ROSS ADVANTAGES:
- Piston Style Design is not vulnerable to sudden failures
- All manufacturing done in-house (Troy, NY) for quality control
- 100% Hydraulic testing on every valve before shipment
- Extra-heavy construction, for decades of reliable service
- Over 10 criteria specified for every valve to ensure optimal performance
- Low maintenance, easily customizable

OPERATION:
The Ross Piston style design provides extremely accurate flow control and is not subject to sudden failure. Each valve is comprised of the following standard components:

OC: The Operating Chamber is created by the top seals of the piston. The pressure in this chamber, as determined by the control components, determines the movement of the piston.

ST: Our standard Strainer utilizes a stainless steel screen with over 7 square inches of surface area to filter out contaminants going into the valve controls.

SC: The adjustable Speed Control Valve regulates the flow into the Operating Chamber and determines the main valve’s opening and closing speeds.

PV: The Pilot Valve, whether hydraulic or electric, acts like the brain of the valve to determine when the valve will open or close.

CLOSING
When the Pilot Valve closes, fluid continues to enter the Operating Chamber through the Strainer and Speed Control Valve. The high pressure created in the Operating Chamber forces the Piston down, closing the valve.

Technical Resources:
At Ross Valve, we pride ourselves in providing a truly engineered product. There is no “off the shelf” valve that will perform optimally in every application, so we specify all critical criteria to ensure the best performance possible for each valve. With nearly 130 years of industry experience, Ross Valve offers a variety of in-house resources to ensure all your product requests are met:

- Dynamic Fluid Modeling
- Pattern Shop & 2 foundries
- Machine Shops & CNC Centers
- Hydro Test facilities
- Pre-Packaged Vault Design/Build Center
- Online Tools
  - Animated Valve Operation Schematics
  - Valve Sizing / Capacity Tool
  - Valve Configuration Tool
  - For customized Specifications, Submittals, Operation & Maintenance Manuals

Ross Valve manufactures all of its products in Troy, NY. Our corporate headquarters can now be found in the newly expanded Ross Tech Park, just 1.5 miles from our original facility.

All Ross Valves meet or exceed all current API/ASME standards for construction and pressure ratings. RV 06-10 5000
Ross continues to grow its presence in the following industries throughout the world:

- Hydro-Power
- municipality
- wastewater
- industrial
- hydropower
- firefighting

**Our Customers**

Ross continues to grow its product line and the design remains largely unchanged even today.

**Dedication to Quality**

Based in Troy NY since 1879, Ross Valves continue to do all manufacturing in-house so that we may provide our customers with the following:

- 100% quality control from product design through final testing
- Performance-tuned valves, with at least 10 independent criteria specified for optimal performance in each application
- Durable and flexible designs, for a lifetime of service - even if operating conditions should change
- Lead-time management and manufacturing flexibility for both standard and custom valves
- 100% hydraulic testing of all valves (completely assembled), for trouble-free installations and start-ups
- Continued commitment to meeting the strict requirements of ANSI, NSF, ASME, UL and ANSI

**Our Product Line**

- Pilot Operated, Electric Trigger, 4"-48" [50RWR-E]
- Electric Check, 4"-48" [42WRS]
- Differential Pilot, 4"-48" [40DP]
- Pilot Operated, Pressure Reducing, 4"-48" [42WRS-40WR]
- Pilot Operated, Ground Tank, 4"-48" [40AWR]
- Pilot Operated, Elevated Tank, 4"-48" [30AWR]
- Pilot Operated, Two-Way Flow, 4"-48" [40DAWR]
- Direct Acting, 1"-4" [98EP]
- Direct Acting, 4"-48" [70SWR-S]
- Solenoid Operated, Throttling, 4"-48" [42AFCV-L]
- Solenoid Operated, Direct Acting, 4"-48" [42WR]
- Solenoid Operated, Basket Type, 4"-48" [10B]
- Emergency Cut-In, 4"-48" [37WR], Opens on falling outlet pressure
- Pneumatic Operated, Pilot w/ Orifice Assembly, 1"-3" [23RF]
- Pneumatic Operated, Pilot w/ Orifice Assembly, 4"-48" [40RF]
- Pneumatic Operated, Pressure Reducing, 1"-3" [42WRS]
- Pneumatic Operated, Ground Tank, 1"-3" [40AWR]
- Pneumatic Operated, Elevated Tank, 1"-3" [30AWR]
- Pneumatic Operated, Two-Way Flow, 1"-3" [40DAWR]
- Internal Pilot Operated, 1"-3" [20WR-PRV]

