



**C.R.I. VALVES**  
Engineers Choice

# Valves that bear the Hallmark of Quality



An ISO 9001, ISO 14001 & 18001 Company

### THE CHANGE AGENT

Powered by technology and the spirit of innovation, C.R.I. has always set the benchmark when it comes to quality and performance. C.R.I. has what it takes experience, expertise, commitment and a clear vision to be a precursor of change, an innovator of new technologies and a standard bearer for quality.

Today, C.R.I. is a multi-winged organization that produces different varieties of pumps and motors that are engineered to perfection. The name C.R.I. itself encapsulates the company's ethos: "Commitment, Reliability, Innovation" and it has now become a household name associated with pumping solutions.

### THE DAWN

The C.R.I. success story began in the year 1961 with the manufacture of irrigation equipment at an in-house foundry with very limited facilities. There has been no looking back since then. Today, C.R.I. is one of the leading names in the manufacture of pumping systems globally with the vision and the capability to be counted as one among the top global pump companies.

With its comprehensive range of products over 2300 models C.R.I. is catering to diverse customer profiles including Residential, Agriculture, Industries, Building services, General Water supply, Mining, Oil & Gas, Sewage & Waste Water and Coal Bed Methane applications.

### QUALITY KNOWS NO BOUNDRIES

C.R.I.'s unwavering determination had made us a strong presence in more than 120 countries with its 8 subsidiary companies, 5000 plus channel partners and more than 1500 Authorised service centers. With a solid production capacity of over 3 million pumps per annum C.R.I. has been rated as one among the best brands worldwide. Besides in recognition of its pioneering efforts and contribution to the cause of progress and quality C.R.I. has been honored with many prestigious awards including: Export Excellence Award for 12 years since 2003, The ISO 9001 and ISO 14001 certified company, spanning across 300,000 sq.mtr. covered area, has a strong R & D wing recognised by Ministry of science & technology which is one of the best in the world and are equipped with the latest in technology for research and design. C.R.I. constantly upgrades the product features to match with the ever changing market trend & customer needs.





The Company with  
Commitment  
Reliability  
Innovation

CRI Valves Division manufactures and markets a wide variety of Industrial Valves, providing flow management solutions to all industrial segments.

#### Product Range

- Gate, Globe and Check Valves
- Floating Ball Valve
- Trunnion Mounted Ball Valve
- Knife Edge Gate Valve
- Butterfly Valve
- Sluice Gate Valve (Metal Seated Gate Valve)
- Resilient Seat Gate Valve
- Air Valve
- Wafer Check Valve
- Ball Type Non Return Valve
- Y-Type Strainers

The plant has major accreditations such as ISO 9001, API 600 and API 6D



# CAST STEEL GATE, GLOBE, CHECK VALVES

## Application

Oil & Gas | Petrochemicals | Power Plants | Chemical & Fertilizers | Sugar & Distillation |  
 Metal & Mining | Paper & Pulp | Water & Waste Water | Textile & Tannery |  
 Food | Pharmaceuticals | General Industries | Process Industries

## Product Range & Specification

Size – 2" to 24" (Gate valve),  
 2" to 24" (Globe valve)  
 2" to 24" (Check valve)  
 Pressure Rating – ASME Class 150 # to 600#  
 Pressure /Temperature Rating – As per ASME B 16.34  
 End Connection – Flanged / Welded  
 Material of construction – Steel, others available on request  
 Type – Hand wheel / Gear Box / Electrical/Pneumatic Actuator

## Standards

DESCRIPTION	GATE VALVE	GLOBE VALVE	CHECK VALVE
DESIGN	API 600	BS 1873	BS 1868
FACE TO FACE	ASME B 16.10		
FLANGE STANDARD	ASME B 16.5		
BUTT WELDING END CONFORMITY	ASME B 16.25		
TESTING STANDARD CONFORMITY	API 598		

## Features

### Gate valve

- Hardened Seat minimize on line erosion & provide maximum service life.
- Body guided wedge ensures positive seating and eliminates side thrust & flexible wedge ensures tight shut-off.
- Graphite packing ring, top & bottom rings are braided graphite. It ensures effective stem sealing.
- Various types of material of construction available depends on customer applications.
- Back seating feature facilitates re-packing of the stuffing box on line with the valve in fully open position.
- Leak proof Body –Bonnet joint with spiral wound gasket.

