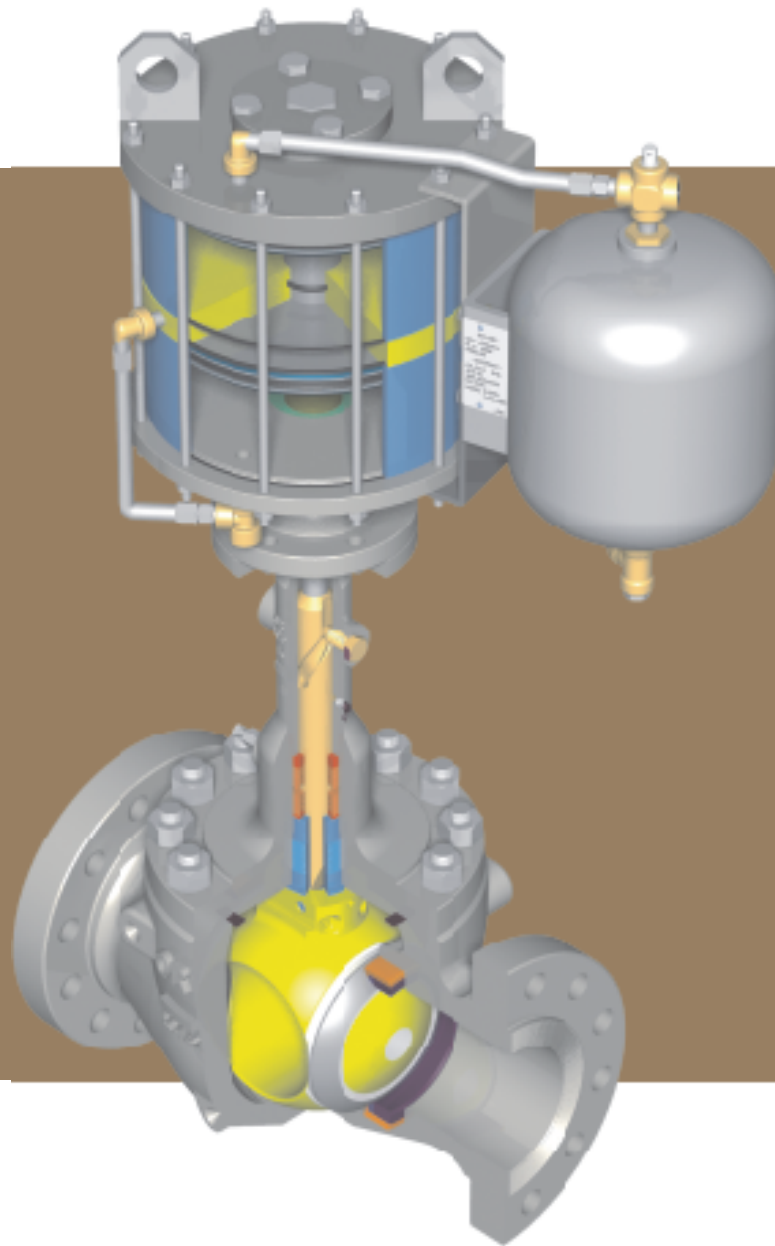


The ORBIT[®] Valve



ORBIT[®]

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ORBIT



ORBIT Valve Manufacturing, Little Rock, Arkansas, USA



THE ORBIT VALVE

Today, ORBIT continues to provide outstanding products and services through the ongoing process of Six Sigma.

The ORBIT Valves' block valve technology provides valves with unmatched durability, safety and long term performance.

Cameron's people are skilled professionals who take pride in their work and are committed to the highest standards of excellence.

The ORBIT Valve is aligned with the other fine products of Cameron's Valves & Measurement group that lead their field in pipelining, oil and gas production, offshore, onshore, sub-sea, refining and industrial processing.

With its full spectrum of quality designs and field service that spans the globe, Cameron's Valves & Measurement group is the World Leader in Single Source Partnering for valve products.

A Low Maintenance, High Integrity Zero Leakage Valve

ACCREDITATIONS AND APPROVALS



DESIGN AND MANUFACTURING

In Cameron's Valves & Measurement group Little Rock factory, production process teams are organized into manufacturing cells, each with responsibility for quality and on time delivery.

