Newmans®

A Cameron Joint Venture Company

Manufacturer of

Newco® COOPER® OIC®

www.NewmansValve.com

Product Line Brochure

Gates • Globes • Checks • Stop Checks • Angles • Tilting Discs • Trunnion Balls • Floating Balls • QuadroSphere™ Balls • Triple Offset Butterflies















Newmans®

Newmans manufactures a complete line of Newco and OIC valve products in a full range of sizes, classes, and materials. Our newest additions are Cooper exotic valves, Sub-Sea ball valves, QuadroSphere® specialty trunnion mounted ball valves and the Trinity Series Triple-Offset Butterfly Valves.

Newmans has been supplying quality valves to the world's hydrocarbon, pulp & paper, marine, power, chemical, mining, and general industries for more than 60 years. Newmans manufactures and inventories gate, globe, check, ball, and specialty valves in sizes from 1/2" thru 120" in diameter and in pressure classes from 150 thru 4500 lbs. in most alloys.

Newmans' world-wide production facilities are ISO certified and are compliant to the industry standards of API, ASTM and ASME. All Newmans products are manufactured,

NEWCO

Cast Steel
Gate, Globe, and Check Valves

Bonnet: *Bolted*
Sizes: *2" thru 60"*
Class: *150 thru 2500*
Design: *API 600 and ASME B16.34*

NEWCO

Cast Steel
Gate, Globe, and Check Valves

Bonnet: *Pressure Seal*
Sizes: *2" thru 36"*
Class: *600 thru 4500*
Design: *ASME B16.34*

NEWCO

Cast WCB, 316, Monel, Hastelloy, and NiAlBr
Triple Offset Butterfly Valves

Sizes: *3" thru 120"*
Class: *150, 300, 600*
Design: *API STD 609*
Features: *Sealed 316SS Bearings, NACE Compliant, ISO 15848 Emmision Tested, and Fire Safe Tested per API 607*

(Details on page 17)

NEWCO

Floating Ball Valves and Trunnion Mounted Ball Valves with Standard, Sub-Sea, or QuadroSphere™ Technology

Body: *2-Piece and 3-Piece*
Sizes: *2" thru 36"*
Class: *150 thru 2500*
Design: *API 608 & API 6D*

QuadroSphere™

See Product Range Chart on back page for details.

NEWCO

Forged Steel
Gate, Globe, Check, and Y-Pattern Valves

Bonnet: *Bolted and Welded*
Sizes: *1/4" thru 2"*
Class: *150 thru 4500*
Design: *API 602*

COOPER

Cast and Forged Exotic Alloys
Gate, Globe, Check, and Ball Valves

Bonnet: *Bolted*
Sizes: *1/2" thru 24"*
Class: *150 thru 1500*
Design: *ASME B16.34*

OIC

Cast and Forged
300 Series Stainless and Alloy 20
Gate, Globe, and Check Valves

Bonnet: *Bolted*
Sizes: *1/2" thru 24"*
Class: *150 thru 1500*
Design: *API 602 & API 603/ASME B16.34*

Newmans®

inspected, and tested in accordance to the most rigid quality standards as well as specific customer requirements.

So, whether it's cast steel for general service or exotic alloys for corrosive applications or metal seated ball valves for severe services, Newmans is "The Reliable Source" for all your valve needs.

- *Engineered solutions*
- *Complete alloy coverage*
- *Ready-to-ship inventories*
- *Competitive factory lead times*
- *Sizes: 1/2" thru 120"*
- *Classes: 150 thru 4500*

Please visit us online at www.NewmansValve.com to see our complete line of Newco, Cooper, & OIC valves.

Cast Steel Gate, Globe, & Check Valves

NEWCO Cast Steel Gate, Globe and Check Valves exceed all industry performance requirements. Ranging from 1/2" thru 60" in pressure classes 150 thru 2500.

Gates

Sizes: *2" thru 60"*
Class: *150 thru 2500*
Design: *API 600*
Ends: *RF, RTJ, BW*
Style: *Flex Wedge, Parallel Slide*
Materials: *WCB, LCC, Alloy Grades*

NEWCO Cast Steel Gate valves are ideal for bidirectional, low-friction flow and tight shut-off. Due to the flow characteristics of the wedge-to-seat design, Gate valves should be operated in the full-open or full-close position. Concentrated flow across the seats of a partially opened gate valve risks possible seat damage, therefore throttling is not recommended. Gate valves are utilized in applications where minimum pressure drop is necessary.

Globes

Sizes: *2" thru 24"*
Class: *150 thru 2500*
Design: *API 600*
Ends: *RF, RTJ, BW*
Style: *Precision Guide*
Materials: *WCB, LCC, Alloy Grades*

NEWCO Cast Steel Globe valves are ideal for unidirectional, controlled flow. The flow characteristics of a Globe valve is repeatable, consistent, and easy to control at any open position, which makes the design ideal for regulating flow.

Checks

Sizes: *2" thru 36"*
Class: *150 thru 2500*
Design: *API 600*
Ends: *RF, RTJ, BW*
Style: *Swing & Tilting Disc*
Materials: *WCB, LCC, Alloy Grades*

NEWCO Cast Steel Check valves yield minimal restriction to low velocity environments and are ideal for preventing pipeline back flow in unidirectional flow applications in horizontal or upward (vertical) flow. The tilted disc design offers quicker closing minimizing the possibility of slamming.

See Product Range Chart on back page for details.

Floating Balls

Sizes: *1/2" thru 12"*
Class: *150 thru 600*
Design: *API 608 & API 607*
Ends: *RF*
Materials: *WCB, LCC, CF8M*

NEWCO 2-piece bolted body floating ball valves are cast in-house and are available in both reduced and full port designs, and are Fire Tested. ***(Details on page 11)***

Trunnion Balls

Sizes: *2" thru 36"*
Class: *150 thru 2500*
Design: *API 6D*
Ends: *RF, BW, RTJ*
Materials: *A105, LF2, F316, F51*
(Details on page 12)

QuadroSphere™

Sizes: *2" thru 24"*
Class: *150 thru 2500*
Design: *API 6D*
Ends: *RF, BW, RTJ*
Materials: *A105, LF2, F316, F51*

Newco's self-cleaning, flow-around "workhorse". The ***QuadroSphere™*** *trunnion valve is ideal for heavy debris applications.*
(Details on pages 13 & 14)

Red Hempel® coating.

Sub-Sea Balls

Sizes: *1" thru 40" (larger sizes available)*
Class: *150 thru 2500*
Design: *API 6A & 6D*
Ends: *FLGD, RTJ, BW, HUB*
Materials: *Forged Carbon Steel & Alloy grades*

Newmans Sub-Sea is focused on the design, manufacture and timely delivery of high integrity sub-sea valves for all conditions and environments. The Newco Sub - Sea Trunnion Mounted Ball Valves are manufactured in standard and exotic materials to meet our client's requirements and expectations.
(Details on pages 17 & 18)

Newco®

Floating, Trunnion & QuadroSpere™ & Sub-Sea Ball Valves

The NEWCO collection of ball valves include Floating Ball Valves, Trunnion Ball Valves, the innovative QuadroSphere® Ball Valves, and Sub-Sea Ball Valves ranging from sizes 1/2" thru 40" in Classes 150 thru 2500. Products are available in most metallurgies. Larger sizes are available upon request.