### Globe valve

- Self-aligning & rotating disc ensure tight shut-off.
- Hardened Seat minimize on line erosion & provide maximum service life.
- Graphite packing ring, top & bottom rings are braided graphite. It ensures effective stem sealing.

### Check Valve

- Self Aligning free floating disc ensures perfect sealing.
- Hardened Seat minimize on line erosion & provide maximum service life.



**GATE VALVES**



**GLOBE VALVES**



**CHECK VALVES**





**C.R.I. VALVES**  
Engineers Choice

## FORGED STEEL GATE, GLOBE, CHECK VALVES

### Application

Oil & Gas | Petrochemicals | Power Plants | Chemical & Fertilizers  
Sugar & distillation | Metal & mining | Paper & Pulp | Water & Waste Water Textile & Tannery |  
Food | Pharmaceuticals | Process Industries

### Product Range & Specification

Size – 15 mm to 50 mm  
Rating – ASME-800#, 1500#, 2500#, Class 150 # to 600#-Welded Flange  
Pressure /Temperature Rating – As per ASME B 16.34

### Standards

Designs API 602 / ISO 15761  
End Standard Socket End - ASME B 16.11  
Screwed End - (NPT) to ANSI / ASME B1.20.1  
Welded Flange – ASME B 16.5  
Butt Welded – ASME B 16.25  
Testing Standard API 598

### Features

- Ground finish stem. Self aligned two piece gland.
- Back seating feature facilitates re-packing of the stuffing box on line with the valve in fully open position.
- Leak proof Body –Bonnet joint with spiral wound gasket.
- Piston type body disc in Check valves makes perfect alignment of Disc & Seat ring.



Gate Valve



Globe Valve



Check Valve

## TRUNNION MOUNTED BALL VALVE

### Application

Oil & Gas | Paper & Pulp | Pharma | Chemicals | Petro Chemical | General Industries | Process Industries

### Product Range & Specification

Size – 2" to 12"  
Pressure Rating – 150 # to 600#  
End Connection – Flanged / Welded  
Operation – Manual(Hand-lever/Handle/GearBox)/ Pneumatic/Electrical (Optional)  
Construction – Two Piece & Three Piece, Full Bore  
Material of construction – Steel, others available on request

### Standards

Design – API 6D, ASME B 16.34, ISO 17292  
Face to Face – ASME B 16.10, API 6D  
Flange Standard Conformity – ASME B 16.5  
Testing – API 6D, API 598, EN 12266

### Features

- Fire Safe design
- Standard double block and bleed feature available and optional double isolation and bleed
- Blow out proof stem ensures that the stem should not blown out of the valve
- Primary soft and secondary metal seat with external sealant injection. Self relieving seats
- Optional secondary sealant injection (6" & above)
- Spring assisted seat rings ensures a positive force always acting on ball even at no pressure.
- Piston action seats (single piston is standard, double piston is optional)
- Antistatic design







## FLOATING BALL VALVE (2 - PIECE)

### Application

Pharma | Power | Clean Water | Raw Water | Sewage | Slurry | Waste Water |  
Viscous liquids etc. | General Industries | Process industries

### Product Range & Specification

Size – 2" to 8"  
Pressure Rating – 150#/300#  
Bore – Full Bore & Reduced Bore  
End Connection – Flanged end  
Material of construction – Steel, Others available on request  
Operation – Manual (Hand-lever/Handle/Gearbox based on size), Pneumatic/Electrical (Optional)

### Standards

Design – API 6D, ISO 17292/ASME B16.34  
Face to Face – ASME B 16.10, API 6D  
Flange Standard Conformity – ASME B 16.5  
Testing – API 6D, API 598, EN 12266

### Features

- Precisely machined mirror finish Solid SS ball
- Inline replacement of stem packing
- Fire Safe design
- Pressure relief feature
- Blow out proof stem stem, live load packing, low emission seals
- Drain and Stem sealant injection features are optional.
- Anti static design



## FLOATING BALL VALVE (3 - PIECE)

### Application

Pharma | Power | Clean Water | Raw Water | Sewage | Slurry | Waste Water |  
Viscous liquids etc. | General Industries | Process Industries

### Product Range & Specification

Size – 1/4" to 8"  
Pressure Rating – 150#/300#/800#  
Bore – Full Bore & Reduced Bore  
End Connection – Flanged end  
Material of construction – Steel, Others available on request  
Operation – Manual (Hand-lever/Handle/Gearbox based on size), Pneumatic/Electrical (Optional)