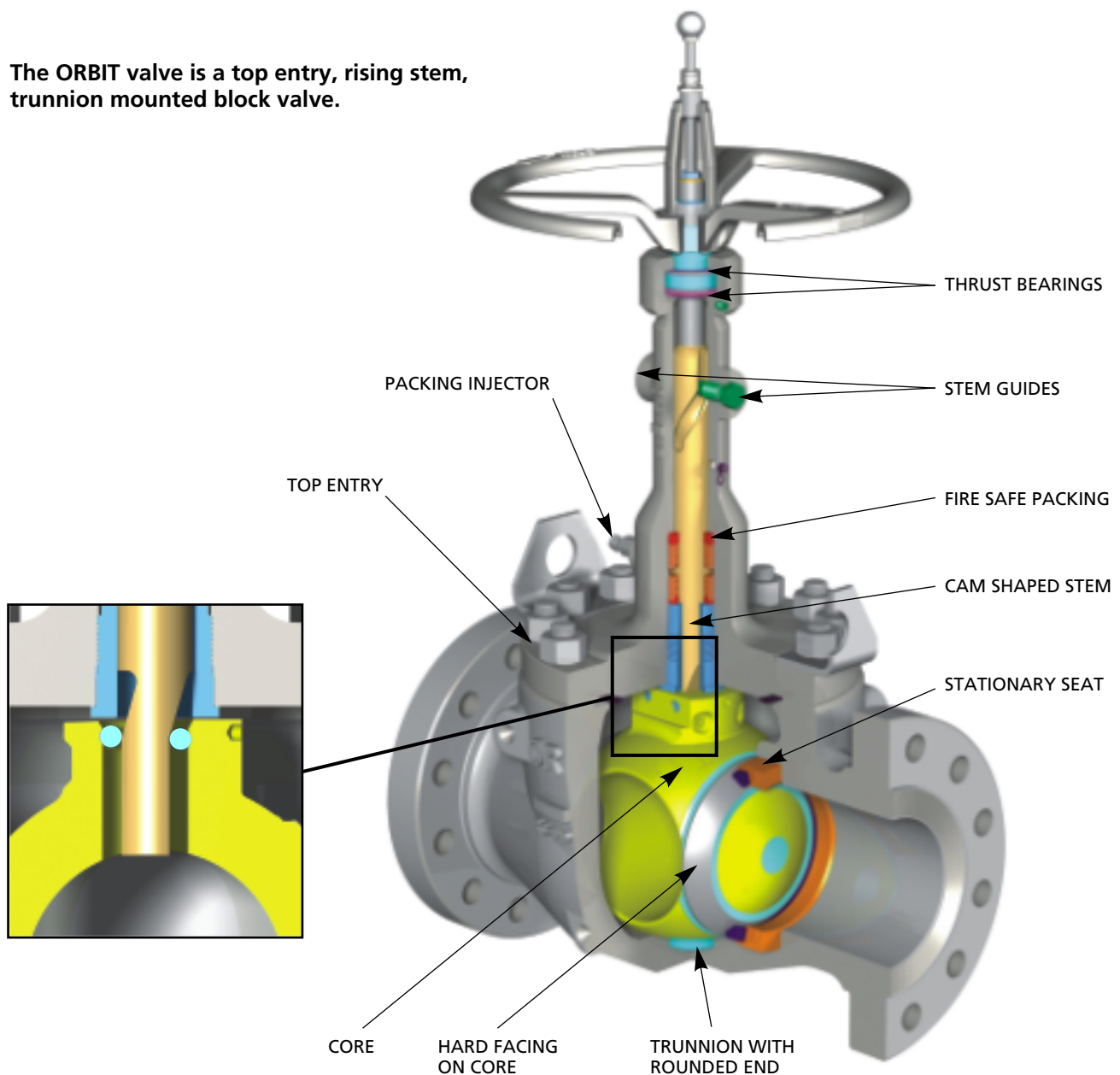
Using Six Sigma lean methods the result is a finished product of unmatched excellence, built with precision and pride.

ORBIT valves are ideally suited for:

- Flow lines
- Meter isolation
- Dryer switching
- Block and bypass
- Product segregation
- Emergency shutdown
- Suction and discharge isolation
- Heat transfer fluids/Hot Oil and many other applications.

ORBIT VALVES ARE WITHOUT EQUAL WHEN ZERO LEAKAGE AND FREQUENT OPERATION ARE DEMANDED.

