



DELATITE™ VALVES

Severe Service Metal Seated
Full Port Zero Leakage Ball Valves

“Delatite solves your valve problems”

The Latest Technology in Severe Service Ball Valves
Erosion Corrosion Control with Zero Leakage

Model AMBV Zero Leakage Ball Valves

The Delatite AMBV Ball Valve has been designed to Reduce or Eliminate Premature Valve Failure Caused by:

- Erosion
- Corrosion
- High Velocity
- Seat Leakage
- High Temperature
- Thermal Shock

Features

- Tight shutoff to SPP.061 for Block Valves
- Seats are out of the Flow Path
- All valves are Hydro Tested and Seat Leakage Tested Prior to Dispatch
- Test Certificates, CMTR'S Bill of Materials and Instruction Manual Supplied with Each Valve
- All valves have a unique Serial Number and are Traceable
- Blow out Proof Stem
- Live Loaded Stem Packing
- Hard Coating (LLK1906) of Ball and Seats
- Additional coating can be applied to meet customer's needs, some of these coating are listed latter in this brochure
- Coating can be applied to the internal of the Body and Ball if required to prevent erosive or corrosive damage

Model AMBV

Metal Seated Ball Valves

The Metal Seated Ball valve is fast becoming the preferred Isolation Valve for Demanding Severe Service, in Erosive and Corrosive application in the Mining, Oil and Gas, Power and Petro-Chemical Industries, when it comes to Isolating Flow that contain Slurry with or without Corrosive Chemicals.

The Delatite AMBV can be supplied in a range of valve options to meet these demanding Applications.

Size's 50mm – 400mm Larger sizes available.

Materials: A216 WCB 316 SS plus any other cast able material that meets the pressure temperature requirements.

Coatings More than 800 coatings are available to meet specific applications

End Connections R.F. Flange, RTJ, Weld Prep.

Ratings: ANSI 150, 300, 600# Higher Rating are available on application.

All areas of the valve that may be susceptible to ware and corrosion can be coated using the latest state of the art technologies to further enhance the life of your Delatite Ball Valve.

Years of extensive Field and Laboratory research have gone into providing the best coatings and the best means of applying those coatings.

All of the above can be used in combination to provide the Best Possible Solution for your application.

Model AMBV Metal Seated Ball Valves

Applications

Power

- Steam Isolation
- Pump Isolation
- Control Valve Isolation
- Isolations Applications Over 50mm 2"
- Ash Slurry Application

