

CERTIFICATE

This certificate with **No. I-148466/2** is the result of Helium shaft leak tests performed on a

ADLER S.p.A.
DN 50 ANSI 300 R.F.
Ball Valve

with reference to the requirements of TA LUFT Ed. 07/2002 (Technische Anleitung zur Reinhaltung der Luft Point 5.2.6.4 – Vdi 2440 Ed. 11/2000 Point 3.3.1.3) and with reference to prEN ISO 15848-1 Ed. 10/2003.

COMPANY	ADLER S.p.A. Valvole a Sfera – S. Stefano Ticino (Mi)
TEST LOCATION	Laboratory OMECO, Monza (Mi) and ADLER Production site
TIME OF TESTING	From 08 th to 10th February 2005
TESTED VALVES	Ball valve, nominal diameter DN 50, nominal pressure Class 300 (53 bar), flanged RF, body material ASTM A 479 316
REQUIREMENTS	Equivalence criteria of shaft sealing system according to TA LUFT Ed. July 2002 under Point 5.2.6.4 and correlated VDI 2440. Leaks lower than 10⁻⁴ mbar/l s m - prEN ISO 15848: Endurance Test (1500 cycles) with three Thermal Cycles at 180°C(CO₂) and one Stem Seal Adjustment (SS1) Leaks lower than 5,7X 10 ⁻⁶ mbar l/ s m
LEAK DETECTION METHOD	Helium Leak Detector (Vacuum Method) Mass Spectrometer type Balzers HLT 150
PACKING MATERIAL	Chevron PTFE/Graphite rings
PACKING SEALING CONFIGURATION	As per attached drawing No. d-FG 2 2739 1 to 4
TEST RESULTS	Details of the test: Omeco Test Report SPS/0053/005 The described valve shaft sealing system satisfies the TA LUFT equivalence criteria as well as VDI 2440
QUALIFICATION	The sealing system can be classified according pr EN ISO 15848 as class A CO₂ (3 thermal cycles) with SS1(one stem Adjustment) during 1500 cycles. Supplementary cycling till 10.000 cycles and one more SSA confirmed the qualification.

IMPORTANT:

This certificate must be referred to the **OMECO Test Report SPS/0053/005** and the Adler Procedure **QSS 01**.

LOCATION : MILANO 28/02/2005



TUV INSPECTOR

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