The ORBIT valve is a top entry, rising stem, trunnion mounted block valve.



QUALITY ASSURANCE

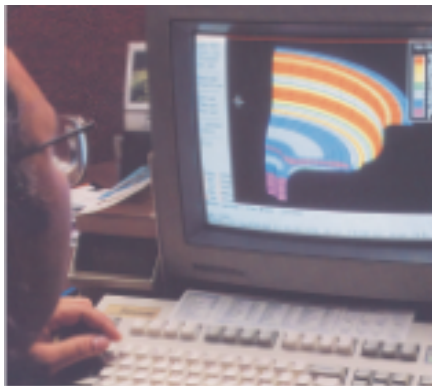
Cameron's Valves & Measurement group Little Rock manufacturing facility has quality programs that are ISO 9001 registered.

SPECIFICATIONS AND COMPLIANCES:

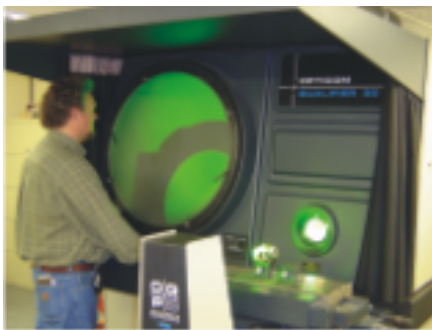
- API 6D
- ISO 9001:2000
- PED (Pressure Equipment Directive) 97/23/EC
- ATEX Directive 94/9/EC
- GOST (Russian Certificates)
- GOST R & GOST GGTN



Every ORBIT valve is individually pressure tested to meet or exceed industry standards.



Critical components are subjected to Finite Element Analysis to produce safe, economical designs.



As part of the ISO 9001 quality plan, every measuring instrument, gauge, fixture and jig is checked for accuracy on a regular basis by the calibration laboratory.

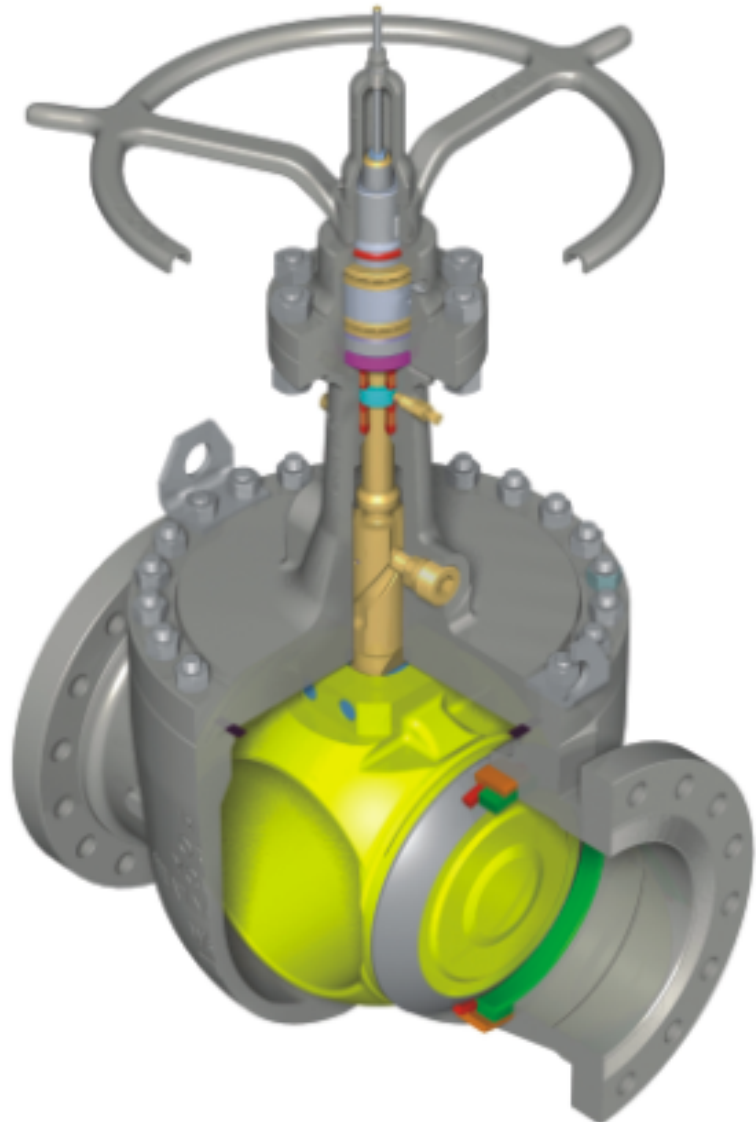
Cameron's Valves & Measurement group Six Sigma lean manufacturing philosophy and the standard 36 month warranty, assures that the design, materials and workmanship of all ORBIT products result in years of dependable operation.

