

**FOR VALVE**

**Valid for products not subject to DNV GL classification requirements.**

**Particulars of Product**

Product Name:	<b>Ball, Butterfly, Gate, Globe, and Plug Valve</b>
Type designation:	<b>Ref. to attachement</b>
Application/context:	<b>As per witness certificates</b>
ID/Serial/Tag no:	<b>N.A.</b>
The product is intended for:	<b>Stock/Projects</b>
Requirements are based on:	<b>Fugitive Emission ISO 15848-1, ISO 15848-2, ISO 10497-2010, Cycle &amp; Reliability Endurance test, API622- 2nd Edition 2011, Fire safe Tests API 607 6th Edition</b>

Deviations and limitations, if any, are stated on page 2 onwards.

**Particulars of Vendor and Purchaser**

Vendor:	<b>Global Supply Line Pty. Ltd.</b>
Vendor reference:	
Purchaser:	
Purchaser reference:	

Issued at **New York** on **2016-07-29**



for **DNV GL**

This document has been digitally signed and will therefore not have handwritten signatures

**Fu, Guoqiang**  
**Surveyor**

Except for any liability caused by DNV GL's gross negligence or wilful misconduct, DNV GL's maximum cumulative liability arising out of or related to the use of or reliance on this document shall be limited to USD 300 000.

## **Verification extent and result**

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Verification extent:

**Witness fire tests fugitive emission tests and endurance tests on valves and actuators**

Verification result/comments:

**Refer to attached spread sheet and each DNVGL certificate.**

### **Report**

At the request of Global Supply Line Pty Ltd, DNVGL New York Office did attended Yarmouth Research and Technology in Maine, USA to witnessed the fire tests fugitive emission tests and endurance tests. The tests for selected size was witnessed by DNVGL surveyor, as we have mentioned on our survey reports.

Details refer to our survey reports ( report number has been listed on attached spread sheet attached: Annex 1. Firesafe tests-001, Annex II Fugitive emission tests-002, Annex III- Valve and actuator endurance - reliability cycle test coverage-003 . )