Newco®

Pressure Seals

The NEWCO Pressure Seal Valves are ideal for standard and critical Power Industry applications. The Pressure Seal bonnet joint eliminates the body/bonnet flanges reducing weight and simplifying the application of exterior insulation. Contrary to bolted bonnet valves, internal pressure applied to a Pressure Seal valve forces the sealing elements into tighter contact - the higher the internal pressure, the tighter the seal.

NEWCO Pressure Seal valves comply with the design and test requirements of ANSI B16.34 and the installation dimensions of ANSI B16.10.

Gates

Sizes: *2" thru 36"*
Class: *600 thru 4500*
Design: *ANSI B16.34*
Ends: *RF, RTJ, BW*
Materials: *All grades*

NEWCO Cast Steel Pressure Seal Gate valves are ideal for bidirectional, low-friction flow and tight shut-off. Due to the flow characteristics of the wedge-to-seat design, Gate valves should be operated in the full-open or full-close position. Concentrated flow across the seats of a partially opened gate valve risks possible seat damage, therefore throttling is not recommended. Gate valves are utilized in applications where minimum pressure drop is necessary.

Globes

Sizes: *2" thru 36"*
Class: *600 thru 4500*
Design: *ANSI B16.34*
Ends: *RF, RTJ, BW*
Materials: *All grades*

NEWCO Cast Steel Pressure Seal Globe valves are ideal for unidirectional, controlled flow. The flow characteristics of a Globe valve is repeatable, consistent, and easy to control at any open position, which makes the design ideal for regulating flow.

Y-Pattern Globes

Sizes: *2" thru 36"*
Class: *600 thru 4500*
Design: *ANSI B16.34*
Ends: *RF, RTJ, BW*
Materials: *All grades*

NEWCO Cast Steel Pressure Seal Y-pattern Globe valves offer the same flow controlling capabilities as standard globes. The smooth Y-pattern allows for less turbulence, and consequently less damaging flow and lower pressure drops.

Tilt Disc Checks

Sizes: *2" thru 36"*
Class: *600 thru 4500*
Design: *ANSI B16.34*
Ends: *RF, RTJ, BW*
Materials: *All grades*

NEWCO Cast Steel Pressure Seal Tilt Disc Check valves yield minimal restriction to low velocity environments and are ideal for preventing pipeline back flow in unidirectional flow applications in horizontal flow. The tilted disc design offers quicker closing minimizing slamming.

See Product Range Chart on back page for details.

Gates

Sizes: *1/2" thru 2"*
Class: *150 - 4500*
Design: *API 602*
Ends: *FLGD, THRD, SW*
Materials: *A105, LF2, Alloy Grades*

NEWCO Forged Steel Bolted and Welded Bonnet Gate valves are ideal for bidirectional, low-friction flow and tight shut-off. Due to the flow characteristics of the wedge-to-seat design, Gate valves should be operated in the full-open or full-close position. Concentrated flow across the seats of a partially opened gate valve risks possible seat damage, therefore throttling is not recommended. Gate valves are utilized in applications where minimum pressure drop is necessary.

Globes

Sizes: *1/2" thru 2"*
Class: *800 thru 4500*
Design: *API 602*
Ends: *FLGD, THRD, SW*
Materials: *A105, LF2, Alloy Grades*

NEWCO Forged Steel Bolted and Welded Bonnet Globe valves are ideal for unidirectional, controlled flow. The flow characteristics of a Globe valve is repeatable, consistent, and easy to control at any open position, which makes the design ideal for regulating flow.

The Y-pattern Globe valves offer the same flow controlling capabilities as standard globes. The smooth Y-pattern allows for less turbulence, and consequently less damaging flow and lower pressure drops.

Checks

Sizes: *1/2" thru 2"*
Class: *800 thru 4500*
Design: *API 602*
Ends: *FLGD, THRD, SW*
Materials: *A105, LF2, Alloy Grades*

NEWCO Forged Steel Bolted and Welded Bonnet Check valves yield minimal restriction to low velocity environments and are ideal for preventing pipeline back flow in unidirectional flow applications in horizontal or upward (vertical) flow.

Newco®

Forged Steel

The NEWCO Forged Steel Valves are ideal for standard and critical Power Industry applications. The welded bonnet joint eliminates the body/bonnet flanges reducing weight and simplifying the application of exterior insulation.

The welded bonnet ensures containment of the high pressure applications experienced within the Power industry. This, in concert with the forged steel body, provides the highest integrity sealing available.

COOPER®

Exotic Alloys

COOPER manufactures a complete line of Ball, Gate, Globe, and Check valves whether in sizes 1/4" thru 24", ANSI Class 150 thru 1500, in stainless steel or exotic alloys, or special design upon application. COOPER valves are manufactured to applicable sections of ANSI and API standards and are used in almost every corrosive application today.

Documentation

- *MTR - Mill Test Report*
- *Hydrostatic Certs - API 598*
- *NDE - Non-destructive, Dye penetrant, X-ray*
- *Alloy Verification - Alloy Analyzer*

Gates

Sizes: *1/2" thru 24"*
Class: *150 thru 1500*
Design: *ASME B16.34*
Ends: *RF, RTJ, THRD, SW, BW*
Materials: *Stainless & Exotic Alloys*
Features: *OS&Y, Bolted Bonnet, Solid Wedge, TFE Gasket & Packing, Rising Stem, Integral Seat, Stainless Steel Bolting*
Options: *Renewable Disc, Hardfacing, Cryogenics, Flex Wedge, Fugitive Emissions Control, Bleed Hole, Actuation*
Note: *Full range of specialty exotic alloy sealing, bolting, & soft goods available upon request.*

Globes

Sizes: *1/2" thru 12"*
Class: *150 thru 1500*
Design: *ASME B16.34*
Ends: *RF, RTJ, THRD, SW, BW*
Materials: *Stainless & Exotic Alloys*
Features: *OS&Y, Bolted Bonnet, Plug Type Disc, TFE Gasket & Packing, Rising Stem, Integral Seat, Stainless Steel Bolting*
Options: *Renewable Plug, Hardfacing, Fugitive Emissions Control, Cryogenics, Actuation*
Note: *Full range of specialty exotic alloy sealing, bolting, & soft goods available upon request.*

Checks

Sizes: *1/2" thru 12"*
Class: *150 thru 1500*
Design: *ASME B16.34*
Ends: *RF, RTJ, THRD, SW, BW*
Materials: *Stainless & Exotic Alloys*
Features: *Swing Type, TFE Gasket, Bolted Cover, Intergral Seat, Stainless Steel Bolting*
Options: *Renewable Disc, Hardfacing, Cryogenics, Lift Check*
Note: *Full range of specialty exotic alloy sealing, bolting, & soft goods available upon request.*

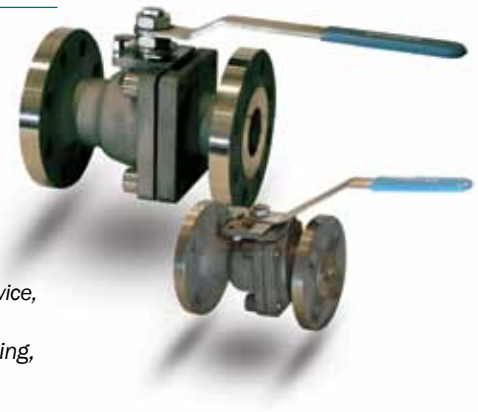
3-Piece Balls

Sizes: *1/4" thru 3"*
Pressure: *1500, 3000, 5000 PSI*
Ends: *THRD, SW, BW, Sanitary*
Materials: *Stainless & Exotic Alloys*
Features: *3 Piece Design, Standard Port, Full Port, Blow-out Proof Stem, TFE Seals, Secondary Metal Seat*
Options: *Vacuum Service, Cryogenics*
Note: *Full range of specialty exotic alloy sealing, bolting, & soft goods available upon request.*

See Product Range Chart on back page for details.