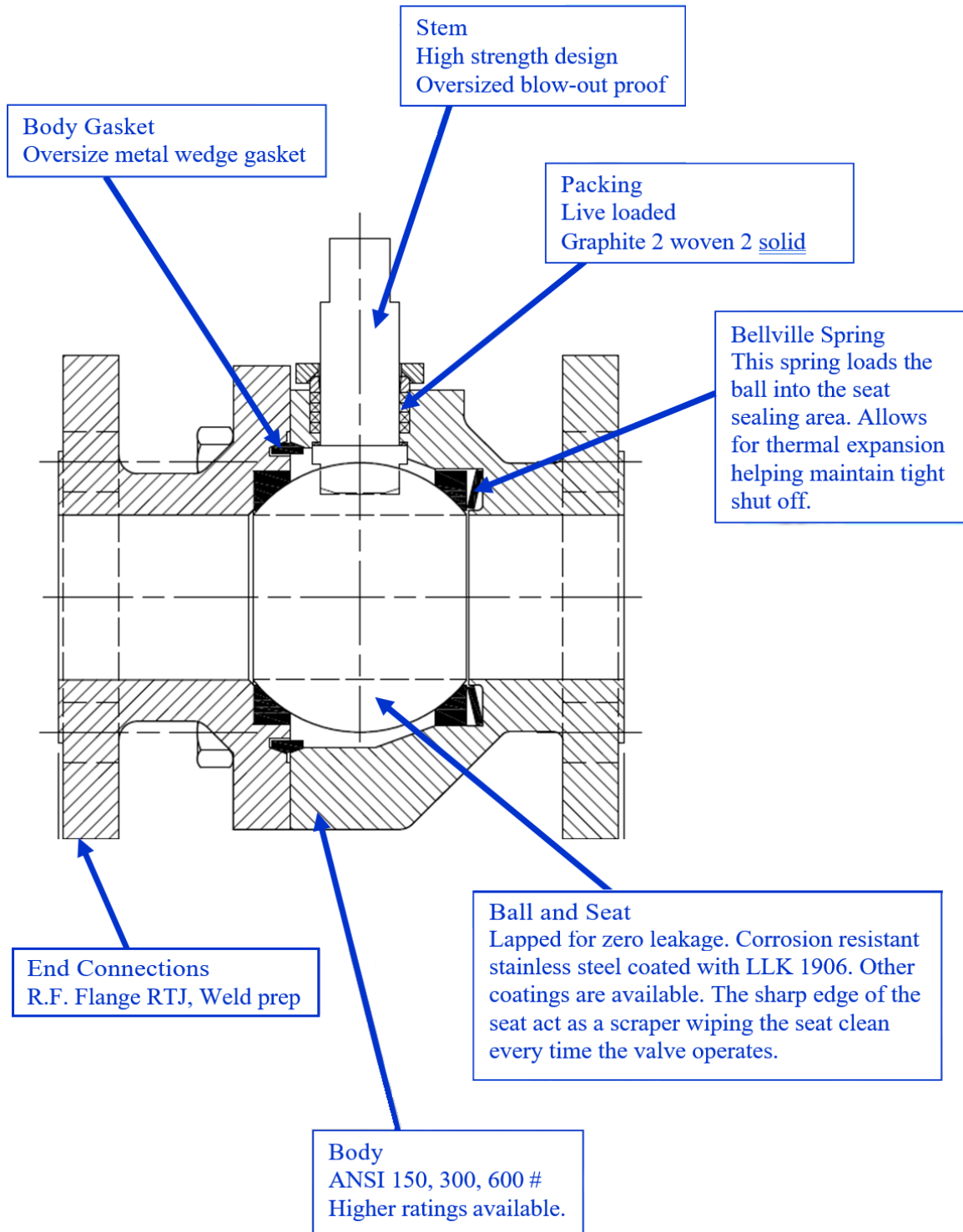
Mining

- Autoclave Inlet & Discharge Isolation
- Slurry Isolation
- Mine Water Isolation
- Concentrate Line Isolation
- Backfill Line Isolation
- Any Slurry Application where tight shutoff is very important due to the possible dewatering of a slurry/Concentrate pipe line
- Isolation Valves for Pressure Acid Leach and Pressure Oxidation systems in the Nickel and Gold Refining industries.

Oil & Gas

- Separator Isolation Valves
- Oil Line Isolation
- Isolation of any line that carry Water, Oil, and Gas containing formation sands. Any other erosive applications

