

Project: LEAK TESTS TO TA LUFT
GMBL.P95

Certificate Number: SOU9920074/1A1

Client: WORCESTER CONTROLS
HAYWARDS HEATH RH16 1TL

Office: SOUTHAMPTON

Client's Order Number: VERBAL/A WATSON

Date: 13/4/99

Order Status: COMPLETE

Inspection Dates

First: 10/2/99

Final: 17/3/99

This certificate is issued to Worcester Controls Ltd following attendance by IA.G. Mortimer and P. McKinnon, the undersigned surveyors to Lloyds Register, at their Haywards Heath and Burgess Hill premises for the purpose of witnessing Helium Leak tests of the valve stem seal systems of a range of valve series as detailed below. The tests were conducted generally in accordance with:- First General Administrative Regulation pertaining to the Federal Emission Control Law (Technical Instructions on Air Quality Control-TA Luft) as of 27 February 1986 (GMBL.p.95)--- Erste allgemeine Verwaltungsvorschrift betreffend das Bundesgesetz zur Emmisionskontrolle (Technische Anleitung zur Kontrolle der Luftqualität - TA LUFT) vom 27 February 1986 (GMBL. S.95).

Leak detection was by means of a calibrated Leybold Ultratest UL400 Mass Spectrometer Serial No. 56-90 D910300017. The Procedure used was in accordance with TA-Luft approval for Enviro-Safe valves + Stem seal arrangements, Engineering Specification 300299 Rev 1 Dated 16/2/99.

SCOPE OF INSPECTION

- 1/ Visual inspection of valves and test equipment as set up in Test House.
- 2/ Review of Procedures and Calibration Data.
- 3/ Witnessing of Tests including " cycling" of valves (100, 500 & 1000 Times).
- 4/ Review of Test Records and subsequent endorsement as true.

The tests covered 9 Full Bore Ball Valves, sizes as follow:-1/2" SS., 1"SS.,2"CS.,3"CS.(Class 150),3"CS,(Class 300),4" CS,(Class 300),. 6" CS.(Class 300),.8" CS (Class 300) & 2"SS representing Valve Stem/Shaft Seal Systems (Graphite Stem Build):--

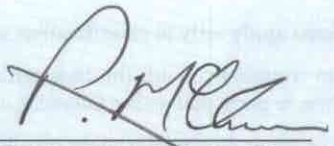
- 1/ B00005-07018-905-B-00-4 (X69458) covering series
13,14,44,51,52,53,54,55,59,81,518,519,528,529,539,549,818,819,828,829,839,849,911 & 922.
- 2/ B00010-07018-905-B-00-4 (X69159) covering series
13,14,18,19,44,51,52,53,54,55,59,63,81,88,96,97,517,518,519,527,528,529,539,549,817,818,819,828,829,839,849,911& 922.
- 3/ B00025-07007-905-B-00-4 (X08862) covering series
18,19,44,53,54,55,59,63,88,96,97,459,519,529,539,549,599,817,818,819,827,828,829,839,849 & 859.
- 4/ B00030-07007-905-A-004 (X09880) covering series
18,19,45,51,52,53,54,55,59,89,96,97,459,517,518,519,527,528,529,539,549,599,817,(818 class 150 only),819,827,829,839,849 & 859.
- 5/ B00040-07007-905-A-00-4 (X79709) covering series
459,517,518,527,528,529,539,549,599,817,818,819,827,828,829,839,849 & (859 Class 150/PN16 only)

NOTICE: *This certificate is subject to the terms and conditions overleaf, which form part of this certificate.*

- 6/ B00060-07007-905-A-00-4 (X09896) covering series 18,19,45,51,52,53,54,55,59,96,97,517,518,519,527,528,529,539,549,599,459,817,818,819,827,828,829,839 & 849.
- 7/ B00080-07007-905-A-00-4 (X80764) covering series 517,518,519,527,528,529,539,817,818,819,828,829,839, & 849.
- 8/ B000A0-07007-905-A-00-4 (X09898) covering series 53,55,56,96,97,517,527,539,817,818,819,827,828,829,839, & 849. (869 Class 300/PN40 only).
- 9/ 44 Series test valve 2" (50mm) stainless steel Graphite stem build to drg. SK1218 covering series 13,14,18,19,44,51,52,53,54,55,59,63,81,88,96,97,517,518,519,527,528,529,539,549,(817,818,819,827,828,829, 839,849,911 &922).

An acceptance standard of a recorded leakage rate of not more than 1×10^{-6} mLs⁻¹ monitored over a two minute period was set and met by the above.9 off test pieces (Valve Test Sheets TA 1 to TA 9 refer)

It is accordingly certified that the Valve Shaft/Stem Seal Systems tested meet the requirements of the Standard specified.


for I.A.G. Mortimer & P. McKinnon
Surveyors to Lloyds Register.

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