Every ORBIT valve built is individually pressure tested to meet or exceed industry standards.

Certifications for hydrostatic test results and material properties are provided when requested.



Fire Testing and Certification to the latest industry standards is performed under the eye of independent inspectors.



OPERATING PRINCIPLE



ORBIT valves are ideal where frequent cycling and a positive shut-off are required.

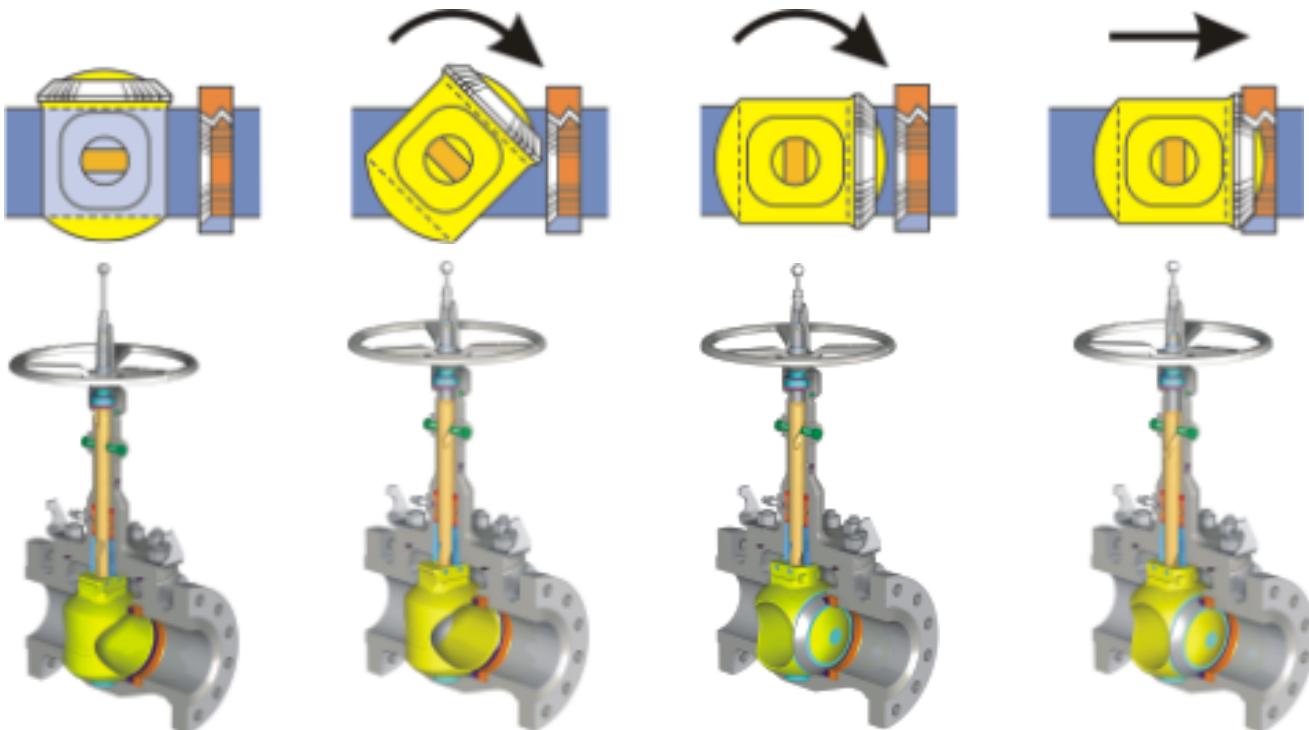
TO CLOSE AN ORBIT VALVE

To close an ORBIT valve, as the handwheel is turned, the stem begins to lower.

