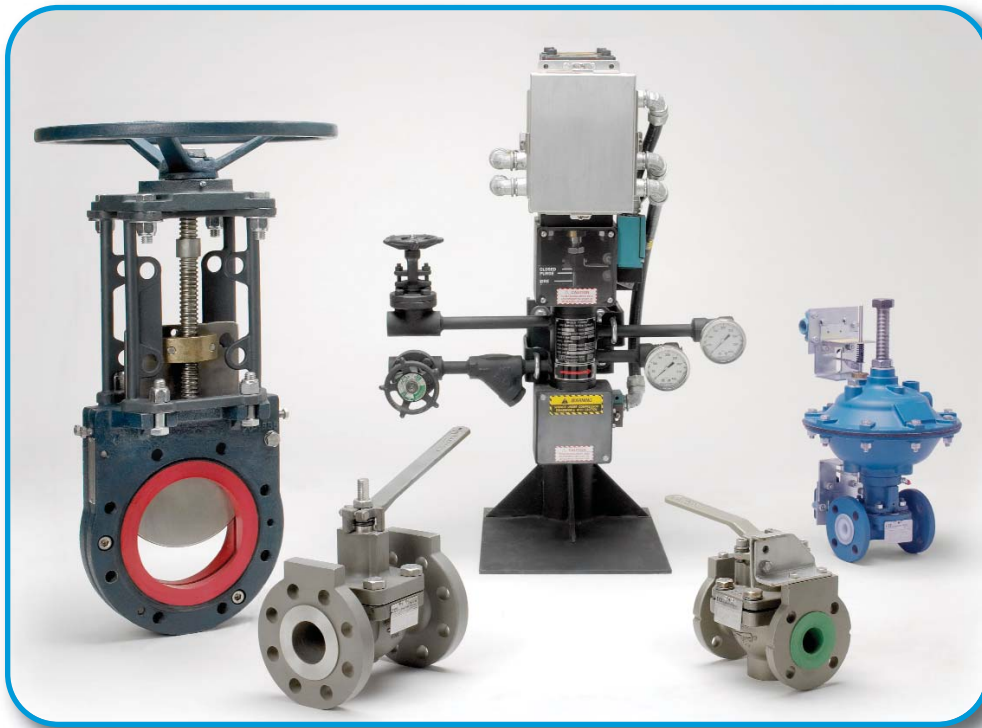


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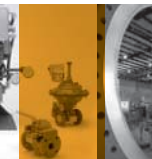
Engineered Valves  
Product Portfolio

## Engineered Valves

Delivering high quality, innovative flow control solutions for Abrasive Wear Resistance, Corrosion Resistance and Critical/Hazardous Containment in a wide range of Industries worldwide.



*Engineered for life*



*Engineered for life*

# MARKETS SERVED

## MINING

Metal & Minerals processing comprises a wide range of applications which require broad industry experience. ITT Engineered Valves has built a reputation as a full service global partner with proven valve experience in the Metals & Minerals Industry. For almost 60 years, we have provided solutions for the most difficult slurries and fluid applications within the following processes:

- Primary Ball Mill (Discharge)
- Secondary Mill
- Cyclone / Sizing
- Flotation
- Concentrate Plant / Filter / Separation
- Tailings
- Recovery water
- Chemical Addition

ITT Engineered Valves offers you our global experience, our people & channel partners, our engineering competencies & innovative technologies and worldwide locations to ensure that valve related disruptions are minimized in your mineral processing operations.

ITT Engineered Valves supplies valves to:

- Metal-ore processing plants
- Precious metal processing plants
- Industrial minerals operations

Utilizing core competencies in abrasion and corrosion resistance, ITT Engineered Valves minimizes the Total Cost of Ownership of processing plant valves.



## POWER

ITT Engineered Valves has been servicing the Fossil and Nuclear power market for more than 60 years with the time proven Dia-Flo diaphragm valve. Our diaphragm valves can be found in hundreds of world wide installations. Recent surveys have shown valves installed some 50 years ago are still in operation with minimal maintenance. This excellence in service and understanding of the power market has led to product extensions in the area of corrosive, abrasive, and engineered solutions. Today you will find our products solving problems in:

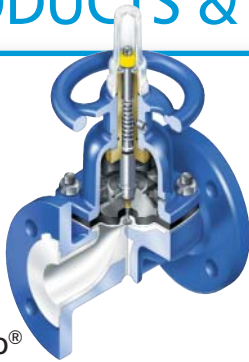
- Demineralizer
- Condensate Polisher
- Safety Shut-off valves for burners and igniters
  - Double block and bleed valve systems
  - Oil isolation and Atomization valve systems
- Coal Mill and Pulverizer Isolation
- Fly Ash
- Bottom Ash
- Flue Gas Desulphurization
- Nuclear

In addition the ITT Engineered Valves Lancaster, PA facility is one of the few remaining valve factories which hold an N-Stamp.

