CAMERON

GENERAL VALVE Aviation and Military Fueling Solutions

High-integrity positive shut-off valves for the aviation and military fueling industry

TECHNOLOGY

GENERAL VALVE Solutions

INTRODUCTION

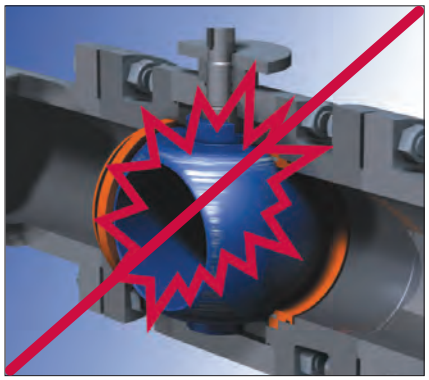
For more than 60 years, the GENERAL VALVE® Twin Seal™ valve has been the market leader for double block-and-bleed plug valves. As the original pioneer, the design of the valve established the standard specifications for high-integrity, positive shut-off valves. For both in-line testing and simple field maintenance and repair, aviation fuel facility managers, engineers and contractors rely on GENERAL VALVE Twin Seal valves for fuel delivery with positive, provable segregation when leaks matter.

Our customers know that when they see the Cameron name, they can expect the highest quality in engineering, manufacturing and customer support. That is why Cameron's GENERAL VALVE line can be found in airports and military installations around the world.

WHY GENERAL VALVE?

First, GENERAL VALVE Twin Seal and TruSeal™ valves hold a verifiable, bubble-tight, fire-safe seal. Second, GENERAL VALVE valves offer more flexibility through the availability of a broad range of sizes, materials, models and port configurations. The GENERAL VALVE portfolio offers a wide range of products: the standard Twin Seal and TruSeal regular port, Twin Seal full port, seat and reseat valves and the four-way diverter valve. Finally, all valves within Cameron's GENERAL VALVE product line have the important feature and advantage of in-line repairability and are supported by Cameron's global parts and service network CAMSERV™ aftermarket services.

FEATURES



The original Twin Seal valve helped establish the rigid requirements of double block-and-bleed service and resulted in the market leading valve we know today. The patented Twin Seal valve is a non-lubricated, resilient seal, expanding plug-type valve which has a mechanical means of freeing the plug before it is rotated from the closed to open position. The plug and seal slips rotate freely, with no seal to body contact, eliminating seal abrasion and wear. The unique, dove-tailed design plug is operated inward between the slips, mechanically wedging out the seal slips for a positive upstream and downstream shutoff. This creates a positive, mechanical shutoff of each valve port independent of springs, system pressure or flow. In addition, the primary seals are reinforced by a secondary metal-to-metal seal, resulting in a superior, fire-safe design. Seals may be repaired with common tools while the valve is in-line, after the line has been depressurized and drained.

Cameron's GENERAL VALVE models can be easily adapted to accept electric or pneumatic actuators. Actuators can be set to operate at various speeds with low torque requirements. For high-speed applications, Cameron offers in-house designed and manufactured hydraulic actuators and supporting power units.

TWIN SEAL – SEAT AND RESEAT VALVES

This is the GENERAL VALVE Twin Seal valve taken one step further. The seat and reseat valve has all of the features of the Twin Seal with an additional capability – it can be repaired or maintained using common hand tools without draining fuel out of the lines in critical airside locations.

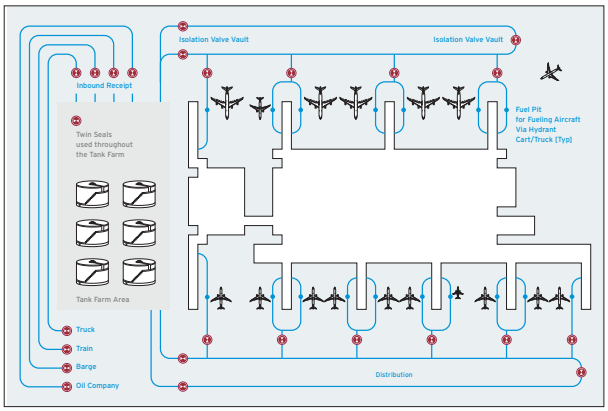
MANUFACTURING

Cameron's GENERAL VALVE valves are API 6D/Q1 monogrammable, PED/CE certified and is ISO 9001 licensed. Our 255,000 square ft. manufacturing facility located in Little Rock, Ark., US is staffed with professionals who can provide complete customer service and product support.

APPLICATIONS FOR AVIATION FUEL FACILITIES

The typical airport applications for Cameron's GENERAL VALVE high-integrity, double block-and-bleed valves include:

- Isolation valves used on
  - Pump and filtration pads
  - Truck-loading racks
  - Hydrant loops
- Pipeline receiver manifolds
- Tank shut-off valves
- Leak detection systems



SERVICE

Cameron has a special dedication to the aviation industry, with a Business Development Manager appointed exclusively for commercial aviation and military clients.

Cameron's Valves & Measurement business segment is a leading provider of valves, valve automation and measurement systems to the global oil and gas industry.

AFTERMARKET SERVICES

- Valve commissioning
- Valve conversions
- Hydro testing
- Workshop site trailers and containers
- Actuator repair and service
- In-line machining

We Build It. We Back It.

USA • CANADA • LATIN AMERICA • EUROPE • RUSSIA • AFRICA • MIDDLE EAST • ASIA PACIFIC

Military Short List

Andersen AFB, Guam
Danish Military, Denmark
DESC Yokosuka, Japan
Diego Garcia AB, BIOT
Djibouti NAS, Africa
Eglin AFB, USA
Eielson AFB, USA
Falklands MOD, UK
FISC Point Loma, USA
FISC Craney Island, USA
Hickam AFB, USA
Jacksonville NAS, USA
Kandahar AB, Afghanistan
Korean Air Force, South Korea
Kunsan AB, South Korea
San Pedro DFSP, USA
Thule AB, Greenland
US Navy Rota, Spain
US Navy Pearl Harbor, USA

Commercial Short List

Atlanta Hartsfield-Jackson IAP, USA
Beijing Capital Airport, China
Changi IAP, Singapore
Charles De Gaulle IAP, France
Chicago O'Hare IAP, USA
Dallas-Fort Worth IAP, USA
Denver IAP, USA
DOHA IAP, Qatar
Dubai IAP, UAE
Frankfurt IAP, Germany
Houston George Bush IAP, USA
Hong Kong IAP, China
Las Vegas McCarran IAP, USA
Los Angeles IAP, USA
London Heathrow IAP, UK
Kuala Lumpur IAP, Malaysia
Madrid Barajas IAP, Spain
Mumbai IAP, India
San Jose IAP, Costa Rica
Schiphol IAP, Netherlands
Seoul Incheon IAP, S. Korea
Sydney IAP, Australia
Tokyo Narita IAP, Japan
Toronto Pearson IAP, Canada
Quito IAP, Ecuador

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Learn more about GENERAL VALVE valves at:
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HSE Policy Statement
At Cameron, we are committed ethically, financially and personally to a working environment where no one gets hurt and nothing gets harmed.