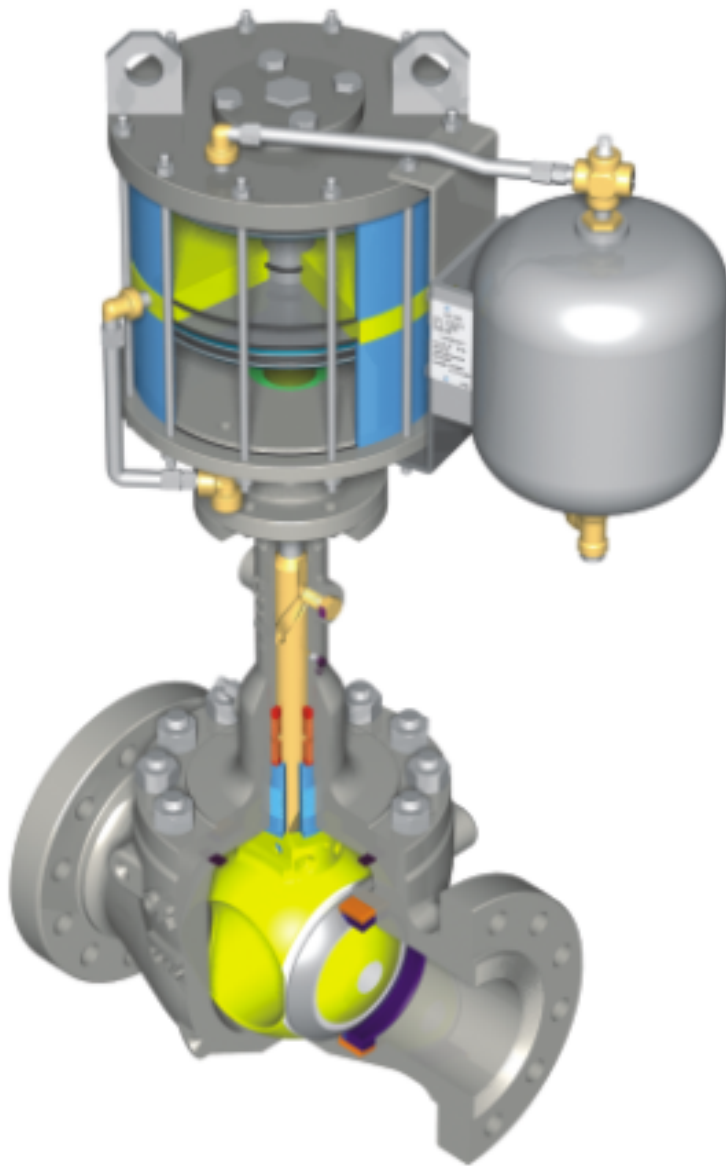
Precision spiral grooves in the stem act against fixed guide pins, causing the stem and core to rotate.

Continued turning of the handwheel rotates the core and stem a full 90° without the core touching the seat.

Final turns of the handwheel mechanically wedge the stem down, pressing the core firmly against the seat.



OPERATING PRINCIPLE



The ORBIT valve shown is complete with an ORBIT piston actuator that allows remote or automatic operation.



The ORBIT valve top entry design provides convenient access for inline inspection and repairs when required. For environmental protection, injectable packing can be replenished while valves are under full line pressure, on enclosed bonnet models.

Every ORBIT valve incorporates a proven tilt and turn operation that eliminates seal rubbing, which is the primary cause of valve failure.

When an ORBIT valve is closed, the core is mechanically wedged tightly against the seat, assuring positive shut-off.

When an ORBIT valve begins to open, the core tilts away from the seat and line flow passes uniformly around the core face. This eliminates the localized high velocity flow that typically creates uneven seat wear in ordinary ball, gate and plug valves. The core then rotates to the full open position.

The absence of seal rubbing during both opening and closing means easy, low torque valve operation and long term reliable performance.

When valve leakage cannot be tolerated, the ORBIT operating principle can be relied upon to deliver a positive shut-off.

PRODUCT RANGE AND OPTIONS



ORBIT builds complete packages that may include valve, actuator and instrumentation. Single source responsibility removes any doubt about where to call for service.

ORBIT valves are manufactured in a variety of materials, sizes and trims to meet specific requirements.

Materials:

Carbon Steel, Stainless Steel, Duplex SS, High Nickel Alloys and other special materials are used as service conditions require. Internal and external protective coatings are available for added durability in corrosive situations.

