



- Completely
- Partially
- Balance

FUGITIVE EMISSIONS CERTIFICATE Nr LTV/MPK/CHE/FE/GGC/016-R1

BV Job nr: IND.C.4.13.0355

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| PROJECT: Stock | Ref: ---- |
| BV Client: M/s: L&T Valves Limited, Manapakkam, Chennai | P/o nr: ---- |
| Manufacturer: M/s: L&T Valves Limited, Manapakkam, Chennai | P/o nr: ---- |
| Inspection requested by: M/s: L&T Valves Limited, Manapakkam, Chennai | |
| Test date: 13/02/2012 to 16/02/2012 | |

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| SUPPLY / SUBJECT OF INSPECTION: | |
| Standard | ISO 15848 Part-1, First edition 2006 |
| Valve details | NPS 4 / Class 2500 / Pressure seal Globe Valve / ASTM A351 Gr. CF8C |
| Stem Seal | 6 Braided graphite preformed split rings (Stem dia: 1.75") |
| Body Seal | Die-moulded graphite ring with SS316 metal cap |
| Test Conditions | Fluid Helium |
| | Pressure 413.7 bar / 208.9 bar |
| | Temperature RT / 538°C |
| | Test method ISO 15848 Part-1: Vacuum method (Annex A), Sniffing method (Annex B) |

CONCLUSIONS / REMARKS:

As per the standard, the range of valves qualified is as under:

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| Performance class | ISO FE BH – CO2 – SSA 1 – t (538°C) – CL2500 – ISO 15848-1 | |
| Test Results | Tightness class | BH |
| | Endurance class | CO2 (1500 mechanical cycles, 3 thermal cycles) |
| | Number of stem seal adjustments (SSA) | 1 |
| Qualification extension | Stem diameters qualified (50% lower and 200% higher) | Pressure seal Globe Valves with stem diameters ranging from 0.875" to 3.5" |
| | Size/Class qualified | Classes 150, 300, 600, 900, 1500 & 2500 (Sizes covering stem diameters 0.875" to 3.5") |

The above items have been released in accordance with specifications and purchase order requirements on hand at the vendor's premises at the time of inspection.

Enclosed manufacturer's Fugitive Emissions report no: AILFEISOGGC-016 dated 17/02/2012 duly endorsed for the test results

This note is issued further to an inspection whose duration and scope were limited by the terms and conditions of the contract with BV principal. This note is NOT an indication that the item(s) is (are) fit for any specific purpose and does not release the manufacturer, supplier and any party from their respective duty, guarantee, obligation and/or indemnity relating to, without limitation, patents, workmanship, materials, safety, performance in operation and/or reliability.

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| <p>Inspected by:</p> <p>Name: M. Rajaram</p> <p>Date of issue: 05/09/2013</p> <p>Inspection centre: Chennai</p> | | <p>Checked by:</p> <p>Name: S. Sankar</p> <p>Signature: </p> |
| <p>Distribution: <input type="checkbox"/> L&T Valves <input type="checkbox"/> BV-Chennai</p> | | |

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