TUV INDIA PVT LTD., 2nd Floor, Pelican Building, Opp. Race Course Tower, Race Course, Vadodara-390 005 Tel.: 0265 2350900 / 920 / 930 E Mail: <u>baroda@tuv-nord.com</u>



Fugitive Emissions Certificate No. 8120132312/01 Rev.0

This is to certify that the 12" (DN 300), Class 150# API 603 Wedge Gate Valve

Manufactured by Flow Link Systems Pvt. Ltd. 189/1A, 1B, 1C & SF 166 Uthupalayam,

Arasur Village, Coimbatore -India

&

Tested by

Teadit Packing & Gaskets Pvt. Ltd. 381/382, Savli GIDC Estate, Manjusar Vadodara - 391775, Gujarat, India.

As per Fugitive Emission standard API 624 First Edition, February 2014 and complies with the \leq 100 ppmv stem leakage (static & dynamic) acceptance criteria

Valve details	 12" (DN 300) x 150# Wedge Gate Valve with flanged ends Bolted type connection between body & bonnet (Valve selected & supplied by manufacturer for testing). Stem type : Rising GA Drawing No. : 20 16 01 52 001, Rev.01 MOC: Body, Bonnet, Wedge & Gland Flange : ASTM A 351 Gr. CF8M, Stem & Gland Bush : ASTM A 479 Gr. 316 Valve Serial No. : 20000101001 Stem diameter: 1.375" [34.925 mm]. Stuffing Box Depth : 44.13 mm. 		
Stem Seal	: Gland Follower Insertion Depth : 1.5 mm (Before Compression) GRAPHITE with Inconel wire Mesh, OD-50.47mm x ID-37.96mm X 5 Nos.		
Body Seal	GRAPHITE		
	Fluid	Methane (having 99.5% purity)	
Test Conditions	Pressure	12.4 Kg/ Cm ² (g)	



(GOVIND PRAJAPATI) Surveyor(s) to TUV India Private Limited

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Test Conditions	Temperature	RT & 260 \pm 10 °C (Allowable temperature difference is \pm 5%)
	Test Method to check emission	Sniffer method for stem seal & body.
		310 mechanical cycles : 04 Nos of Ambient Cycle & 03 Nos. of thermal Cycle
	No of mechanical cycle completed	Ambient Cycle Details : 04 Nos . [03 Nos x 50 Cycle & 01 No. x 10 Cycle] Thermal cycle Details : 03 Nos. x 50 Cycle. @ 260 ± 10 °C
	Time taken during one cycle	02 Minutes (1 minute during opening & 1 minute during closing)
Test Results	Maximum allowable leakage from stem seal	100 ppmv
	Actual maximum leakage	39.6 ppmv [Static Leakage]
	observed from stem seal	39.6 ppmv [Dynamic Leakage]
	Physical visual verification of moving component (shaft) after operation	No abnormal wear & tear observed on shaft surface
Qualification extension	Stem Seal	This test qualifies all the API 603 Wedge Gate Valves of intended for on-off applications having the same seal design, quantity & construction.
	Valve Size/ Class	8" (DN 200) X 150# to 14" (DN350) X 150#

Remarks:

- 1. Test was conducted from 25.04.2023 to 06.05.2023
- 2. This Certificate is valid in conjunction with test report No. : 02/23 Dtd.06.05.2023

Date: 08.05.2023



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