Our strength is in understanding the power plant system and providing solutions targeted at solving problems. We will continue to evolve with the global power market by providing solutions grounded on understanding our customer's needs and sound engineering designs.



# PRODUCTS & SERVICES



## Dia-Flo®

Dia-Flo diaphragm valves are engineered for the tough work environments of chemical processing, water treatment, pollution control, food & beverage, mining, pharmaceutical, pulp & paper and power generation markets.

Dia-Flo features:

- Bubble tight shut-off – eliminates reliance on line pressures.
- Bonnet Isolation – separates working components from flow.
- Eliminates packing glands and stem sealing – controls emissions
- In-Line Maintenance – removable top works for easy access

Dia-Flo valves are available in a variety of material combinations in sizes from 1/2" to 12" (15mm – 300mm).



## Fabri-Valve®

Knife Gate, Slide Gate, and Wedge Gate Valves. Fabri-Valve is a proven performer for application specific and general purpose valves in the mining, power, pulp and paper, waste water, chemical, petroleum and marine markets.

Fabri-Valve Highlights:

- Bi-Directional Knife Gate – with patented recessed seat designs
- Heavy-Duty Knife Gate – provides a wide range of seat designs
- Ported Slide Gate – with two constant contact steel reinforced elastomer seats.
- Materials of Construction – range from carbon steel to specialty Alloy and Fully Lined steel and plastic options.

Available in size ranges from 2" to 108" (50mm to 2,650mm). Custom designs also available.



## Skotch®

Skotch burner safety shut-off valves for oil- and gas-fired systems combine the functions of three valves into one for increased safety, reliability and reduced installation complexity and cost.

- Significant installation cost reduction – 1 valve replaces 3 traditional.
- Instantaneous switching – dual stem design prevents out of sequence operation.
- Simple reliable tightness verification – 0 vent and block valves through use of integral test port.
- Factory Mutual System Approvals: US Standards and Inspection Organization.

The Skotch product line includes safety shut-off valves for oil- and gas-fired burners and igniters.



## PULP & PAPER

ITT Engineered Valves has built a reputation as a full service partner in fluid control valves for the Pulp & Paper Industry. For almost 60 years we have provided solutions for the most difficult slurries and fluid control applications within the following processes:

- Pulping Mills: Fabri-Valve - Stock Lines, Black liquor, High Density, Blow Tank outlet, Knotters, Rejects, Pump and Equipment Isolation, Filtrate
- Bleaching: Cam-Tite, Dia-Flo and Fabri-Valve - Chlorine gas containment, extraction, hypochlorite, sulfuric acid, sodium chlorate with solids, Methanol, ozone, oxygen, sulfur dioxide bleach stock lines, tower, equipment and pump isolation applications.
- Paper Making: Dia-Flo and Fabri-Valve - Kaolin, Titanium Dioxide, PCC Unlined or Lined, Varnish, Starch, Alum, Sizing Bleach, Stock Lines, Tower, Equipment and Pump Isolation
- Recovery: Cam-Tite and Dia-Flo - Tall Oil, Fatty or Resinous Acids, Causticizer and De-Minerizer.
- Recycling: Fabri-Valve - Knotters, Rejects, Screen, Stock Lines, Equipment and Pump Isolation, Filtrate, Blow tank outlet, High Density Storage and Tower Isolation

We have built a reputation on being a cutting edge supplier of valves capable of handling the harsh environment of this Industry. Where there is a need for Abrasion or Corrosion Resistance, Critical Containment, Durable and Reliable operation you will find ITT Engineered Valves.