**OPTIONAL ACCESSORIES**

- *Note: This is a partial list of available options.*
ROSS ADVANTAGES:

- Piston Style Design is not vulnerable to sudden failures
- All manufacturing done in house Troy NY for quality control
- 100% Hydraulic testing on every valve before shipment
- Extra-heavy construction, for decades of reliable service
- Over 10 criteria specified for every valve to ensure optimal performance
- Low maintenance, easily customizable

OPERATION:
The Ross Piston style valve design provides extremely accurate flow control and is not subject to sudden failure. Each valve is comprised of the following standard components:

OC The Operating Chamber is comprised of the top seals of the piston. The pressure in this chamber, as determined by the control component, determines the movement of the piston.

ST Our standard Strainer utilizes a stainless steel screen with over 7 square inches of surface area to filter out contaminants going into the valve controls.

SC The adjustable Speed Control Valve regulates the flow into the Operating Chamber and determines the main valve's opening and closing speeds.

PV The Pilot Valve, whether hydraulic or electric, acts like the brain of the valve to determine when the valve will open or close.

Technical Resources:

At Ross Valve, we pride ourselves in providing a truly engineered product. There is no “off the shelf” valve that will perform optimally in every application, so we specify at least 10 separate criteria to ensure the best performance possible for each valve. With nearly 130 years of industry experience, Ross Valve offers a variety of in-house resources to ensure all your product requests are met.
Dedication to Quality

Ross continues to grow its product lines and the rugged design remains largely unchanged, even today.

Company History

Where George Ross founded our company in 1879, he made Automatic Control Valves that were designed to last. He also created a company built on integrity where ingenuity, design and engineering quality of materials, craftsmanship in manufacturing, and high level of customer-service and flexible business systems that have evolved with changes in technology and the industries we serve.

Ross Valves Young Values

Backed by over 100 years of experience, our mission is to provide you with a level of service not often available elsewhere. When you work with Ross, you work with the world’s most experienced manufacturer of the industry's most durable and accurate Automatic Control Valves.

Quality

Ross is a 5th generation family-owned and operated business, there is an ongoing commitment to assure that all of our equipment is topped, and meets the high expectations of our customers.

Dedication to

Ross continues to grow its product lines and the rugged design remains largely unchanged, even today.
ROSS ADVANTAGES:

- Piston Style Design is not vulnerable to sudden failure
- All manufacturing done in-house, Troy, NY for quality control
- 100% Hydraulic testing on every valve before shipment
- Extra-heavy construction, for decades of reliable service
- Over 10 criteria specified for every valve to ensure optimal performance
- Low maintenance, easily customizable

OPERATION:

When the Pilot Valve opens, fluid exits the Operating Chamber faster than it can enter through the Speed Control Valve. The low pressure created in the Operating Chamber allows line pressure in the main valve to force the Piston up, opening the valve.

When the Pilot Valve closes, fluid continues to enter the Operating Chamber through the Strainer and Speed Control Valve. The high pressure created in the Operating Chamber overcomes the line pressure in the main valve and forces the Piston down, closing the valve.

ROSS STANDARD FEATURES:

1. Rigid ½” Piping & Fittings
2. Position Indicator
3. Spring with 7 ¼” Stainless Steel Filter
4. Application Specific Seal Control
5. ANSI Class 250 Body & Caps
6. NSF 61 Certified Epoxy Coating Inside & Out
7. Fully Guided Piston Above & Below Seat

Technical Resources:

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  - Valve Sizing / Capacity Tool
  - Valve Configuration Tool
  - Technical Specifications, Submittals, Operation & Maintenance Manuals

All Ross Valves meet or exceed all current AFWA standards for construction and pressure ratings.