Model AMBV Metal Seated Ball Valves

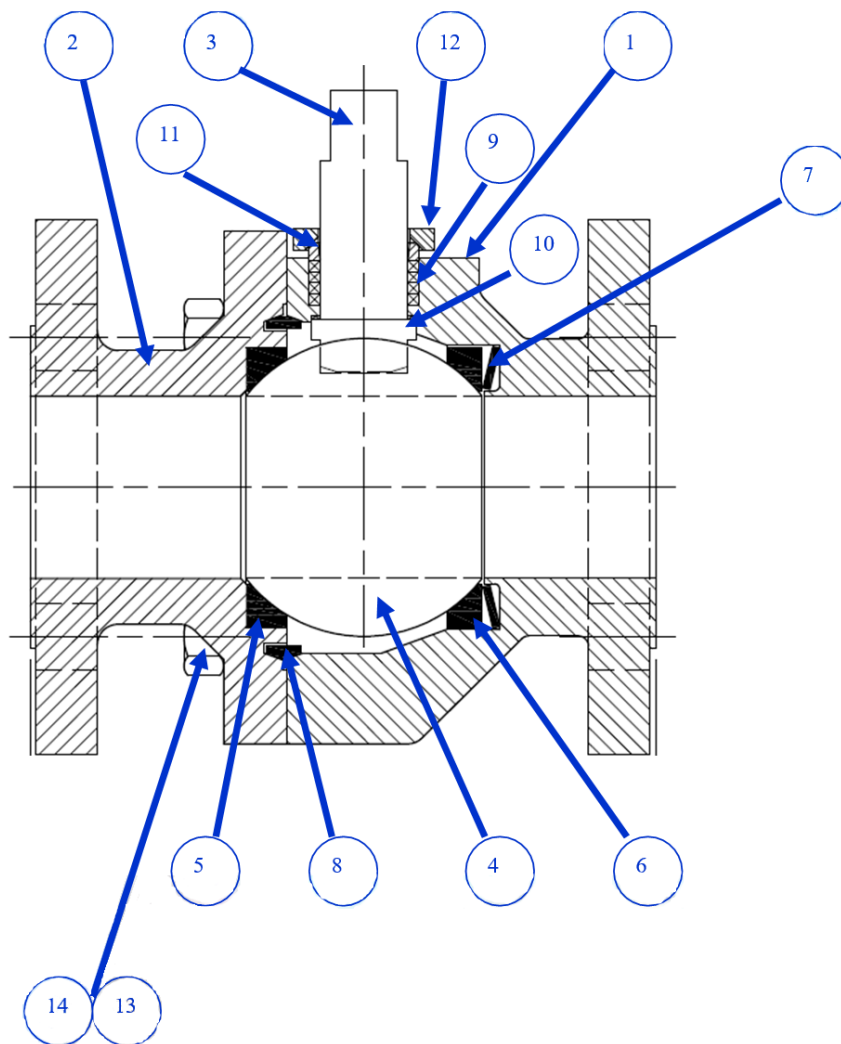


Bills of Material

<i>Item</i>	<i>Description</i>	<i>Material</i>
1	Body	A216-WCB
2	Ball	431SS Coating (LLK 1906)
3	Seats	431SS Coating (LLK 1906)
4	Stem	431SS
5	Belleville Spring	17-4PH
6	Body Gasket	AS2637-1986-630
7	Packing	Graphite 2 x woven 2 x solid
8	Packing Flange	316SS
9	Live Load Springs	17-4PH
10	Body Studs	A193-B16
11	Body Nut	A194-GR.4H

<i>Item</i>	<i>Description</i>	<i>Material</i>
1	Body	A351 GR CF8M
2	Ball	431 SS (Coated LLK 1906)
3	Seats	431 SS (Coated LLK 1906)
4	Stem:	431 SS
5	Belleville Spring	17-4PH
6	Body Gasket	AS2367-1986-630
7	Packing	Graphite 2 x woven 2 x solid
8	Packing Flange	316 SS
9	Live Load Springs	17-4PH
10	Body Studs	A103-B16
11	Body Nut	A194-GR.4H

Model AMBV Metal Seated Ball Valves



- | | |
|---------------------|--------------------------------|
| 1. Bonnet | 11. Packing Follower |
| 2. Body | 12. Gland Flange |
| 3. Stem | 13. Body Studs |
| 4. Ball | 14. Body Nuts |
| 5. Seat | 15. Gland Studs |
| 6. Pusher Seat | 16. Gland Nuts |
| 7. Bellville Spring | 17. Yoke |
| 8. Body Gasket | 18. Yoke studs |
| 9. Packing | 19. Yoke Nuts |
| 10. Thrust Washer | 20. Valve Identification Plate |

Options for Slurry Applications

Coatings available:

Delatite Valves have access to the latest in coating technology.

This coating can be applied to the:

- Body
- Ball
- Seat

With over 60 years' experience the Delatite coating suppliers offer:

- HVOF
- Low velocity oxygen fuel
- Twin wire arc jet
- Plasma flame
- Plasma transferred arc

Coatings available up to 800 combinations including:

- Ceramic
- Alloy #6
- Tungsten carbide
- Chrome carbide

Delatite Valves have evaluated hundreds of metallic, carbide, and ceramic coatings to give the customer the best coating solution for their applications.