### Standards

Design : ISO 17292/ API 6 D  
End connection : Socket Weld Ends – ASME B 16.11  
Screwed (BSPT) – ISO 7-1 | Screwed (NPT) – ASME B1.20.1  
Flanged- ASME B 16.5  
Face to Face: ASME B 16.10 / API 6D  
Pressure Test: EN 12266/ API 598  
Fire Test: API 607/ ISO 10497

### Features

- Precisely machined mirror finish Solid SS ball
- Inline replacement of stem packing
- Fire Safe design
- Pressure relief feature
- Blow out proof stem stem, live load packing, low emission seals
- Drain and Stem sealant injection features are optional.
- Anti static design
- Fire Safe tested and Certified by FCRI



## KNIFE EDGE GATE VALVE

### Application

Water and Waste water | Abrasive slurries | Chemical Slurries | High Viscous media.

### Product Range & Specification

Size – 2" to 36"

Pressure Rating – PN10 / PN 16 / ASME 150#

Type - Uni Directional & Bi Directional

End Connection – Flanged, Wafer (lugged / Semi Lugged)

Operation - Lever Operated, Gear Operated, Chain wheel & Pneumatic (Optional)

Material of construction – Iron, Steel

### Standards

Design – MSS SP 81

Face to Face – DIN PN 10 and ASME B16.5 Up to 600mm

Above 600mm ASME B16.47

Flange Standard Conformity – MSS SP 81 / ASME B 16.5 / ASME B 16.47

Testing – MSS SP 81

### Features

- The body is made of a single casting with no welding on pressure containing parts, to make it even more rugged.
- Full port design for greater flow capacity and minimal pressure drop
- Resilient seat are locked into the valve body and provide guiding for the gate
- Replaceable wire reinforced elastomer perimeter seal provides bidirectional zero leakage shutoff.



## BUTTERFLY VALVES

### Application

HVAC | Fire Fighting | Construction | Water & Waste Water Treatment | Paper & Pulp Industry |  
 Sugar & Chemical Industry | Food & Pharmaceutical Industry | Cement Industry | Metal & Mining | General Industries

### Product Range & Specification

Size – 1 ½" – 24"

Pressure Rating – PN 10 / PN 16

End Connection – Wafer & Semi lugged

Operation – Hand Lever / Gear / Electrical / Pneumatic

Material of construction – Cast Iron, Ductile Iron

### Standards

Design – BS EN 593 / API 609 / IS 13095

Face to Face – ISO 5752

Top Flange – ISO 5211

Testing – API 598 / IS 13095

Suitable for Flanges drilled to BS EN/ANSI /DIN/IS

### Features

- Positive engagement between stem and disc without any pins. This eliminates the possibilities of electrolyte corrosion.
- Corrosion resistant, long life non toxic fusion bonded epoxy coating
- Food Graded EPDM can be supplied for drinking water application
- Seat can be available on replaceable/bonded type based on customer requirement
- Plain Bearings at both ends reduces friction and operating torque, ensures smooth operations.
- Optional Rilson coating available on request
- BIS Certified ISI Marking for valves of sizes upto 250mm



# METAL SEATED GATE VALVE

## Application

Water, Irrigation | Sewage | General Industries

## Product Range & Specification

Size – 2" to 12"

Pressure Rating – PN 10 / PN 16

End Connection – Flanged

Material of construction – Cast Iron & Ductile Iron

## Standards

Design – IS 14846

Face to Face – IS 14846

Flange Standard Conformity – IS 1538

Testing – EN 12266-1 / IS 14846

## Features

- Fully guided wedge ensures proper alignment throughout travel and easy operation irrespective of pressure variation
- Tapered wedge ensures excellent shut-off in long run
- Low emission multiple stem packing
- Tight shutoff with minimum thrust.
- Overlayed seat rings and wedge, less wear & tear and corrosion resistant
- Bypass arrangement/Stem cap/Drain Plug (available on request)
- BIS Certified ISI Marking on valves sizes upto 100mm.