Full Port Flanged Balls

Sizes: *1/2" thru 12"*
Class: *150 thru 1500*
Design: *ASME B16.34*
Ends: *RF, RTJ*
Materials: *Stainless & Exotic Alloys*
Features: *2-Piece Split Body, Full Port, Blow-out Proof Stem, Secondary Metal Seat, Firesafe (Per API 607 Rev. IV), Stainless Steel Bolting, Stainless Steel Handle*
Options: *Metal Seats, Cryogenics, Vacuum Service, Fugitive Emissions Control, Ceramics, Actuation*
Note: *Full range of specialty exotic alloy sealing, bolting, & soft goods available upon request.*



Wrought Designation	Cast Equivalents	
304	ASTM A744/A351	CF8
304 - Modified	ASTM A744	CF8 C0.04% min., 0.08% max.
304H	ASTM A351	CF10
304L	ASTM A744/351	CF3
316	ASTM A744/A351	CF8M
316L	ASTM A744/A351	CF3M
317	ASTM A744/A351	CG8M
317L	ASTM A744/A351	CG3M
317LM	ASTM A744	CG3M Mod.
347	ASTM A744/A351	CF8C
347H	ASTM A351	CF8C Mod. C 0.04% min., C 0.08% max.
904L/N08904	ES1167	Cooper Spec
Alloy 20 - Modified	ASTM A990 (UNS N08007)	CN3MCu
Alloy 20 - Cast	ASTM A744/A351	CN7M
Alloy AL - 6XN	ASTM A744/A351 N08367	CN3MN
Alloy Steel	ASTM A487	4D
Avesta 254 SMO	ASTM A-351	CK3MCuN
Duplex SS - Cast	ASTM A890	CD3MN (5A), CD3MWCuN(6A), CD4MCu, CD4MCuN, GR. 4A (CD3MN)
Duplex SS - Cast	ASTM A995	CD4MCuN
Hast B - Cast	ASTM A494	N-12MV
Hast C - Cast	ASTM A494	CW12MW
Hast C - 22 Cast	ASTM A494	CX2MW
Hast C4	ASTM A494	CW2M
Hast B2	ASTM A494	N-7M
Hast C4 - Cast Modified	ASTM A494	CW2M-Class 1 Mod. Si o.4% min., S 0.015% max.
Incoloy 825	ASTM 494	CU5MCuC
Inconel 600	ASTM A494	CY40-CL1, CY40-CL2
Inconel 625 - Cast	ASTM A494	CW6MC
Incoloy 800	ASTM A351	CT15C
Monel	ASTM A494	M-30H, M35-2
Monel 400	ASTM A494	M35-1
Nickel 200	ASTM A494	CZ100
Stellite	AMS 5387	R30006
Titanium - Cast	ASTM B367	GR2, GR C3, GR C5
Titanium	ASTM B367	GR7B, GRC2
Titanium	ASTM GR.12	UNS R53400
Zirconium - Cast	ASTM A752	GR705C, GR705C

COOPER®

Special Service Applications

- ***Acid*** *- HC1, H2SO4, HNO3, Acetic, etc.*
- ***Chlorine*** *- Available in special designs.*
- ***High Temperature*** *- Ball valves 1/4" thru 12" for servicing temperatures to 1100^{0} F.*
- ***Oxygen*** *- Specially cleaned & prepared for O2 service.*
- ***Critical*** *- Designed for lethal, corrosive, erosive, & toxic applications.*
- ***Abrasive/Erosive*** *- Materials available exceeding 2400 knot hardness.*
- ***Cryogenic*** *- Servicing temps. to -300^{0} F*
- ***Mining*** *- Autoclave applications for corrosive, erosive, & high temp. services.*
- ***Vacuum*** *- Suitable for service to 20 microns.*

For features or materials not listed in this publication, please provide a full description of requirements or consult your sales representative for assistance.

Stainless Steel

OIC manufactures a complete line of Gate, Globe, and Check valves in sizes 1/4" thru 24", ANSI Class 150 thru 4500, in all grades of stainless steel. OIC Stainless Steel valves are constructed in accordance with the specifications of American Standards Organizations with the primary objective of guaranteeing uniformity in production. These standards are those universally used in the Oil, Petrochemical and Chemical industries. Due to their comprehensive nature, they give a clear definition of the product. Standardized production in accordance with these specifications embrace the standards and codes for recommended materials, dimensional requirements, and temperature pressure ratings.

Gates

Sizes: *1/4" thru 24"*
Class: *150 thru 1500*
Design: *ASME B16.34, API 603, API 602*
Ends: *RF, RTJ, THRD, SW, BW*
Materials: *304/L, 316/L, 317/L, 321, 347/H, A20*
Features: *Stainless Steel Body & Bonnet, Rising Stem, Outside Screw & Yoke, 1" to 2-1/2" Solid Wedge, 3" & up Flexible Wedge, Graphite or TFE Seals. Integral Seat Rings, Stem Backseat Design*

Also available in Cryogeneic designs!

Globes

Sizes: *1/4" thru 12"*
Class: *150 thru 1500*
Design: *ASME B16.34, API 603, API 602*
Ends: *RF, RTJ, THRD, SW, BW*
Materials: *304/L, 316/L, 317/L, 321, 347/H, A20*
Features: *OS&Y, Bolted Bonnet, Plug Type Disc, Graphite or TFE Seals, Rising Stem, Integral Seat, Stainless Steel Bolting*

Also available in Cryogeneic designs!

Checks

Sizes: *1/2" thru 12"*
Class: *150 thru 1500*
Design: *ASME B16.34, API 603, API 602*
Ends: *RF, RTJ, THRD, SW, BW*
Materials: *304/L, 316/L, 317/L, 321, 347/H, A20*
Features: *Swing Type, Graphite or TFE Seals, Bolted Cover, Intergral Seat, Stainless Steel Bolting*

Also available in Cryogeneic designs!

See Product Range Chart on back page for details.

Right for the Job and right for your Budget.

Newco® Trinity Series - Triple Offset Butterflies

3" thru 120" • ASME 300 thru 600

The NEWCO Triple Offset Valves feature the premium Triple Offset design, providing zero leakage in both directions by utilizing a Stellite/316 SS metal seating surface carefully matched for superior sealing. The Triple Offset design uses three separate geometries of disc/stem orientation and rotation to accomplish bubble tight sealing. The proven conical seating feature allows Newmans Triple Offset Valve to operate with minimal torque, increased temperatures and longer life cycle. The disc and body seat engage with no rubbing of the seating components.