Seats:

Elastomer or metal seal options are selected for the intended service. Because the seals in the valves do not rub and because they are mechanically compressed shut, they survive in high temperature and abrasive situations.

Operation:

Hand or power operation can be selected. ORBIT builds double acting, spring close and spring open pneumatic actuators.

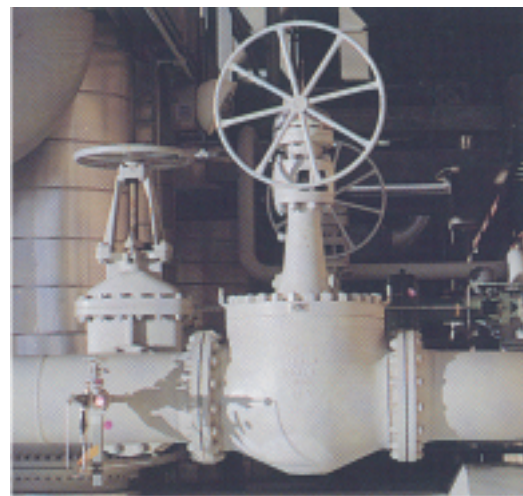
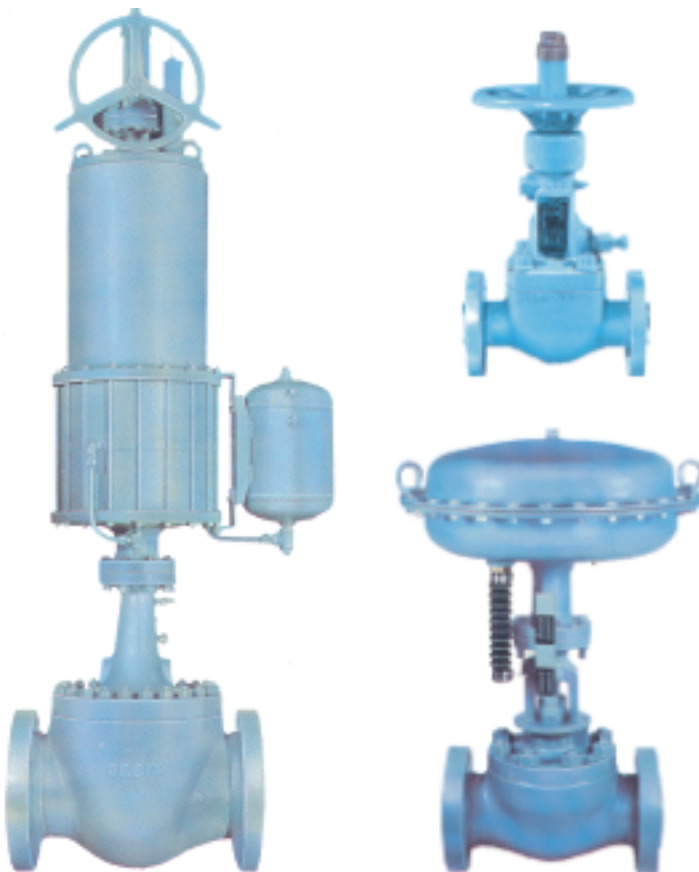
User selected electric and hydraulic actuators are available. Extensive instrumentation choices are offered.

Customizing:

Handwheel extensions, safety interlocks, position indicator limit switches, thermal jackets, custom painting and special inspection can be provided.

Maintenance and Repairs:

Contact VALVSERV for inspection, maintenance and repairs for all ORBIT valve products.



TRADEMARK INFORMATION

Orbit® is a registered trademark which is owned by Cameron.

This document contains references to registered trademarks or product designations, which are not owned by Cameron.

Trademark	Owner
Carpenter 450	Carpenter Technology Corp.
Hastelloy	Haynes International, Inc.
Inconel	INCO Nickel Sales, Inc.
Latrobe	Timkin Latrobe Steel
Monel	INCO Alloys International, Inc.
PEEK	Victrex PLC.
Stellite	Stoody Deloro Stellite, Inc.
Teflon	E.I. DuPont De Nemours & Company
Ultimet	Haynes International, Inc.
Viton	E.I. DuPont De Nemours & Company

**VALVES & MEASUREMENT**

3250 Briarpark Drive, Suite 300

Houston, Texas 77042

USA Toll Free 800 323 9160

For the most current contact and location information go to: www.c-a-m.com