# RESILIENT SEATED GATE VALVE

## Application

Drinking Water | Irrigation Systems | Waste Water | General Industries

## Product Range & Specification

Size – 2" to 20"

Pressure Rating – PN 10 / PN 16

End Connection – Flanged

Operation – Hand Wheel / Gear Box / Electrical / Pneumatic

Material of construction – Cast Iron, Ductile Iron (GGG40) (optional GGG50 available)

## Standards

General Design - BS 5163, EN 1074-1, EN 1074 -2, ISO5752

Face to Face - EN558 Series-3/ISO5752, ASME B 16.10

Flange Standard Conformity - EN1538/EN 1092 - 2

Testing – EN 12266 - 1, BS 6756 - 1

## Features

- 100 % Leak proof
- Corrosion resistant fusion bonded Epoxy Coated body and bonnet.
- Ductile Iron Wedge with EPDM encapsulation
- Fully guided wedge ensures proper alignment throughout travel and easy operation irrespective of pressure variation
- Stem O-rings can be replaced under pressure without removing the valve from pipeline even the valve is fully open / closed position.
- Suitable for underground installations
- Bypass arrangement available on request
- Endurance and Performance tested at FCRI





## AIR VALVE

### Application

Water Application | General Industries | Agriculture | General Industries

### Product Range & Specification

Size – 2" to 12"

Pressure Rating – PN 10 / PN 16 / PN 25

End Connection – Flanged

Temperature – Up to 80oC

Material of construction – Iron, others available on request

### Standards

Design – IS 14845, AWWA C 512 – 07, EN 1074 – 1 & 4

Flange Standard Conformity – IS 1538/ASME B 16.5 (150#)/ EN 1092-2

Testing – EN 12266-1

### Features

- Very efficient triple function (Air release, Air intake and Air release under pressure)
- Corrosion resistant fusion bonded Epoxy Coated body and bonnet
- Specially designed TAMPERPROOF cover ensures free, all-round (360 Degrees) air movement
- Floats are designed to optimum specific gravity ensuring quick response to level changes
- Replaceable seat and seals
- Can be supplied along with isolation valve.
- Provision provided for drain plug
- Optional Stainless Steel Float & Cage design ensuring perfectly centered float
- Endurance and Performance tested at FCRI



## WAFFER TYPE CHECK VALVE

### Application

Metal & Mining | Water & Waste Water | Process Industries | Chemical & Fertilizer | Pharmaceutical

### Product Range & Specification

Size – 2" to 12"

Pressure Rating – PN 10 / PN 16

End Connection – Flanged, Wafer

Material of construction – Iron & Steel

### Standards

Design – API 6D / ASME B16.34

Face to Face – API 6D

Flange Standard Conformity – ASME / DIN / BS 10

Testing – API 598

### Features

- Self Aligning free floating disc ensures perfect sealing
- Full bore ensures low pressure drop
- Corrosion resistant hardened seat



## Y STRAINER

### Application

Water , Irrigation I Cement Plant I Chemical Industries I Pharmaceutical Industries I  
 Power Plants I Sugar Industries I Pulp & Paper Industry I Fertilizer plant & Allied Industries I  
 General Industries

### Product Range & Specification

Size – 2" to 12"

Pressure Rating – PN 10 / PN 16

End Connection – Flanged

Material of construction – Cast Iron/Ductile Iron

### Standards

Design – Manufacturer Standard

Face to Face – ASME / BS

Flange Standard Conformity – BS10 / EN / ASME Testing – EN 12266 – 1

### Features

- Compact Design
- Blow-off plug for screen maintenance
- 1/32 " to 1/2" perforated stainless steel screen
- 40, 60, 80, 100 fine mesh stainless steel screens



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## BALL CHECK VALVE

### Application

Clean Water I Raw water I Sewage I Slurry I Waste Water I Viscous liquids etc

### Product Range & Specification

Size – 2" to 8"

Pressure Rating – PN 10 / PN 16

End Connection – Flanged

Material of construction – Cast Iron & Ductile Iron

### Standards

Design – EN 13445, EN 12334

Face to Face – IS 5312 / DIN 3202

Flange Standard Conformity – BS10

Testing – IS 5312

### Features

- Lowest possible pressure drop across the valves
- Lower head loss-high discharge, reduced pumping time
- Valve can be mounted horizontal as well as vertical



## Quality & Process Development



600-0091



6D-0915



## W I N N I N G   W A Y S

When you have a good thing going it is quite in the fitting of things that recognitions come our way. Several prestigious awards, which decorate our shelf, say it all. These rewards not only acknowledge our position as a leader in the water pump industry but also serve as reminders about what the customer expects from a winner. And we, as ever, have our ears perfectly tuned to customer expectations.