NEWCO TOVs serve the industrial processing, transmission, water treatment and power industries across the globe. The Newco TOV offers dependable, economical service for all applications that require proven performance and quality.

FEATURES

- *Self Cleaning*
- *Full Port*
- *Bubble Tight Shutoff*
- *Self Centering Disc*
- *Blowout Proof Stem Option*
- *Stellite Body Seat Standard*
- *Wide Range of Configurations*
- *Firesafe Tested to API 607 Rev 5*
- *Wafers, Lugs, Flanged, & Buttwelds*
- *Materials Include*
  - *WCB*
  - *316 Stainless Steel*
  - *Monel*
  - *Hastelloy*
  - *Nickel - Aluminum - Bronze*

Trinity

Newco® Pressure Seal Gates, Globes, & Checks

2" thru 36" • ASME 600 thru 4500

The NEWCO Pressure Seal Valves are ideal for standard and critical Power Industry applications. The Pressure Seal bonnet joint eliminates the body/bonnet flanges reducing weight and simplifying the application of exterior insulation. Contrary to bolted bonnet valves, internal pressure applied to a Pressure Seal valve forces the sealing elements into tighter contact - the higher the internal pressure, the tighter the seal.

NEWCO Pressure Seal valves comply with the design and test requirements of ANSI B16.34 and the installation dimensions of ANSI B16.10.

Newmans

Newco COOPER OIC QuadroSphere Trinity

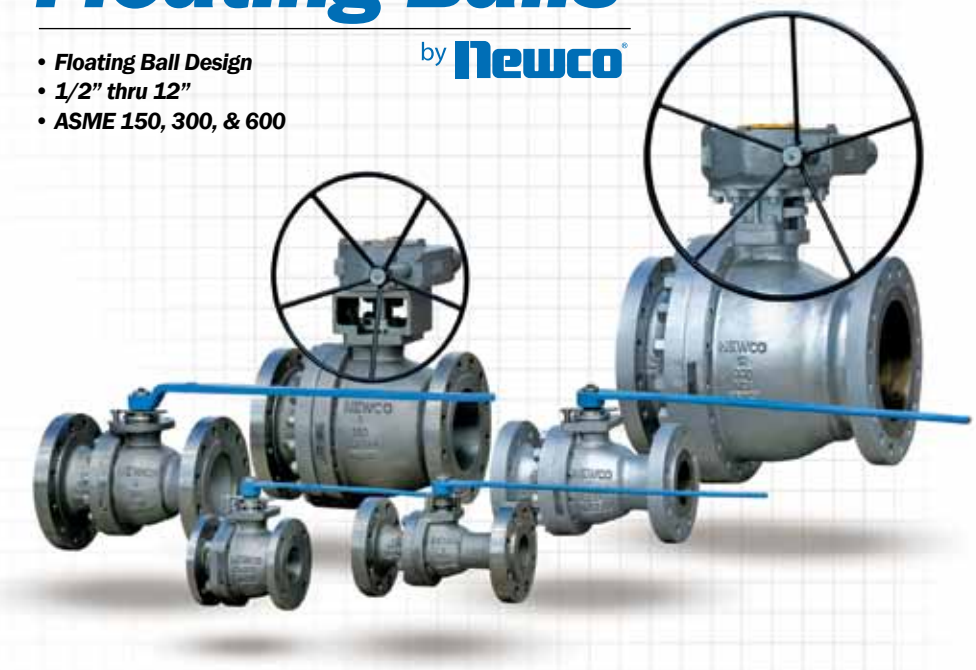
Toll Free: 1.800.231.3505
www.NewmansValve.com

Stafford, TX • Houston, TX • Carson, CA • East Brunswick, NJ • Atlanta, GA • Edmonton, Alberta • Barrie, Ontario • Shanghai, China • Bergamo, Italy • Melbourne, Australia • Brisbane, Australia

Floating Balls

by Newco

- ***Floating Ball Design***
- ***1/2" thru 12"***
- ***ASME 150, 300, & 600***



Specifications

Meets/exceeds CSA requirements. Fire Safe Design

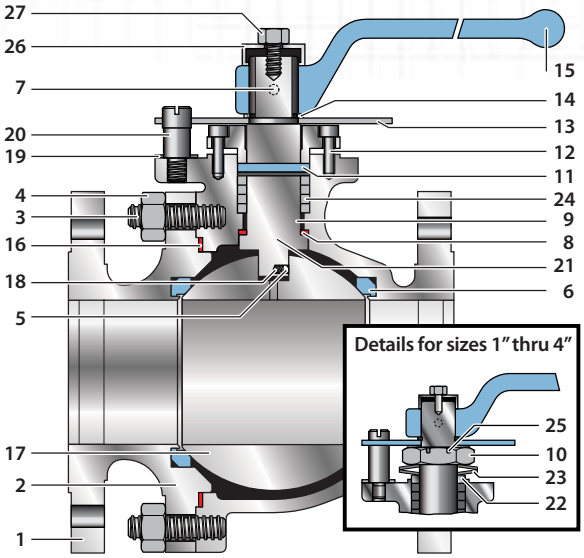
BASIC DESIGN	***ASME B16.34/API 608***
Flange Surface Finish	*125-250 AARH Serrated*
Face-to-Face Dimension	*ASME B16.10/API 608*
Flanged End Dimension	*ASME B16.5*
Inspected & Tested to	*API 598 & 607*
Certifications	*ISO 9001/Canadian CRN*

Pattern Descriptions

CLASS & PORT	***B16.34/API 608 Long Pattern***	***B16.34/API 608 Short Pattern***
150# Full	✔	
300# Full	✔	
600# Full	✔	
150# Red.		✔
300# Red.		✔
600# Red.	✔	

Benefits at a Glance

- *ANSI classes 150, 300, and 600*
- *Standard NACE MR-01-03 compliant*
- *WCB, LCC, and CF8M body material*
- *ISO actuator mounting pad*
- *Full port and Reduced port*
- *Fire tested to API 607 rev 4*
- *1/2" thru 12" size range*
- *Adjustable stem packing*
- *Blow out proof stem*
- *Locking device*
- *Anti static ground*
- *Stainless steel trim*
- *2 piece body design*
- *RPTFE seats*



Typical Bill of Materials					
1	Body	ASTM A216-WCB/A351-CF8M/A352-LCC	**15**	Handle	ASTM A216-WCB
2	Adapter	ASTM A216-WCB/A351-CF8M/A352-LCC	**16**	Gasket	SS - 316 w/Graphite
3	Stud	ASTM A193-B7M/A193-B8A/A320-L7M	**17**	Ball	ASTM A351-CF8M
4	Heavy Heax Nut	ASTM A193-2HM/A194-8A/A194-7M	**18**	Spring Antistatic	ASTM A313-302
5	Ball Antistatic	Stainless - Commercial	**19**	Key Lock Plate	Stainless - Commercial
6	Seat ring	Teflon - Glass Filled 25%	**20**	Stopper Pin	Stainless - Commercial
7	Hex Sckt Set Scrw	Stainless - Commercial	**21**	Stem	ASTM A276-316
8	Thrust Washer	Teflon - Glass Filled 25%	**22**	Gland Ring	ASTM A246 - 316
9	Sleeve	Teflon - Glass Filled 25%	**23**	Spring Washer	Stainless - Commercial
24	Gland Nut	Carbon - Commercial / ASTM A276-CF8M	**10**	Gland Packing	Graphite
11	Gland	ASTM A351-CF8	**25**	Lock Plate	Stainless - Commercial
12	Sket HD Cap Scrw	Stainless - 18 - 8	**26**	Cup Washer	Stainless - Commercial
13	Stopper Plate	Stainless - Commercial	**27**	Hex Bolt	Stainless - Commercial
14	Circlip	Stainless - Commercial	-	-	-

See Product Range Chart on back page for details.