We offer the most technically advanced coatings to protect valves in:

- Pressure acid leaching
- Pressure oxidation systems
- Any other erosive and corrosive applications

Carbide for Wear Protection

Delatite Carbide Selection:

Surface Coating	Description
LLK-1515	Hard dense coating with good abrasion, erosion resistance: Low oxidation and corrosion resistance. Max operating temp 500 DegC.
LLK-1516	Hard dense coating with good abrasion, erosion resistance: Low oxidation and corrosion resistance. Good bond strength. Max operating temp 500 DegC.
LLK-1518	Hard dense coating with good abrasion, erosion resistance: Low oxidation and corrosion resistance. Smooth coatings; High bond strength. Fine micro structure. Max operating temp 500 DegC.
LLK-1529	Hard dense coating with good abrasion, erosion resistance: Used for Petrochemical and Off shore Oil & Gas industries. Max operating temp 500 DegC.
LLK-1551	Hard dense coating with good abrasion, erosion resistance: High oxidation and corrosion resistance. Smooth coatings; High bond strength. Max operating temp 750 DegC.
LLK-1554	Hard Chrome replacement. High corrosion and abrasion resistance. Usable in water based solution and wet corrosive environments. Smooth coatings; High bond strength. Max operating temp 500 DegC.
LLK-1558	Hard Chrome replacement. High corrosion and abrasion resistance. Usable in water based solutions and wet corrosive environments. Smooth coatings; High bond strength. Max operating temp 500 Deg C.
LLK-1582	Coarse Carbide. Excellent for severe abrasion and wear resistances. Good solid particle erosion resistance. Recommended for cavitation and wear. Protection at high temperatures. Smooth: as sprayed surfaces. Max operating temp 870 DegC.

Carbide for Wear Protection cont.

Delatite Carbide Selection:

Surface Coating	Description
LLK-1583	Coarse Dense Carbide. Excellent for severe abrasion and wear resistances. Good solid particle erosion resistance. Recommended for cavitation and sliding wear protection at high temperatures. Max operating temp 870 DegC.
LLK-1704	Hard, Corrosion and wear resistances. Ceramic coating. Insoluble in acidic / alkalis. Max operating temp 540 DegC.
LLK-1712	Lower hardness but higher toughness. Used in wear applications where increased hardness is required. Max operating temp 540 DegC.
LLK-1716	Hard dense wear resistant coating. Good corrosion resistance. Higher mechanical shock resistance.
LLK-1905	A Non-Wetting Ceramic developed for Nickel and Gold Refining. This coating is suitable for pressure acid leach (PAL) and pressure oxidation systems as are used in Nickel and Gold Refining. Prevents Nickel plating, adhesion, and build up on surface components drastically increasing valve component life.

The above mentioned coatings are just a small example of the coatings that are available to meet the customer severe service needs for erosion, corrosion, abrasion, impact resistance, and to maintain reliable control of your manufacturing process.

Delatite Valves Pty Ltd can supply valves with a combination of 100's of coatings giving the customer protection against:

- Abrasion
- Corrosion
- Erosion
- High Temperature
- Wear Protection

All coatings are applied using the latest state of the art application methods.

Valve Face to Face Dimensions

Valve Size		Rating					
		150#		300#		600#	
mm	Inch	mm	Inch	mm	Inch	mm	Inch
25	1"	127	5.0	165	6.5	216	8.5
40	1.5"	165	6.5	191	7.5	241	9.5
50	2"	178	7.0	216	8.5	292	11.5
80	3"	203	8.0	282	11.1	356	14.0
100	4"	229	9.0	305	12.0	432	17.0
150	6"	394	15.5	403	15.9	559	22.0
200	8"	457	18.0	502	19.8	660	26.0
250	10"	533	21.0	594	22.4	787	31.0
300	12"	610	24.0	648	25.5	838	33.0
350	14"	686	27.0	762	30.0	889	35.0
400	16"	762	30.0	838	33.0	991	39.0
450	18"	864	34.0	914	36.0	1092	43.0
500	20"	914	36.0	991	39.0	1194	47.0
600	24"	1067	42.0	1143	45.0	1397	55.0

