VALVES













Valve Maintenance & Repair

With more than 300 highly skilled and certified technicians, the most field service trailers in the industry, and strategically located regional repair shops, Industrial Service Solutions is fully equipped to service and support your valves' entire life cycle. We deliver a wide range of onsite services from valve testing and inspection to maintenance including machining and welding to parts procurement and upgrades. Our factory authorized repair centers offer full-service repairs, reconditioning, modifications, testing and inspection services for all brands, types, and sizes of valves and actuators.

- + Ball Valves
- + Butterfly Valves
- + Check Valves
- + Control Valves
- + Gate Valves
- + Globe Valves

- + In-line Valves
- + Manual Valves
- + Mixing Valves
- + MOV Valves
- + Plug Valves
- + Pressure Relief

- + Safety Valves
- + Switch Valves
- + Vent Valves
- + Electric Actuators
- + Hydraulic Actuators
- + Pneumatic Actuators

Service Technicians Trained to Diagnose, Service, & Repair

- + Anderson Greenwood®
- + Atwood & Morrill®
- + Auma©
- + Centerline®
- + Chapman[©]
- + Conbraco©
- + Consolidated©
- + Crane / Pacific[©]
- + General Twin Seal®
- + HBE Engineering©

- + CCI®
- + Conval®
- + Crosby[©]
- + Durco®
- + Edwards[©]
- + Farris®
- + Fisher®
- + Flowseal®
- + Limitorque[©]

- + Masoneilan©
- + Newco©
- + ORBIT®
- + Rotork®
- + Shand & Jurs®
- *Valtek*©
- Velan©
- + WedgePlug©
- + Weir©



Valve Shop Services

We can service, repair, and remanufacture all brands, types, sizes, and applications of valves, including block, control, and pressure relief valves. Our authorized repair centers are available 24/7 and ready to work with your operations and engineering personnel on process requirements, optimize valve repair vs replace decisions, and improve valve performance in the field. We can also coordinate with maintenance and planning to schedule work to procure parts and equipment to complete the project on time and within budget.

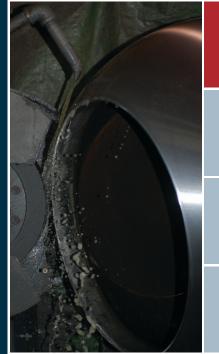
- + OEM Authorized Service Center
- + 24/7 Emergency Repairs
- + Preventative Maintenance
- + Reconditioning & Remanufacturing
- + OEM Parts Procurement
- + Part Reverse Engineering
- + Valve Seat Machining & Grinding
- + Valve Fabrication & Welding
- + New Valve Modifications

- + Manual to MOV Conversions
- + Flange Face Conversions
- + Actuator Sizing & Assembly
- + In-line Testing with Lift Assist
- + Non-Destructive Testing
- + Warehouse Storage
- + Online Asset Tracking
- + Class 9 Cleanroom

CERTIFICATIONS

- + National Board VR Stamp
- + National Board ASME Section I & VIII
- + Limitorque "Blue Ribbon" Service Center
- + Consolidated Authorized Green Tag Center

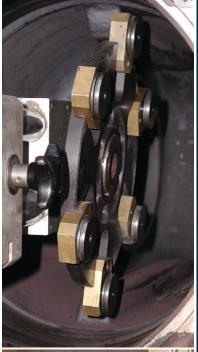
















Valve Field Service

Industrial Service Solutions' fleet of 48 to 53 foot mobile tooling trailers are fully equipped for inline machining, part fabrication, welding, actuation repair, and live-steam testing to National Board standards. Onsite we can service any valve type, brand, size, material, pressure, and operating condition. In addition to valve repair and maintenance, our field service team excels at larger projects, including turnarounds, outages, upgrades, and installations. Whatever the time, location, or complexity of a project, Industrial Service Solutions has the field service know-how and equipment to do the job safely, on schedule, and within budget.