Trunnions

by Newco®

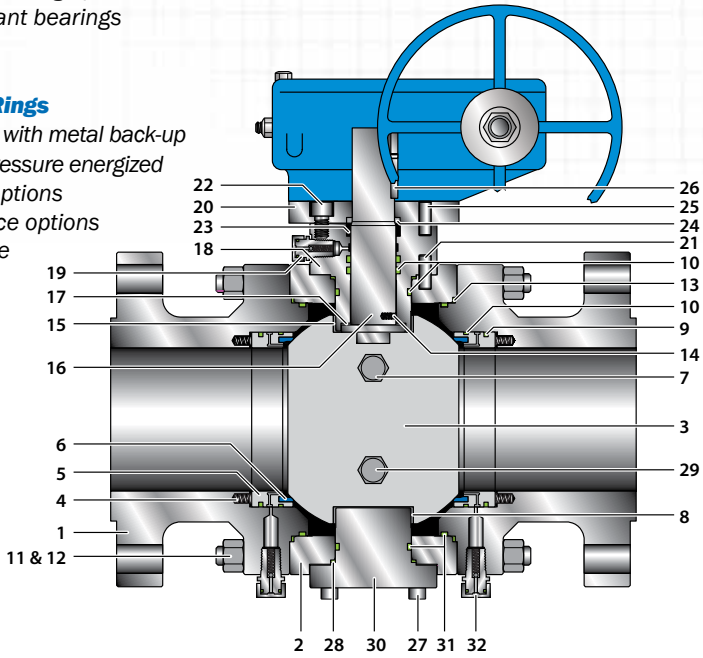
Benefits at a Glance

- *2" thru 36" full or standard bore*
- *ASME Classes 150 thru 2500*
- *Body vent or flush and drain*
- *Hardened surface options*
- *API 6D face-to-face*
- *Flanged or weld-end*
- *Blow-out proof stem*
- *NACE compliant trims*
- *Anti-static protection*
- *Independent seat rings*
- *Graphite gaskets & seals*
- *Firesafe design*
- *Inconel seat springs*
- *Bi-directional seating*
- *Double block & bleed option*
- *A105, LF2, or 316 SS body*
- *Heavy-duty forged 3-piece body*
- *ISO 5211 actuator mounting pad*
- *100% tested in accordance to API 6D*
- *Secondary stem & seat seal system*
- *Wide variety of seating options*
- *Corrosion resistant bearings*
- *Easy to service*

- ***Trunnion Design***
- ***2" thru 36"***
- ***ASME 150 thru 2500***

Heavy-duty Seat Rings

- *Variety of inserts with metal back-up*
- *Spring loaded/pressure energized*
- *Metal-to-metal options*
- *Hardened surface options*
- *Field replaceable*



Typical Bill of Materials

1	Body Flange	ASTM A105	**17**	Stem Bearing	R-PTFE
2	Body	ASTM A105	**18**	Stuffing Box	ASTM A105
3	Ball	ASTM A182 - F316	**19**	Injection Fitting	ASTM A105
4	Spring	Inconel X-750	**20**	Adaptor Flange	Carbon steel
5	Seat Ring	ASTM A276 Type 316	**21**	Pin	Carbon steel
6	Seat	R-PTFE	**22**	Screw	ASTM193 - B7M
7	Vent Valve	ASTM A182 Type 316	**23**	Packing	Flex Graphite
8	Bearing	1045 + PTFE	**24**	Gland	ASTM A276 Type 410
9	Seat Gasket	Graphite	**25**	Pin	Carbon steel
10	O-ring	Viton	**26**	Key	AISI 1045
11	Body Stud	ASTM 193 - B7M	**27**	Screw	ASTM A193 - B7M
12	Body Nut	ASTM 194 - 2HM	**28**	Gasket	316 + Graphite
13	Body Gasket	316 + graphite	**29**	Drain Plug	ASTM A182 Type 304
14	Antistatic Dvc	ASTM A276 type 316	**30**	Trunnion	ASTM A105
15	Bearing	1045 + PTFE	**31**	O-ring	Viton
16	Stem	ASTM A182 Type 316	**32**	Injection Fitting	ASTM A105

Newco®

Specifications

Meets/exceeds CSA requirements. Fire Safe Design

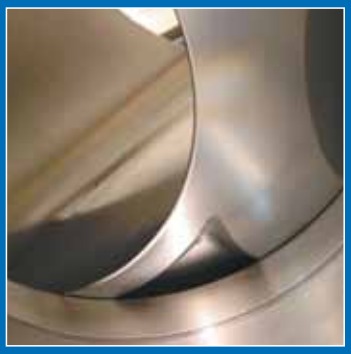
BASIC DESIGN	***ASME B16.34/API 6D***
Face-to-Face Dimension	*API 6D*
Flanged End Dimension	*ASME B16.5*
Inspected & Tested to	*API 6D & 607*
Certifications	*ISO 9001/Canadian CRN*

See Product Range Chart on back page for details.

Newco®

QuadroSphere™

- Trunnion Design
- 2" thru 24"
- ASME 150 thru 2500



QuadroSphere™

Simply better technology!

by Newco®

Protected Seating Surfaces

*The **QuadroSphere™** trunnion ball valve protects its seats by minimizing fluid media velocity contacting upstream seating surfaces during cycles. As the **QuadroSphere™** closes, fluid media applies pressure to the upstream seat ring urging it against the ball's upstream sealing lip for leakproof performance. Features on the ball remove debris from the seats ensuring a clean, tight shut-off each time it cycles.*

Lower Torque Requirements

*The geometric shape of the ball greatly reduces ball-to-seat surface contact. This features creates less "drag" during cycles, requiring less torque to operate the **QuadroSphere™**.*

Self-cleaning Features *(See Flow Pattern Comparison)*

*Ordinary ball valves allow fluid media and debris to be trapped in the inner-body cavity. This can result in the accumulation of foreign debris around the ball that can result in damage to seating surfaces. As the **QuadroSphere™** cycles, its unique geometric features allow foreign debris to be flushed from the inner-body cavity to prevent the accumulation of solid matter around the backside of the seat rings and bearings. Then, open or closed, once the ball engages the seats, line fluid cannot enter the inner-body cavity.*

Seventy Percent Less Wear

*Unlike ordinary ball valves, the **QuadroSphere™** ball experiences a fraction of the drag across seating surfaces during cycles, reducing wear up to 70 percent and extending performance life.*