As per ANSI B16.10

Pressure—Temperature Ratings

A216-WBC Carbon Steel

Standard Class

Temperature		Pressure Class					
		150		300		600	
DegC	DegF	kPag	PSIg	kPag	PSIg	kPag	PSIg
-29	-20						
38	100	1964	285	5101	740	10201	1480
93	200	1792	260	4653	675	9305	1350
149	300	1585	230	4515	655	9064	1315
204	400	1379	200	4377	635	8754	1270
260	500	1172	170	4136	600	8271	1200
316	600	965	140	3791	550	7548	1095
343	650	862	125	3688	535	7410	1075
371	700	758	110	3688	535	7341	1065
399	750	655	95	3481	505	6962	1010
427	800	551	80	2826	410	5687	825
454	850	448	65	1861	270	3688	535
482	900	345	50	1172	170	2378	345
510	950	241	35	724	105	1413	205
538	1000	138	20	345	50	724	105

A216 – WCB is not recommended for prolonged use above 427 Deg C (800 Deg F)

Pressure—Temperature Ratings

A351 GR CF8M

Standard Class

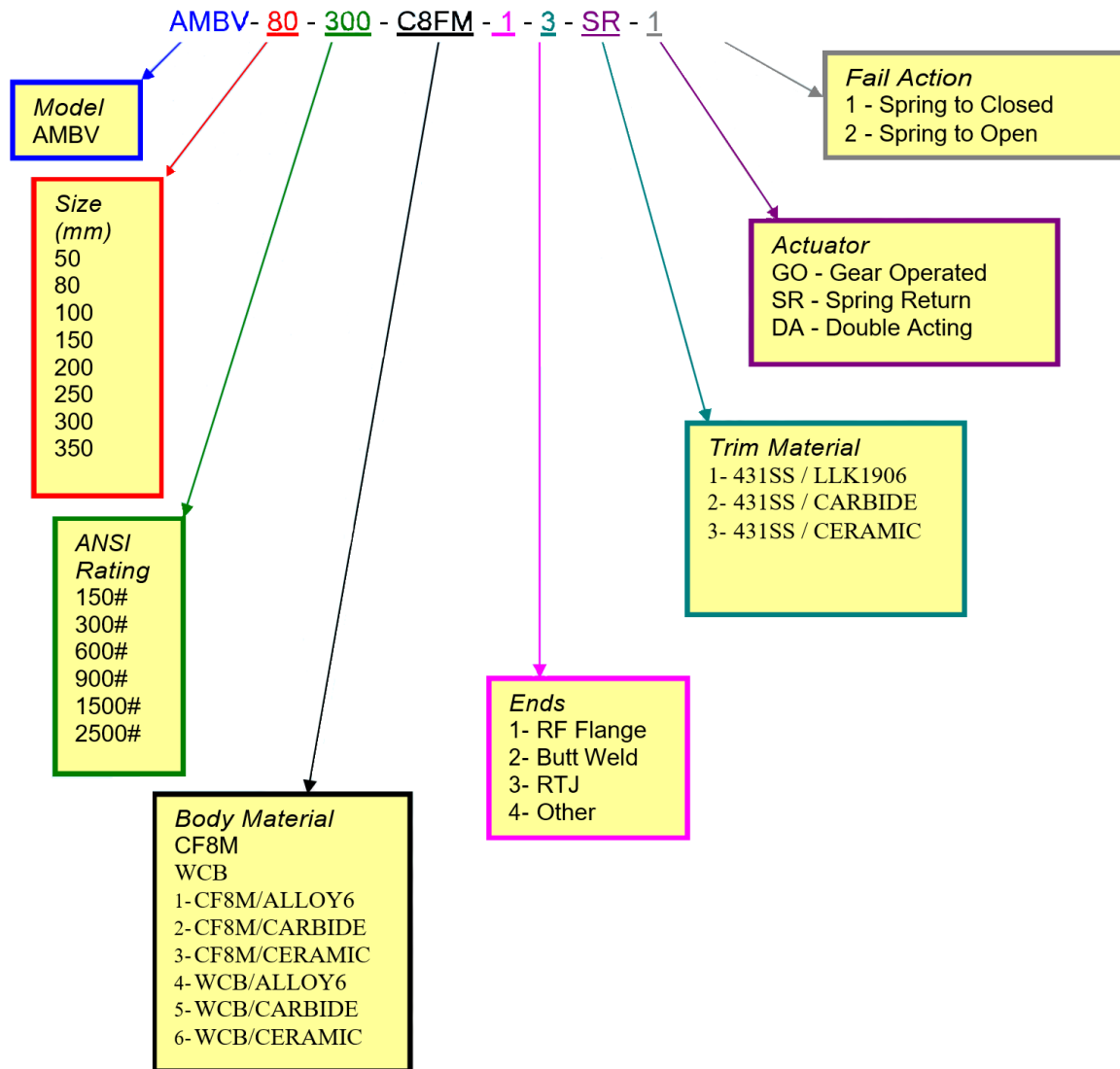
Temperature		Pressure Class					
		150		300		600	
DegC	DegF	kPag	PSIg	kPag	PSIg	kPag	PSIg
-84	-120	1896	275	4963	720	9926	1,440
93	200	1654	240	4274	620	8547	1,240
149	300	1482	215	3860	560	7720	1,120
204	400	1344	195	3550	515	7100	1,030
260	500	1172	170	3309	480	6583	955
316	600	965	140	3102	450	6238	905
343	650	862	125	3067	445	6135	890
371	700	758	110	2964	430	5962	865
399	750	655	95	2929	425	5824	845
427	800	551	80	2861	415	5721	830
454	850	448	65	2792	405	5583	810
482	900	345	50	2723	395	5445	790
510	950	241	35	2654	385	5342	775
538	1000	138	20	2516	365	4997	725
566	1050	138	20 (1)	2481	360	4963	720
593	1100	138	20 (1)	2240	325	4446	645
621	1150	138	20 (1)	1896	275	3791	550
649	1200	138	20 (1)	1413	205	2826	410
677	1250	138	20 (1)	1241	180	2516	365
704	1300	138	20 (1)	965	140	1896	275
732	1350	138	20 (1)	724	105	1413	205
760	1400	138	20 (1)	517	75	1034	150
788	1450	138	20 (1)	414	60	793	115
816	1500	103	15 (1)	276	40	586	85

