



SHELL GLOBAL SOLUTIONS

CERTIFICATE OF ACCEPTANCE

This is to certify that Supplier Technical Assessment Record (STAR) level 2 has been awarded to:

Company: L&T Valves Limited
 Manufacturing Location: Kancheepuram, India
 Brand: L&T
 Technical Qualification Result: TAMAP

Based on the Shell Global Solutions Technical Qualification carried out in February – 2013 in accordance with testing procedure SPE 77/300 dated December 2012 has been accepted by Shell Global solutions International B.V. based on successful Type Acceptance Testing (TAT) result of:

Product Designation	Pressure Class	Size	Emission class	MESC No	TAT Date
Wedge Gate	600	DN 250	B	77.23.08.116.1	25 th Feb to 8 th Mar 2013
Disc Globe	600	DN 100	B	77.33.08.112.1	25 th Feb to 8 th Mar 2013
Wedge Gate	600	DN 80	B	77.23.08.110.1	25 th Feb to 8 th Mar 2013

The 2-STAR rating in the Shell Global Solutions Technically Accepted Manufacturers And Products (TAMAP) database is applicable to the MESC Sub-sub Groups, listed in Technical Specification MESC SPE 77/300B in accordance with tested valves description on page 2. For an overview of manufacturers models & types qualified by this testing see page 2.

Restrictions & Conditions	
	1. 77.23.08.116.1; Qualified temperature range : - 196°C to +300°C; FE class: B; Qualified Size range: DN 200, DN 250, DN 300 & DN 350; Qualified Pressure class: 150, 300 & 600
	2. 77.33.08.112.1; Qualified temperature range: - 196°C to +300°C; FE class: B; Qualified Size range: DN 50*, DN 80, DN 100, DN 150 & DN 200; Qualified Pressure class: 150, 300 & 600
	3. 77.23.08.110.1; Qualified temperature range: - 196°C to +300°C; FE class: B; Qualified Size range: DN 50, DN 80, DN 100 & DN 150; Qualified Pressure class: 150, 300 & 600

* Concession given after verifying the identity of design, parts, materials, geometry of key critical sealing elements, seals, packing, etc.

Shell GSI Report No: SR.13.10631	Original acceptance: 2013 - 06 - 06
Shell GSI contract no: 139358	Current Certificate: none
Acceptance Certificate no: 2013 - 06 - 06/02	Certificate Expiry: 2018 - 06 - 06
Issued By: Shell Technology Center Bangalore, Shell India Markets Private Limited	

Signature / Stamp:

Date: 06/06/2013

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 SUDHANSHU KUMAR (PTIN - PTE / PMMI)
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Test Valves:

Test valve SR.13.10631/01 with Shell MESC - 77.23.08.116.1

TEC: GA-FW-MG-UD-TE-BB-CR-I10434-ST
Manufacturer drawing No.: 30004447-02 with revision 0 from 10-11-2012
DN250 (10") Pressure class 600; Flanged, bolted bonnet, wedge type Gate valve, full bore
Design to ISO 10434 with extended bonnet and cavity relief (uni-directional)
Body material: ASTM A351 Grade CF8M; Stem material: ASTM A182 Grade F316
Wedge material: ASTM A351 Grade CF8M + Stellite-6
Seat ring material: ASTM A182 Grade F316 + Stellite-6; Stem Packing: Graphite
Fugitive Emissions (FE) Tightness class: Class B
Temperature range: -196 °C to +150 °C
Test temperature range: -196 °C to +300 °C
Size Range Qualification (internal bore): DN 200, DN 250, DN 300 and DN 350
Pressure class qualification: 150, 300 & 600

Test valve SR.13.10631/06 with Shell MESC - 77.33.08.112.1

TEC: GL-DI-MG-BD-TE-BB-CR-BS1873-ST
Manufacturer drawing No.: 30004447-03 with revision 0 from 10-11-2012
DN100 (4") Pressure class 600; Flanged, bolted bonnet, disc type Globe valve, straight pattern, full bore
Design to BS 1873, Sour service, NACE MR-01-75 (version 2002) with extended bonnet
Body material: ASTM A 351 Grade CF8M; Body Seat: Integral weld overlay with Stellite-6
Disc material: ASTM A182 Grade F316/ A351 Grade CF8M + Stellite-6; Stem material: ASTM A479 Grade XM19 ; Packing material: Graphite; Fugitive Emissions (FE) Tightness class: Class B
Temperature range: -196 °C to +300 °C
Test temperature range: -196 °C to +300 °C
Size Range Qualification (internal bore): DN50*, DN80, DN100, DN150 & DN200
Pressure class qualification: 150, 300 and 600

* Concession given after verifying the identity of design, parts, materials, geometry of key critical sealing elements, seals, packing, etc.

Test valve SR.13.10631/8 with Shell MESC - 77.23.08.110.1

TEC: GA-FW-MG-UD-TE-BB-CR-I10434-ST
Manufacturer drawing No.: 30004447-01 with revision 0 from 10-11-2012
DN80 (3") Pressure class 600; Flanged, bolted bonnet, wedge type Gate valve, full bore
Design to ISO 10434 with extended bonnet and cavity relief (uni-directional)
Body material: ASTM A351 Grade CF8M, Stem material: ASTM A182 Grade F316
Wedge material: ASTM A351 Grade CF8M + Stellite-6
Body Seat Ring: ASTM A182 Grade F316 + Stellite-6; packing material: Graphite
Fugitive Emissions (FE) Tightness class: Class B
Temperature range: -196 °C to +150 °C
Test temperature range: -196 °C to +300 °C
Size Range Qualification (internal bore): DN50, DN80, DN100 & DN150
Pressure class qualification: 150, 300 and 600

The following manufacturer brand name / model types will be listed in TAMAP: L&T