



## DET NORSKE VERITAS

### Tests Witness Report according to MSS SP 99(2001) Testing

MANUFACTURER : M/S. HYD-AIR VALVES PVT. LTD.

**Office:**

J.V.Patel, ITI Compound,  
B. Madhukar Marg,  
Elphinstone Station Road,  
Mumbai – 400013

**Factory:**

SHADE No. 08.  
LONAVLA INDUSTRIAL ESTATE LTD.  
NANGARGAON, LONAVLA- 410, 401

The under signed surveyor did visit the facilities of the above stated manufacturer between for the witnessing of Brust tests mentioned below conducted on under mentioned sizes of Verious types of Valves, and details are as given below:

#### Sizes of Valves selected for witnessing performac tests:

a	8 BLVN-MP.SS	Quantity: 3 Nos according to Clause No: 5.6 of MSS SP 99(2001)
b	8BLVN-MP.CS	Quantity: 3 Nos according to Clause No: 5.6 of MSS SP 99(2001)
c	4-2 BLVN-SWS.SS	Quantity: 3 Nos according to Clause No: 5.6 of MSS SP 99(2001)
d	8NVFN.SS	Quantity: 3 Nos according to Clause No: 5.6 of MSS SP 99(2001)
e	8 NVFN.CS	Quantity: 3 Nos according to Clause No: 5.6 of MSS SP 99(2001)
f	8 NV-IB-T.SS	Quantity: 3 Nos according to Clause No: 5.6 of MSS SP 99(2001)
g	8-3 MNVN.SS	Quantity: 3 Nos according to Clause No: 5.6 of MSS SP 99(2001)
h	8-3MNVN.CS	Quantity: 3 Nos according to Clause No: 5.6 of MSS SP 99(2001)
i	8 SOV-FN-UB.SS	Quantity: 3 Nos according to Clause No: 5.6 of MSS SP 99(2001)
j	4 SOV-FN-O, S&Y.SS	Quantity: 3 Nos according to Clause No: 5.6 of MSS SP 99(2001)

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.

K	8 SOV-FN-O,S&Y.CS	Quantity: 3 Nos according to Clause No: 5.6 of MSS SP 99(2001)
L	8 NRFN.SS	Quantity: 3 Nos according to Clause No: 5.6 of MSS SP 99(2001)
M	8 NRFN.CS	Quantity: 3 Nos according to Clause No: 5.6 of MSS SP 99(2001)

**Test Parameters used during test on above fittings is as below:**

1	Temperature During Testing: 15 to 35 deg C	Quantity:3 Nos according to Clause No: 5.6 of MSS SP 99(2001)
2	Test Pressure retained within $\pm$ 5% PSIG	Quantity:3 Nos according to Clause No: 5.6 of MSS SP 99(2001)
3	Test Medium Demineralised water.	Quantity:3 Nos according to Clause No: 5.6 of MSS SP 99(2001)
5	Mechanical tests done in NABL approved laboratory (Perfect Laboratory Services NABL Certificate No: T-1604 & T-1605)	Quantity:3Nos according to Clause No: 5.6 of MSS SP 99(2001)

**Following tests conducted as per MSS SP 99(2001)**

1	Selection of tests samples – Witnessed.	Valve testing Report No: HS-SD-001
2	Verification of material properties – MTC's Reviewed.	Material Test Certificates appended to Report no. HS-SD-001 according to Clause No: 3 through 4 of MSS SP 99(2001)
3	Hydrostatic Proof Pressure Test – Reviewed.	Calculation of Tensile strength Report no. HS-SD-001 according to Clause No: 5.7 of MSS SP 99(2001)
8	Hydrostatic Burst Test – Witnessed	Report no. HS-SD-001 according to Clause No: 5.6 of MSS SP 99(2001)

**CONCLUSIONS:**

Results of all the above tests performed were found to be satisfactory.

The details of applicable test pressures with reference to various tests mentioned above have been reviewed and endorsed by Det Norske Veritas AS Pune, in the Reports of manufacturer.

The above mentioned valves meets the requirement of MSS SP 99(2001) with reference to mandatory tests mentioned in the specifications and conducted herein.

**Location: Mumbai**

**Naresh Turerao**

**Date: 2011.07.28**



*Naresh*

**Surveyor to  
Det Norske Veritas AS**