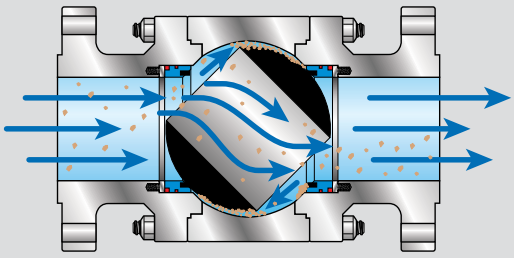
*As the **QuadroSphere™** cycles, flow is split into five channels (over, under, around the sides, and through the ball port), preventing localized, high velocity impingement upon the downstream seat as with ordinary ball valves.*

Benefits at a Glance

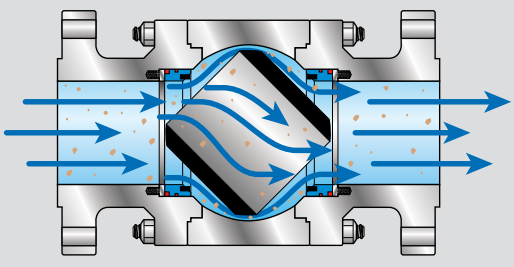
- *Self Cleaning*
- *Full Port*
- *Protects the Seats*
- *Flow Around Ball*
- *Low Operating Torque*
- *Hardened Surface Options*
- *Improved Throttling*
- *Easy to Service*

Flow Pattern Comparison

Ordinary Ball Valve *allows debris and solids to accumulate.*



QuadroSphere™ *allows debris to be flushed from valve body.*



See Product Range Chart on back page for details.

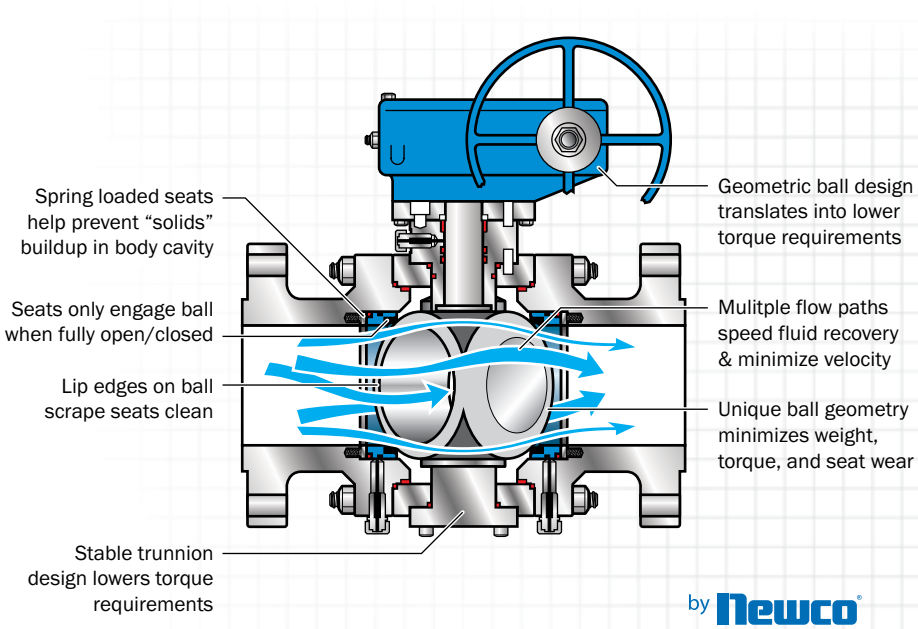
Why Choose QuadroSphere™ ?

When high velocity abrasive flow leads you to think "premium priced" metal seated ball valves...
- QuadroSphere's multiple flow path geometry reduces damaging velocity at a budget friendly price!

When standard ball valve cavities fill with media making operations difficult...
- QuadroSphere's self-cleaning technology feature will keep the cavity clear!

When abrasive media damages your ball surface and seats during cycling...
- QuadroSphere's unique ball geometry cleans seats and minimizes rubbing during cycling!

When gate and globe valve operations become difficult due to solids accumulation around the stem...
- QuadroSphere's quarter-turn radial operation with self-flushing geometry keeps your valve turning!



by Newco®

QuadroSphere™ Features

- *2" thru 24" full or standard bore*
- *ASME Classes 150 thru 2500*
- *Heavy-duty forged 3-piece body*
- *Trunnion design*
- *API 6D face-to-face*
- *Flanged or weld-end*
- *Self-cleaning technology to prevent solids accumulation*
- *Protected seating*
- *A105, LF2, or 316 SS body*
- *Hard chromed stainless steel ball*
- *Body vent or flush and drain*
- *Blow-out proof stem*
- *Corrosion resistant bearings*
- *Secondary stem & seat seal system*
- *Anti-static protection*
- *Independent seat rings*
- *Inconel seat springs*
- *Bi-directional seating*
- *Firesafe design*
- *Graphite gaskets and seals*
- *Lower operating torques*
- *Improved throttling*
- *Double block & bleed option*
- *ISO 5211 actuator mounting pad*
- *100% tested in accordance to API 6D*

QuadroSphere™ Heavy-duty Seat Rings

- *Spring loaded/pressure energized*
- *Variety of inserts with metal back-up*
- *Metal-to-metal options*
- *Hardened surface options*
- *Field replaceable*

Specifications

Meets/exceeds CSA requirements. Fire Safe Design

BASIC DESIGN	***ASME B16.34/API 6D***
Face-to-Face Dimension	*API 6D*
Flanged End Dimension	*ASME B16.5*
Inspected & Tested to	*API 6D & 607*
Certifications	*ISO 9001/Canadian CRN*

Verified Performances

- ***Over 300,000 successful cycles of in a Potato Peeler Exhaust application @ 290 psig to atmosphere***
- ***ANSI 300 performed satisfactorily for more than 9 months in a PVC Reactor Outlet application***
- ***10" ANSI 300 performed perfectly for more than 7 years as a "crown valve" in a Hot Geothermal Brine Re-injection application... and is still in service!***

Sub-Sea Trunnions API 6A & 6D

by Newco®

- ***Trunnion Design***
- ***1" thru 40"*** *(larger sizes available)*
- ***All ASME & API Classes***

Specifications

BASIC DESIGN	ASME B16.34
Wellhead Equipment	API 6A
Pipeline Equipment	API 6D
ROV Interface on Sub-Sea Productions	API 17H
Face-to-Face Dimension	ASME B16.10 & B16.25
Flanged End Dimension	ASME B16.5
Inspected & Tested to	API 598
SSC Resistant Metallic Matls. for Oilfield Equip.	NACE MR 01.75

Newmans Sub-sea division has operated in the Valve Industry for more than 30 years. Since their beginning, the company has acquired and applied its knowledge and experience in the Oil, Gas and Energy markets.

Newmans Sub-sea is focused on the design, manufacture and timely delivery of high integrity sub-sea valves for all conditions and environments. The Newco Sub-Sea Trunnion Mounted Ball Valves are manufactured in standard and exotic materials to meet our client's requirements and expectations.

We combine the latest in design and manufacturing technologies ensuring we deliver the highest levels of reliability and quality in our products.

Subsea Valve Engineering and Manufacturing are critical disciplines in the valve industry. It is not an area for high volume commodity manufacturing. It is the domain of the valve artisan.

To excel, it is necessary to consider design functionality, available technology, manufacturing processes as well as environmental and cost impact.

