

TEST CERTIFICATE



N° CornerStoneValve #1_rev02

RINA file No.: 16 RY 3008 OF

Manufacturer or Supplier: CornerStoneValve

Mfr. work order No.: 160310 / 16159

Purchaser: MRC Global

Order No.: 4000035056 Intended for: Gorgon Project

Inspection date: 29th Nov – 2nd Dec 2016 Place of inspection: 13124 Trinity St., Stafford, Tx 77477

THIS IS TO CERTIFY that the items, particulars of which are given in the following section, have been subjected to the below detailed inspections and tests, with satisfactory results.

Referenced standards and specifications:

TS1041 – Revision B - Fugitive Emission Type Testing

Section 5.8 - G1-TE-X-0000-SPC0117 – Revision 7 - Specification For Manually Operated Valves

UNI EN ISO 15848-1:2015 - Industrial valves – Measurement, test and qualification procedures for fugitive emissions – Part 1 – Classification system and qualification procedures for type testing of valves

Tested material, components or equipment:

Item	Description	Qty	Dwgs	Rev.
Line item 2	6" x 6" CL 600 END ENTRY FLOATING BALL VALVE, CRYOGENIC, CAVITY RELIEVING, EXTENDED BONNET, RF, GEAR OP – Serial Number 16031002005	1	Drawing FBC2-0600F-00600-00	C

This certificate is ruled by the General Condition for service provision. As far as the nature of the activity and RINA liability are concerned, please find here below an abstract of the above mentioned General Condition.

3.1 The Document concerns the verification of the conformity of the product, the activity, the service or the process carried out by the Client with respect to a certain document of reference (here included a law), or the carrying out of technical and/or economic analysis demanded by the Client. The Client is the sole responsible of the correct carrying out of the activity and its conformity, or the conformity of its products, to the enforceable laws and to Clients and third parties' expectations in general. 3.3 To no report, declaration, document or information issued or released to implement the Services supplied by the Company can be ascribed legal effects and implications different from the certificate stating that, on the basis of the verifications carried out by the Company, the structure, the materials, the equipment, the machineries or any other element this document or information refer to complies with the document of reference. At the same time, they cannot have legal effects or implications not explicitly envisaged by the parties when requesting the Service. 11.1 In providing the Services, as well as other correlated information or advice, the Company, its Surveyors and employees, operate with due diligence for the proper execution of the activity. However, considering the nature of the activities performed, it is not possible to guarantee absolute accuracy, correctness and completeness of any information or advice supplied. 11.2 Therefore express and implied warranties are specifically disclaimed and nor the Company nor its Technicians or auxiliaries will be liable for any loss, damage or expense of whatever nature sustained by any person, in tort or in contract, derived from carrying out the Services. 11.3 Without prejudice to the provisions of the previous paragraph, if a user of the Company Services can prove to have suffered a loss or a damage because of some negligent act or omission by the Company, its Technicians or employees, the Company will pay compensation to such person for his proved loss, up to, but not exceeding, five times the amount of the fees charged for the specific services, information or opinions from which the loss or damage derives or, if no fee has been charged, a maximum of one million Euro. Where the fees charged are related to a number of Services, the amount of the fees will be apportioned for the purpose of the calculation of the maximum compensation, by reference to the estimated time involved in the performance of the Service from which the damage or loss derives. 11.4 Any liability for indirect or consequential loss, damage or expense is specifically excluded.



Inspections and tests carried out:

Fugitive Emission Type Testing

- Inspection Step 6.3(B): per TS1041 Rev. B (Page 6): **Torque Testing at Rated Pressure Prior to Test**
- Inspection Step 6.5: per TS1041 Rev. B (page 8): **Preliminary Tests at Room Temperature**
- Inspection Step 6.6: per TS1041 Rev. B (page 8): **Mechanical Cycle Test at Room Temperature**
- Inspection Step 6.7: per TS1041 Rev. B (page 9): **Static Test at Low Temperature**
- Inspection Step 6.8: per TS1041 Rev. B (page 9): **Mechanical Cycle Test Low Temperature**
- Inspection Step 6.9: per TS1041 Rev. B (page 9): **Static Test at Room Temperature**
- Inspection Step 6.10: per TS1041 Rev. B (page 9): **Mechanical Cycle Test at Room Temperature**
- Inspection Step 6.11: per TS1041 Rev. B (page 9): **Static Test at High Temperature**
- Inspection Step 6.12: per TS1041 Rev. B (page 9): **Mechanical Cycle Test at High Temperature**
- Inspection Step 6.13: per TS1041 Rev. B (page 10): **Static Test at Room Temperature**
- Inspection Step 6.14: per TS1041 Rev. B (page 10): **Mechanical Cycle Test at Room Temperature**
- Inspection Step 6.3(B): per TS1041 Rev. B (Page 6): **Torque Testing at Rated Pressure After Test**

The calibration status and adequacy of the test measurements devices used have been satisfactorily verified.

Remarks: /

Marking:	/
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Enclosures: SO 16031002005 - FE Type Testing Witnessed
 FO-INEX-IR01 R1 E
 FO-INEX-IR02 R1 E
 FO-INEX-IR03 R1 E
 FO-INEX-IR04 R1 E

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