# EMERSON'S PIGGING TECHNOLOGY

Perform Multiple Product Transfers in a Single Line Without Cross-Contamination

Emerson's pigging technology is designed to optimize transfer operations and minimize product losses by efficiently emptying and cleaning product transfer lines. Our solutions enable multiple fluids to be transfered in a common line without cross-contamination.

## How It Works

Our pigging technology includes Pigs which are a solid cylindrical wiper designed to fit inside a pipe and be propelled through a line by a liquid or gas. Pigs are stored, received, and propelled in piggable valves which are specially designed ball valves used to both regulate the transfer of product and clean the line. After the fluid transfer is complete, automated pigging begins. Pigs at the end of the line are launched and the sequence concludes when pigs are returned to their home stations. Emerson's piggable valve assemblies are equipped with air and vent valves in addition to an air throttling valve which regulates pig velocity to optimize the cleaning and emptying of the line.

## Applications

Safe, efficient performance for industrial applications involving the transfer of bulk liquids such as:

- Chemicals and Intermediates wax, adhesives, solvents, polyglycols, etc.
- Food and Beverage oils, condiments, soups, beverages, chocolate, etc.
- Lubricants and Greases base oils, additives, finished product lubricants, etc.
- Specialty Chemicals resins, paints, varnishes, inks, coatings, cosmetics, detergents, personal care products, cleaning products, glue, etc.

## **Key Specifications**

Pigging Systems:	Uni-Directional , Bi-Directional
Valve Types:	Head Line Distribution Valve, In-Line Distribution Valve, Three Way Valve, Clarinet, Twin Head Line Distribution Valve, Twin In-Line Distribution Valve
Line Sizes:	2"-16"
Valve Materials:	Stainless Steel
Types of Flanges:	ANSI 150 RF PN 16/PN 20
Pig Materials:	Polyurethane, Viton, EPDM, HNBR, PTFE
Accessories:	Air Manifolds, Pig Launchers, Pig Stoppers, Piggable Tubing and Fittings, Pig Detectors
Spare Parts and Consumables:	Pig Wipers, Pigs, Seals

For other pig materials or specifications please consult Emerson



Head Line Distribution Piggable Valve installed at the end of a discharge header of a blender enabling pigging between the blender to storage.



In-Line Distribution Valve installed on a piggable line enabling the transfer of finished product into a tank.



Emerson's pigging technology enables the efficient transfer of several products through a single line without cross-contamination.

Photos courtesy of Copton



## Perform Multiple Product Transfers in a Single Line Without Cross-Contamination

## **Features and Benefits**

- Eliminate the generation of slop and expensive product waste, or the need for flushing operations
- Reduce piping and infrastructure while performing multiple, successive transfers through a single line without cross-contamination
- Ensure the completeness of material transfers with our unique valve design that nearly eliminates residual fluid
- Track pig travel through the system and receive an alarm when replacement of pigs is required
- Incorporate Emerson's specially adapted ball valve assembly which is inherently failsafe by design and not prone to leakage, unlike piggable systems that use piston valve technology
- Verify system performance with Emerson's performance guarantees
- Utilize piggable valves that incorporate Emerson's best-in-class instrumentation including ASCO solenoid valves and TopWorx actuators and accessories
- Improve operational flexibility by automatically pigging the lines of liquid product from any source to any destination
- Improve HSE with automated transfer operations and closed system design

#### Services

Emerson delivers start-up, reliability, and maintenance services that help ensure the integrity of your assets. All of our service offerings can be included in a Long-term Service Agreement.

- 24 Hour Technical Support
- Long-term Service Agreement
- Parts Management
- Preventative Maintenance
- Repairs
- Startup and Commissioning
- System Design and Process Consulting
- System Performance Evaluation

Emerson's pigging technology includes pigs, valves, lines, manifolds, and accessories. These systems require engineering expertise. Consult your Emerson representative for help on designing or automating a transfer system, or for lifecycle services on retrofitting existing systems, supplying spare parts, or service agreements to maintain system performance.

www.emerson.com/integratedblendingsolutions



Emerson's pigs ensure durability and ease of maintenance with a replaceable, flexible lip seal design.



Emerson's expansive global network of 400+ service engineers can service your needs locally and quickly.



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