

FLUID CONTROL RESEARCH INSTITUTE

एफ.सी.आर.आई.



ISO 9001: 2008 REGISTERD FIRM CERT.NO: IN/08/1117

Under Ministry of Heavy Industries & Public Enterprises,

Kanjikode West- 678623, Palakkad, Kerala, India

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CERTIFICATE OF TESTING



Certificate no : T0027

ENDURANCE TESTING OF GATE VALVE

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Report No **FCRI/ET/266/2014-15**

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APPROVED BY

S. Ram Mohan
Dr. S. Rammohan
Chief Research Engr.

DATE OF RECEIPT : 10-06-2014
COND. OF RECEIPT : GOOD
DATE OF TESTING : 12-06-14 to 25-06-14
DATE OF ISSUE : 10-07-2014

Customer:
McWANE Service Pvt.LTD
Coimbatore- 641018,

REFERENCE DOCUMENTS

Test Procedure / Standard No : MSPL-TP-002 Rev 2 Dt:10.02.14

DETAILS OF TEST VALVE

Valve Sl. No.	: A14F02- 001	Body MOC	: DI
Type	: Resilient Seated Gate valve	Wedge MOC	: DI + EPDM Encapsulated
Size & Rating	: DN 300 , PN 16	Seal MOC	: NA
Flange Std	: EN1092-2 , PN16	Tag No	: 238-A
Actuation	: Electrical Actuator	Model	: Series 31

EQUIPMENT USED

Pump	Make: ASPEE	Pressure	0-20 bar	Flow	: 10 lpm
Pressure Gauge	Make : Alot	Range	0-60 bar	Resolution	: 0.5 bar

DETAILS OF TESTS

1.Shell test (Before Endurance cycle test)

1	Shell pressure	temperature	duration	Observation
13.06.14	25	30 deg C	10 minutes	No leakage , Valve holding pressure

2. Seat leakage test (Before Endurance cycle test)

date	Seat pressure	temperature	duration	
13.06.14	18 bar	30 deg C	10 minutes	No leakage , Valve holding pressure
13.06.14	0.5 bar	30 deg C	10 minutes	No leakage , Valve holding pressure

3. Endurance cycle test

	Date	No of cycles completed	Pressure (bar)	
1	13.06.2014	502	16.0	No leakage , Valve holding pressure
2	14.06.2014	756	16.0	No leakage , Valve holding pressure
3	16.06.2014	998	16.0	No leakage , Valve holding pressure
4	17.06.2014	1206	16.0	No leakage , Valve holding pressure
5	18.06.2014	1482	16.0	No leakage , Valve holding pressure
6	19.06.2014	1503	16.0	No leakage , Valve holding pressure
7	20.06.2014	1752	16.0	No leakage , Valve holding pressure
8	24.06.2014	2260	16.0	No leakage , Valve holding pressure
9	25.06.2014	2530	16.0	No leakage , Valve holding pressure

CONCLUSION: Test was carried out as per customer test procedure, The valve is performed satisfactorily.

Tested By
ABOBACKER SIDHIK. A

Checked by
S. MANIKANDAN

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4.Shell test (After Completion of the Endurance cycle test)				
	Shell pressure	temperature	duration	Observation
25.06.14	25	30 deg C	10 minutes	No leakage , Valve holding pressure
5. Seat leakage test (After Completion of the Endurance cycle test)				
date	Seat pressure	temperature	duration	
25.06.14	18 bar	30 deg C	10 minutes	No leakage , Valve holding pressure
25.06.14	0.5 bar (Low pressure)	30 deg C	10 minutes	No leakage , Valve holding pressure



Test setup



VALVE UNDER TEST