**Annex III- VALVE AND ACTUATOR ENDURANCE - RELIABILITY CYCLE TEST COVERAGE-003**

ITEM	MANUFACTURER	VALVE TYPE	MODEL RANGE TESTED	BODY	SEAT/ SEALS	PRODUCT DESCRIPTION	STANDARD	YARMOUTH CERTIFICATE NUMBER	DNV CERTIFICATE NUMBER	DATE OF TEST/ WITNESS	COVERAGE RANGE	CYCLES & RANGE	TEMP#
2.31A	AUSTRALIAN PIPELINE VALVE (APV) C/W TORQTURN ACTUATOR	BALL VALVE FLOATING C/W JC SERIES APV-TORQTURN ACTUATOR	MODEL BV100 C/W JC SERIES APV-TORQTURN ACTUATOR	CARBON STEEL	PTFE/ GRAPHITE/ VITON	BALL VALVE JC SERIES APV-TORQTURN R & P ACTUATOR	ISO 15848-1 LEAKAGE LEVEL 'CH'	215066-2.3.1	N1414UNX	7/6/2015	800 TO 2500 CLASS UP TO 4"	ENDURANCE TESTED SIMULATED LIFE TIME ENDURANCE CLASS CO2	3 THERMAL CYCLES UP TO -20°C TO 150°C (302°F)
2.1A	AUSTRALIAN PIPELINE VALVE (APV) C/W TORQTURN ACTUATOR	BALL VALVE FLOATING C/W JA SERIES TORQTURN ACTUATOR	MODEL SLFSBV01 BALL VALVE C/W JA SERIES TORQTURN ACTUATOR	CARBON STEEL	PTFE/ GRAPHITE	BALL VALVE C/W JA SERIES TORQTURN HEAVY DUTY QUARTER TURN PNEUMATIC SCOTCH YOKE ACTUATOR	ISO 15848-1 LEAKAGE LEVEL 'CH'	215066-2.1	N1414UNW	7/6/2015	150 TO 600 CLASS 1/2" TO 12"	ENDURANCE TESTED SIMULATED LIFE TIME ENDURANCE CLASS CO2	3 THERMAL CYCLES UP TO -29°C TO 160°C (302°F)
2.3A	AUSTRALIAN PIPELINE VALVE (APV) C/W TORQTURN ACTUATOR	BALL VALVE TRUNNION C/W ASK SERIES TORQTURN ACTUATOR	MODEL BVF100 BALL VALVE C/W ASK SERIES TORQTURN ACTUATOR	A105 CARBON STEEL	PTFE/ GRAPHITE/ VITON	BALL VALVE C/W ASK SERIES TORQTURN HEAVY DUTY QUARTER TURN PNEUMATIC SCOTCH YOKE ACTUATOR	ISO 15848-1 LEAKAGE LEVEL 'CH'	213104	NYK-14-7415-10	1/10/2014	150 TO 1500 CLASS 1" TO 20"	ENDURANCE TESTED SIMULATED LIFE TIME ENDURANCE CLASS CO2	3 THERMAL CYCLES UP TO -20°C TO 150°C (302°F)
2.2A	AUSTRALIAN PIPELINE VALVE (APV) C/W TORQTURN ACTUATOR	BALL VALVE TRUNNION C/W HD SERIES TORQTURN ACTUATOR	MODEL FS9000 BALL VALVE C/W HD SERIES TORQTURN ACTUATOR	CARBON STEEL	PTFE/ GRAPHITE/ VITON	BALL VALVE C/W HD SERIES TORQTURN HEAVY DUTY QUARTER TURN PNEUMATIC R & P ACTUATOR	API 622 2ND EDITION 2011	213078	NYK-14-7415-10	1/20/2014	150 TO 600 CLASS 2" TO 20"	ENDURANCE TESTED SIMULATED LIFE TIME 2500 CYCLES	3 THERMAL CYCLES UP TO -29°C TO 150°C (302°F)
2.6A	AUSTRALIAN PIPELINE VALVE (APV) - SUPERSEAL	BUTTERFLY VALVE HIGH PERFORMANCE	MODEL SLHBF-FS-ALJBR BUTTERFLY VALVE C/W JA SERIES TORQTURN ACTUATOR	A216 WCB CARBON STEEL	RPTFE/ GRP	WAFER BUTTERFLY C/W JA SERIES TORQTURN ACTUATOR	API 622 2ND EDITION 2011	213078	NYK-14-7415-10	1/20/2014	150 TO 600 CLASS 2" TO 24"	ENDURANCE TESTED SIMULATED LIFE TIME 2500 CYCLES	3 THERMAL CYCLES UP TO -20°C TO 150°C (302°F)
2.32A	AUSTRALIAN PIPELINE VALVE (APV)	GATE VALVE	MODEL GA1RAA8RN GATE VALVE BBOSY RF 150LB	CARBON STEEL	METAL/ GRAPHITE	40NB (1 1/2") CLASS 150 GATE VALVE GRAPHITE PACKING	ISO 15848-1 LEAKAGE LEVEL 'CH'	215066-2.32	N1419FYX	5/25/2016	150 TO 2500 CLASS 1/4" TO 2"	ENDURANCE CLASS CO2 TIGHTNESS CLASS 'C' LEAKAGE CLASS 'CH'	UP TO 200°C
2.4A	AUSTRALIAN PIPELINE VALVE (APV)	GATE VALVE	MODEL P47XUF GATE VALVE	A216 WCB CARBON STEEL	METAL/ GRAPHITE	GATE VALVE C/W APV-DIAMOND GEAR 107B GEARBOX	API 622 2ND EDITION 2011	213078	NYK-14-7415-10	1/27/2014	150 TO 600 CLASS 2" TO 24"	ENDURANCE TESTED SIMULATED LIFE TIME 2500 CYCLES	3 THERMAL CYCLES UP TO -29°C TO 260°C (500°F)
2.4.1	AUSTRALIAN PIPELINE VALVE (APV)	GATE VALVE	MODEL P47LXUF	ASTM A351 CF8 STEEL	METAL/ GRAPHITE	150NB (6") CLASS 150 RF GATE VALVE (GRAPHITE PACKING) C/W APV-DIAMOND GEAR 107B GEARBOX	LEAKAGE LEVEL 'CH' (CLASS C) 3 THERMAL CYCLES	215233-2.4.1	N1419FZ1	7/21/2015	150 TO 600 CLASS 2" TO 30"	EQUIVALENT CL02 3 THERMAL CYCLES	TO 260°C
2.5A	AUSTRALIAN PIPELINE VALVE (APV)	GLOBE VALVE	MODEL P143XU GLOBE VALVE	A216 WCB CARBON STEEL	METAL/ GRAPHITE	GLOBE VALVE	ISO 15848-1 LEAKAGE LEVEL 'CH' (CLASS C)	215233-2.5	N141673V	7/21/2015	150 TO 600 CLASS 2" TO 24"	ENDURANCE TESTED SIMULATED LIFE TIME	3 THERMAL CYCLES UP TO -20°C TO 260°C (500°F)