- + 24/7 Emergency Service
- + Preventative Maintenance
- + Turnarounds & Outages
- + Start-up & Troubleshooting
- + Upgrades & Installation
- + Part Procurement/Management
- + Onsite Part Fabrication
- + Non-Destructive Testing

- + Modifications & Retrofits
- + In-line Machining & Welding
- + Valve Seat Hard Facing
- + Stem Polishing & Coating
- Mechanical Support & Bolt-Up
- + Valve Repacking Services
- Leak Detection & Repair (LDAR)
- + Testing & Calibration

Our technicians use advanced methods of testing to reduce downtime cost while preserving the safety and integrity of your valves. All test stands at our repair facilities are certified by the National board, including mobile test stands used in the field. We can test air at 6,000 psi, nitrogen at 6,000 psi, water at 8,000 psi, and steam at 1,500 psi. If you need in-line testing for pressure and safety relief valves, we have EVT and AVK test units and can setup specific test programs, including linkage to ValvKeep for future preventative maintenance.







New & Reconditioned Valve Products & Parts

Industrial Service Solutions has an extensive inventory of new valve products and a large supply of valves on-hand ready to be reconditioned. Our experienced product specialists select and size the correct valve products, even in critical safety and control valve applications. If a new or reconditioned valve isn't the right solution, our in-house valve repair services provide fast, high-quality turnarounds.







METAL ECYCLING

RANSIT &

WATER & AASTEWATER

MOUNTING

Brands We Represent

Industrial Service Solutions is a distributor of pumps for all types of industrial, municipal, and commercial applications. We provide distribution for the major OEMs below.











































^{*} Some brands may not be available in all geographic areas.





High Performance Double Offset Butterfly Valves

Equivalent to ABZ, Bray, Crane, Durco, & Jamesbury

APPLICATIONS

- + Air Separation & HVAC
- + Chemical & Petrochemical
- + Grain/Corn Processing
- + Power Generation
- + Pulp & Paper
- Marine & Shipbuilding

SIZES	2 to 24 IN (up to 60 IN available)
PRESSURES	ANSI Class 150, 300, 600
TEMPERATURES	from -196°F to 550°F
BODY STYLE	Wafer, Lug, Flanged
BODY MATERIAL	Cast Steel, Stainless Steel
SEAT MATERIAL	PTFE, EPDM, NBR, Metal Seated
DESIGN STANDARD	API 609, MSS SP-67, BS 5155, EN 593, DIN 3354
FLANGE DRILLING	ASME B16.5, ASME B16.47, DIN 2501, EN 1092
TESTING STANDARD	API 598, EN 12266
FACE-TO-FACE	API 609, DIN 3202

- Easier to automate than gate valves, often easier than rotary valves
- + Lower installation cost and higher performance than gate valves
- + Provides reliability and tight shut-off under many damaging process conditions
- + Can easily be adapted to comply with evolving emission regulations
- + Positive shaft retention prevents movement of the shaft past the compression plate
- + Flexible-lip polymeric seat assures positive shut-off, extending life cycle
- + Only the insert needs to be removed to replace the seat; the insert and seat are self-aligning
- + Low torque requirements allow the use of less costly actuators
- + Available in a broad range of materials for standard and special services including chlorine, oxygen, cryogenics, and vacuum.





Series 1200 Butterfly Valves

Equivalent to Crane Series 200

APPLICATIONS

- + Air Separation & HVAC
- + Food & Beverage
- + Chemical & Petrochemical
- + Power Generation
- + Pulp & Paper

SIZES	2 to 48 IN
PRESSURES	to 200 PSI
TEMPERATURES	to 300°F
BODY STYLE	Wafer, Lug, Flanged
BODY MATERIAL	Cast Iron, Ductile Iron, Stainless Steel
SEAT MATERIAL	PTFE, EPDM
DESIGN STANDARD	API 609, MSS SP-67
FLANGE DRILLING	ASME B16.5
TESTING STANDARD	API 598
FACE-TO-FACE	API 609

