Motion and Flow Control

When it comes to high-performance, mission critical controls, navies around the world rely on Marotta. Our valves, regulators and controllers play a vital role in weapons, fire suppression and propulsion systems on the global fleet of surface and subsea combat vessels.

Solenoid Valves
Our patented solenoid valve technology sets the standard for reliability and performance in marine applications. We offer a wide range of pilot and direct acting valves in 2-, 3- and 4-way configurations.

Relief Valves
Our relief valves provide best-of-class pressure control bands and extremely smooth “no-impact” operation. They feature a unique approach to pressure sensing that tightens the cracking-reseat pressure band and improves repeatability. Available for high and low pressure applications for pneumatic and hydraulic service. Our relief valves meet MIL-V-24694, MIL-V-85245 and MIL-V-22549.

Submersible Technology
Marotta has pioneered the development of submersible solenoid valves.

Single-Stage Pressure Reducers
Available as lightweight stand-alone valves or as cartridge designs, our single-stage pressure reducers cover a wide range of regulated outlet pressures. They handle inlet pressures up to 6,000 psig and IPS line sizes from 1/2 to 2 inches. Our pressure reducers meet MIL-V-2961.

Alignment Fittings
Marotta’s Flo-Fit® fitting eliminates pipe alignment problems and reduces pipe stress from shock, vibration or thermal distortion. The patented Flo-Fit design features an internal pivot and seals that can offset misalignments up to 3.5 degrees from center for a total of 7 degrees.
FROM DESIGN TO DELIVERY
Our experienced engineering team designs each component and system for maximum reliability and lifecycle while complying with challenging weight, space and cost constraints. We then work with our marine customers on every phase of the product development process:

• Requirements
• Preliminary design
• Final design
• Prototypes
• Development units
• Qualifications
• Production

PRESSURE/FLOW CONTROL MANIFOLDS
Our manifold offerings range from the simple to complex—from single inlet with multiple outlets to multi-chambered flow control units with integral valves and electronic controls. All of our naval manifolds are engineered and manufactured in strict accordance with MIL-V-24272.

QUIETING TECHNOLOGY
Marotta offers a selection of quieting manifolds which minimizes structure-born and airborne noise. Our quiet manifolds and fittings meet MIL-V-24658 and MIL-STD-740 noise requirements.

IN-LINE VALVES
Simple, rugged and reliable, Marotta’s in-line valves combine big flows and a small package. They feature a distinctive coaxial flow path that offers a significantly lower pressure drop compared to conventional valves of a similar size. Marotta’s in-line valves are available in both piloted and motor operated versions for shut-off, check, pressure reducing and relief applications. Pressures range from 150 – 6000 psig with line sizes from 1 to 10-inch IPS.

SMART VALVES
Marotta’s in-line valves lend themselves to electronics integration, creating smart valves capable of complex operations, self-diagnostics, back-up power capabilities and more.

ELECTRONIC CONTROLLERS
Developed specifically for naval applications, our controllers can work with DC brushless, servo and proportional control systems with a variety of power, torque, speed and positioning requirements. Our control engineering capabilities allow us to engineer complete electro-mechanical systems for our customers.

AUTOMATIC STOP VALVES
The patented Flo-Fuse® Safety Valve helps protect crews and the environment when gas or fluid lines fail. This normally open valve, which is held open mechanically during normal flow conditions, closes almost instantaneously when flow conditions indicate a downstream line rupture or other component failure. It can be incorporated into many different hydraulic or pneumatic designs as a reliable, robust safety measure.
Marotta develops Anti-Auto-Ignition Solenoid Valve for submarine piping applications

Marotta develops and supplies Pressure Reducing Manifold for Navy Surface Combatants

Fuel and Steam Quick Closing Valves designed and developed for carrier program

3’ Counter-Measures Valve designed for SSN688 class submarines

In-line piloted valve designed for torpedo launching systems

Marotta designs and tests valve for deepest diving submersible

Marotta develops noise attenuating device (quieting element) for submarine applications

Marotta supplies first oscillation free relief valve to DDG class destroyers

Composite Valve Program initiated

Motor Operated Pilot Valve (MOPV) Technology adopted by the US Navy

Submersible and Splashproof Valve Technology adopted by US Navy

Magazine Sprinkler Valve Systems

VLS Deluge Valve Systems

Internal Canister Cooling Actuation Valve Technology