Newmans Sub-Sea division is not a mass production operation. Every completed product is truly that, completed in every sense and to the client's exacting specification. We listen to your requirements as these differ with every client. Newmans works with you to achieve the best possible outcome for your service. In short, you get what you want. We specialize in short to medium term delivery requirements at competitive market rates.

See Product Range Chart on back page for details.

Standard Features

- *Large trunnion support bearings for high duty extended life*
- *Spring energised independent floating seats*
- *Bearing block design to minimise body leak paths*
- *Soft seating*
- *Self relieving or single piston effect seats*
- *Dual barrier body seals (Not applicable with welded body)*
- *Dual barrier gland seals (Not applicable with welded body)*
- *Triple barrier stem seals*
- *Large stem diameter for high duty cycle and extended life*
- *ROV friendly position indicator*
- *Antistatic & anti-blow-out designed stem*
- *Designed and constructed in accordance with API 6A/6D*

Optional Features

Seats

- *Metal-to-metal*
- *Double piston effect*
- *Combination (self relieving/double piston) seats*

Stem

- *Seal area carbide coated*
- *Metal stem seal*

CRA Inlay

- *Inconel 625, incoloy, 316 stainless steel*
- *Wetted seal areas*
- *Complete cladding*

End Connections

- *Flanged RF, RTJ, standard or extended length*
- *Buttweld*
- *Lengths extended by transition pups*
- *Clamp hub*
- *Compact flange*

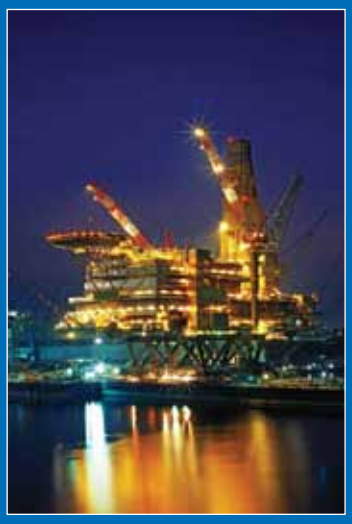
Actuation

- *Manual hand Wheel*
- *ROV bucket in accordance with API 17H*
- *Double acting or spring return hydraulic actuator*

Applicable Standards

The following standards and codes are those governing design and manufacturing of our ball valves. Other codes and standards may be considered upon request.

- *API - American Petroleum Institute*
- *API 6A - Specification for Wellhead Equipment*
- *API 6D - Specification for Pipeline Valves*
- *API 17H - ROV Interfaces on Sub Sea Production Systems*
- *API 598 - Valve Inspection and Test*
- *ANSI - American National Standard Institute*
- *ASME/ANSI B 16.5 - Steel Pipe Flanges and Flanged Fittings*
- *ASME/ANSI B 16.10 - Face-to-Face and End-to-End Dimensions of Ferrous Valves*
- *ASME/ANSI B 16.25 - Butt-Welding Ends*
- *ASME/ANSI B 16.34 - Steel Valves*
- *NACE Std. MR 01.75 - SSC Resistant Metallic Materials for Oilfield Equipment*



Trinity Triple Offset Butterfly Valves

by Newco

Sizes: 3" thru 120"
DN: 80 thru 3000
ASME 150, 300, & 600
PN16, 25, 40, & 100

Specifications

Meets/exceeds CSA requirements. Fire Safe Design

BASIC DESIGN	***ASME B16.34/API 607***
Lug Dimension	*API STD 609*
Dbl. Flanged (Short Ptn.)	*API STD 609/ISO 5752*
Dbl. Flanged (Long Ptn.)	*API STD 609/ANSI 16.10*
Inspected & Tested to	*API STD 598/API 607*

Benefits at a Glance

- *Triple Offset Design for Bi-directional Bubble Tight Shutoff*
- *Self Centering Disc*
- *Sealed Bearing Design*
- *Stellite Body Seat Standard*
- *Blowout Proof Stem Option*
- *Firesafe Tested to API 607*
- *Available in a Wide Range of Materials and Configurations*
  - *WCB, 316 Stainless Steel, Monel, Hastelloy, & Nickel - Aluminum - Bronze*

Time Tested Performance from the Quality Valve Supplier

Newmans Triple Offset Valves are designed, manufactured and supplied from world class facilities serving the industrial processing, transmission, water treatment and power industries across the globe. The new Triple Offset Valves offer dependable, economical service for all applications that require proven performance and quality.

Superior Features come Together for Superior Service

Featuring the premium Triple Offset design, the Newmans TOV is a zero leakage valve in both directions utilizing a Stellite/316 SS metal seating surface carefully matched to provide superior sealing. The Triple Offset design uses three separate geometries of disc/stem orientation and rotation to accomplish bubble tight sealing. The proven conical seating feature allows Newmans Triple Offset Valve to operate with minimal torque, increased temperatures and longer life cycle. The disc and body seat engage with no rubbing of the seating components.

Our Commitment is to Your Success

The Newmans Triple Offset Valve meets or exceeds industry standards and is available in a wide range of pressures, materials and body configurations. Once again Newmans Valve is offering superior value and performance to our global customers. Contact your Newmans representative for more information on the Triple Offset Valve Product line."

Newmans Triple Offset Valves feature standard Stellite body seats, robust laminated disc seats, and unique graphite stem bearing seals for exceptional service life.

Asset Protection

*Talk to business owners today and you may find that asset control as well as inventory documentation are now part of their everyday conversations. Companies are actively seeking sophisticated methods to do just these items. They need systems that provide the security of instantly knowing the status of their products along with the return on the initial investment. Additionally, they want the assurance of knowing what they received is what they ordered. For these businesses, idsTag is the solution they have been requesting. Built upon industry proven hardware technologies joined with a sophisticated and secure web-centric database, idsTag provides your authorized employees with immediate knowledge regarding every identified product or component that warrants tracking. You can see the location, the status in your inventory and every detail of the order, shipment and receipt of these critical materials. Join the companies that are making the switch to the inventory documentation answer for modern companies – **idsTag**. It's real.*

TAG ids imbedded data scan

Simple to...

- **Operate**
  Universally recognized hardware components for scanning that are currently in use in the industry.
- **Use**
  Access to information is available anywhere in the world to authorized users via a secure website.
- **Incorporate**
  The process of integrating existing data is handled by our team of experts while new purchases are immediately moved into the database by your vendor.

GreenSeal - Low Emissions Packing Technology

Newco valves are designed and manufactured to meet the current editions of industry standards and have been production tested to written procedures that include the requirements of API 598, ASME/ANSI B16.34, and MSS-SP-61. Newmans offers the GreenSeal Packing System for severe service applications to guarantee your valve is packed for low fugitive emissions!

Testing shows that cast steel gate valves with standard body/bonnet joint, using a spiral wound metal with graphite gasket, revealed no leakage into the atmosphere. The addition of our GreenSeal packing system completes our leak-proof package.

Newco valves of current design, properly installed and adjusted, will provide real fugitive emission seal at both the body/bonnet and stem packing. Routine stem seal maintenance will maintain performance for many cycles. This results in a reduction in the cost of ownership.

Newmans Valve is serious about its commitment to superior products and service. We are just as committed to the world we all live in. Our GreenSeal technology is good for the environment and good for business.

Newmans Valve Green Seal
www.NewmansValve.com
Packed for Low Emissions!