- + Flange accommodates all types of actuators: handle, gear, electric, and pneumatic
- + Smooth finished disc flats mate with seat flats to give a highly efficient seal; prevents leakage into shat areas
- + Strong precision key gives positive attachment for handles or actuators
- + One-piece through shaft ensures dependability and positive disc positioning
- + Bonding of elastomer to phenolic backing ring protects against distortion, a common cause of leakage
- + Seat face negates need for flange gaskets
- + Precision profile disc provides bubble-tight shut-off and assures minimum torque and longer seat life
- + Phenolic backed seat is non-collapsible, stretch resistant, blow out proof, and easily replaced in the field



C-KGA Slurry Knife Gate Valves

Equivalent to Clarkson KGA

SIZES	2 to 54 IN	
PRESSURES	to 100 PSI	
TEMPERATURES	to 400°F	

APPLICATIONS

- + Cement & Aggregates
- + Chemical & Petrochemical
- + Mining & Metals
- + Power Generation
- + Pulp & Paper

- + 100% full port
- + Double seated, bidirectional shut-off design
- + Heavy duty elastomer sleeves
- + No seat cavity
- + Packingless design
- + Manual bevel gear
- Air or hydraulic cylinder actuators
- Electric motor operators

© MOUNTING



C-KGD Slurry Knife Gate Valves

Equivalent to Clarkson KGD

SIZES	2 to 24 IN
PRESSURES	to 150 PSI
TEMPERATURES	to 300°F

APPLICATIONS

- + Cement & Aggregates
- + Chemical & Petrochemical
- + Mining & Metals
- + Power Generation
- + Pulp & Paper

- + 100% full port
- + Double seated, bidirectional shut-off design
- Exclusive, dynamic self-adjusting sleeve design
- + MSS face-to-face dimension
- + Manual bevel gear
- + Air or hydraulic cylinder actuators
- + Electric motor operators





C-KGF Slurry Knife Gate Valves

Equivalent to Clarkson KGF

APP	LICA	TIONS
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- + Cement & Aggregates
- + Chemical & Petrochemical
- + Mining & Metals
- + Power Generation
- + Pulp & Paper

SIZES	3 to 36 IN
PRESSURES	to 300 PSI
TEMPERATURES	to 300°F

- + 300 psi CWP Design
- + 100% full port
- + Double seated, bidirectional shut-off design
- + Exclusive, dynamic self-adjusting sleeve design
- Manual bevel gear
- Air or hydraulic cylinder actuators
- + Electric motor operators



C-KLB Linear Line Blind Valves

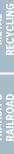
Equivalent to Clarkson KLB

APPLICATION	11/1/2

- + Cement & Aggregates
- + Chemical & Petrochemical
- + Mining & Metals
- + Power Generation
- + Pulp & Paper

SIZES	2 to 24 IN
PRESSURES	to 150 PSI
TEMPERATURES	to 300°F

- + Man-safe line blind
- + No downstream leakage even with sleeve failure
- + 100% full port
- Double seated, bidirectional shut-off design
- + MSS face-to-face dimension
- + Positive splash containment
- + Manual bevel gear
- + Air or hydraulic cylinder actuators
- + Electric motor operators





C-Valve Slurry Throttling Valves

Equivalent to Clarkson C-Valve

APPLICATIONS

- + Cement & Aggregates
- Chemical & Petrochemical
- Mining & Metals
- **Power Generation**
- Pulp & Paper

SIZES	1 to 10 IN (larger sizes available)
PRESSURES	to 100 PSI
TEMPERATURES	to 400°F

- + No metal parts in contact with the flowing slurry
- Molded elastomer sleeve
- + Sleeve maintains perfect round and concentric aperture across the full
- + Throttling range from wide open to up to a 90% reduction of maximum flow
- Automated or manual valve actuation
- + Valve sizing and applications assistance available