Material Pressure – Temperature ratings per ASME/ANSI B16-34-1988

Note:

(1) For welding end valves only. Flanged end ratings terminate at 538 Deg C (1000 Deg F)

Valve Model – Coding Number



Delatite Valves are dedicated to providing High Quality Products of Superior Design which are all supported by excellent customer service. Delatite are Committed to solving Severe Service Valve problems in today's industries.

Total Quality Management is our Commitment to our Customers. We go out of our way to understand the Customers' needs and to provide solutions which meet or exceed our customers' needs.

This commitment is carried across all departments of the company. Including:

- Sales
- Engineering
- Product Development

This Commits Delatite to ongoing quality and performance improvements to meet our customer's needs.

We aim to meet our Customers' Needs First Time and on Time.
Valves have been designed to meet the ANSI Standards for Valves.
Valve are Tested to conform with MSS SP.61.

Delatite Valves are accredited to ISO 9001 : 2015.
For Design and Manufacture of Valves.

Repair facilities are ISO 9001 : 2015.

Certificate No AU 1807.

Pressure test equipment is calibrated, traceable & Certified by NATA LAB.

The information and specification in this publication are presented for information purposes only. While every effort has been made to ensure accuracy, they should not be considered as certified information.

Delatite Valves are continually improving the performance of their range of valves. Information in this brochure is subject to change without notice.

For further information or verification please contact your Delatite Valve Representative.

Manufactured in Australia by:

Authorised Distributor

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