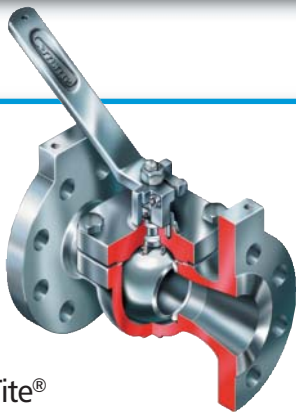


## CHEMICAL & GENERAL INDUSTRY

The Chemical and General Industrial manufacturing sectors are dependent upon flow control in virtually every production process. ITT Engineered Valves has focused upon the most difficult applications with critical containment of gases and fluids that are often corrosive and abrasive. The breadth of our product line assures that we have the right solution for your specific application.

- Corrosive Chemicals: Dia-Flo, Cam-Tite, Cam-Line - Acids, Bases, Aliphatic and Aromatic Hydrocarbons, De-mineralized water, Alcohol, Dies, Amino Acids, Bleach
- Abrasive Slurries: Fabri-Valve, Dia-Flo, Cam-line - TiO<sub>2</sub>, Carbon Black, Food Stuffs, Fillers, Salts, Lime, Paint, Clay, Sewage, Silica, Sludge, Tooth Paste, Heavy Water, Calcium Carbonate
- Fugitive Emissions and Lethal Services: Cam-Tite - Bromine, Phosgene, Hydrogen Fluoride, Ammonia, VOC's, Steam and Chlorine Applications.
- General Industrial: Dia-Flo, Fabri-valve, Cam-Line - Food Stuffs, Air, Alcohol, Asphalt, Beer, Caustic Soda, Edible Oils, Fertilizer, Glycol, Ink, Juice, Oils, Perfumes, Soap solution, Soup, Tomato Paste, Varnish, Water

The diversity built into the ITT Engineered Valves product portfolio allows for a variety of material combinations to be configured to meet an extensive array of media needs.



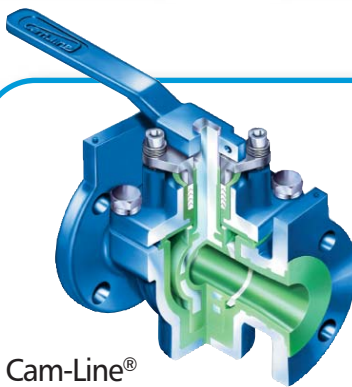
### Cam-Tite®

Cam-Tite utilizes a unique non-spherical ball design to reduce inherent standard ball design limitations. Intended uses include demanding hazardous and corrosive environments within the chemical processing, nuclear and power generation markets.

Cam-Tite features:

- Low operating torque – unique design minimizes “breakaway torque.”
- Positive sealing – minimizes pressure on seats & assures tight seal.
- Increased seal life – Cam action reduces lateral loads.
- Quality assured – every valve is tested in accordance with MSS-SP-72 and ANSI B16.34

Available in a variety of material combinations from 1/2" to 6" (15mm-150mm).



### Cam-Line®

The Cam-Line trunnion mount non-spherical ball design offers all Plastic-Lined wetted features with the benefits of the unique cam action. With special linings and optional PVDF coatings Cam-line is ideal for highly corrosive applications in chemical processing industries.

Cam-Line Features:

- Cam design – provides tight shut-off, reliable stem seal, lower operating torque, reduced seat cold flow and prolonged seal life.
- Trunnion support – removes excess loads from the seats.
- Top-Entry – allows in-line maintenance and reduced pipe stress effect
- TEFZEL\* lining – unsurpassed mechanical toughness and broad resistance to chemical attack.

Available in a variety of configurations from 3/4" to 6" (20mm-150mm).



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## ITT Engineered Valves:

### 60 years of Providing Quality, Innovative Solutions

ITT Engineered Valves has earned the reputation for delivering the highest quality, innovative valve solutions for a wide range of industrial fluid control needs. These best in-class quality valves have been the foundation for industries such as Mining, Power Generation, Pollution Control, Pulp & Paper, Chemical Processing, Water Treatment, Pharmaceutical, Food & Beverage and Bio-Processing.

Through both standard and custom designed valve assemblies, ITT Engineered Valves is your partner in providing the best quality and value engineered solutions for your unique flow control needs.

- Dia-Flo® Diaphragm Valves
- Fabri-Valve® Knife Gate, Slide Gate, Wedge Gate and Custom-Fabricated Valves
- Cam-Tite® Hazardous and Critical Duty Ball Valves
- Cam-Line® Plastic Lined Ball Valves
- Scotch® Burner Safety Shut-Off valves



Lancaster PA facility



Amory MS facility

## Engineered Valves

For more information write to:

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