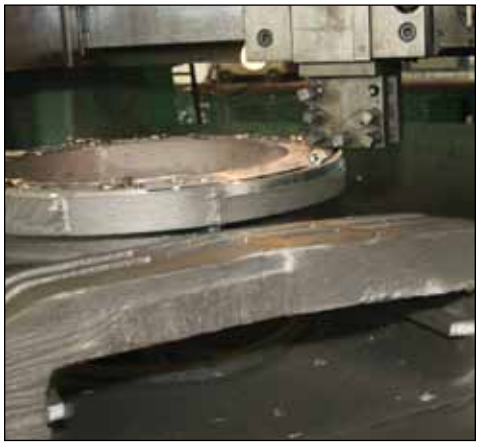
Newmans/Yancheng Headquarters & Process Centers


F14



NEMCO
IS
300
WCB
77




















Product Range Chart

Product range includes but is not limited to the following. Product range is subject to change without notice.

Brand	Type	Size	Class	Ends	Available Material**
Newco	Cast Carbon	* 2" to 48"	150 - 2500	RF, RTJ, BW	WCB, LCC
Newco	Cast Alloy	2" to 24"	150 - 2500	RF, RTJ, BW	C5, WC6, WC9, C12, C12A
Newco	Forged Carbon	1/4" to 3"	150 - 4500	FLGD, THRD, SW	A105N, LF2
Newco	Forged Alloy	1/4" to 2"	150 - 4500	FLGD, THRD, SW	F5, F9, F11, F22, F91, F51
Newco	Pressure Seal	2" to 24"	600 - 4500	RF, RTJ, BW	Cast - all grades
Newco	Floating Ball	1/2" to 18"	150 - 600	RF	WCB, LCC, CF8M
Newco	Sub-Sea	* 1" to 40"	150 - 2500	RTJ, RF, BW, HUB	A105, LF2, LF3, F316, F51, F53, F55
Newco	Trunnion Ball & QuadroSphere	2" to 36"	150 - 2500	RF, BW	A105, LF2, F316, F51
Newco	Trinity Triple Offset	3" to 120"	150 - 600	WFR, LUG, FLGD, BW	WCB, 316, Monel, Hastelloy, NiAlBr
OIC	Cast Stainless	1/2" to 24"	150 - 2500	RF, RTJ, BW	304/L, 316/L, 317/L, 321, 347/H, A20
OIC	Forged Stainless	1/4" to 2"	150 - 4500	FLGD, THRD, SW	304/L, 316/L, 317/L, 321, 347, A20
Cooper	Cast Alloy	1/4" to 24"	150 - 1500	FLGD, THRD, SW, BW	Monel, Inconel, Hastelloy, Titanium, Zirconium, Duplex
Cooper	Forged Alloy	1/4" to 3"	800 - 1500	FLGD, THRD, SW, BW	Monel, Inconel, Hastelloy, Titanium, Zirconium, Duplex
Cooper	Ball Valves	1/4" to 3"	1500 PSI	THRD, SW, BW	Monel, Inconel, Hastelloy, Titanium, Zirconium, Duplex
Cooper	Ball Valves	1/2" to 12"	150 - 1500 PSI	FLGD	Monel, Inconel, Hastelloy, Titanium, Zirconium, Duplex

*Larger sizes available upon request. **Other materials available upon request.

Company Information

Newmans is recognized as a global valve manufacturing company providing product to the market on a world-wide basis. The NEWCO, OIC, and COOPER trademarks are recognized and respected the world over for their high quality and ability to meet the industry's most exacting standards. Newmans manufactures and markets one of the industry's broadest product lines suitable for most applications and market segments. Newmans is fully committed to being the "Reliable Valve Source to its customer base by quoting on time, delivering on time a quality product at a competitive price. In support we have a highly qualified technical engineering staff, superior customer service backed by large inventories of finished valves which can be shipped daily from seven strategically located distribution centers around the world.

Product Technology

Newmans manufactures Gate, Globe, Check, Stop Check, Tilting Disc, Floating Ball, Trunnion Ball, Sub-Sea, QuadroSphere™ Ball, and Trinity Series Triple Offset valves in a full range of materials, valve styles, and pressure classes. Cast carbon steel, low-alloys, and forged valves are manufactured under the NEWCO trademark. 300 series stainless steel and Alloy 20 are produced and marketed under the OIC trademark. Other exotic alloys are manufactured under the Cooper trademark.

Newmans manufactures and stocks valves in sizes from 1/4" to 120" in diameter and in pressure classes from 150 to 4500 lbs. Larger sizes are available on request.

Newmans facilities operate under ISO 9001-2000 & 14001-2004 series registration. All valves are compliant to the industry standards of API, ASTM, and ASME. Inspection and testing is maintained throughout the manufacturing process to verify compliance to these standards as well as any specific customer requirements.

Customer service is further enhanced by complete modification and actuation capabilities. This capability allows Newmans to provide rapid deliveries of special valve requirements to meet the customer's delivery needs.

Mission Statement

It is our goal to be known and respected in the Industry as "The Reliable Valve Source" for our extensive knowledge and superior service. Measured by keeping our word, we will deliver quality products on time at a fair value.

We achieve the above dealing with integrity in an open and flexible environment allowing people access to valuable information to make good and timely decisions. We believe that all this can be accomplished yielding great rewards for all involved while maintaining a balance in life.

Stafford, Texas - Corporate Headquarters
13127 Trinity Dr. - Stafford, Tx 77477
Tel: 281.302.4900 / Fax: 281.302.4801
Toll Free: 800.231.3505

Houston, Texas
3003 SH 225 #120 - Pasadena, TX 77503
Tel: 713.675.8631 / Fax: 713.675.1589

Carson, California
1539 Del Amo Blvd. - Carson, CA 90746
Tel: 310.667.8570 / Fax: 310.878.0355

East Brunswick, New Jersey
19A Cotters Lane - East Brunswick, NJ 08816
Tel: 732.257.0300 / Fax: 732.238.0132

Atlanta, Georgia
3065 Chastain Meadows Pkwy. - Bldg. 200 Ste. 200
Marietta, GA 30066
Tel: 678.278.4000 / Fax: 678.278.4040

Edmonton, Alberta
9555 - 12th Av SW - Edmonton, AB T6X 0C6 - CAN
Tel: 780.464.3500 / Fax: 780.467.0376

Barrie, Ontario
92 Davidson Street - Barrie, Ontario L4M 3S3 - CAN
Tel: 705.737.4216 / Fax: 705.737.5156

Shanghai, China
Suite 702, Jinying Tower A - 1518 Minsheng Road
Pudong, Shanghai CHINA 200135
Tel: ++86.21.61049569 / Fax: ++86.21.61049579

Bergamo, Italy
Piazza Salvo D'Acquisto, 90
Trescore Balneario (BG) 24069 - Italy
Tel: ++39.035.944914 / Fax: ++39.035.4271247

Melbourne, Australia
8-10 Apoinga Street
Dandenong, Victoria 3175
Tel: ++61.039.7683444 / Fax: ++61.039.7683456

Brisbane, Australia
3/36 Premier Circuit
Warana - Queensland, 4575
Tel: 07.5445.6599 / Fax: 07.5493.5855