



Fire Type-Test Certificate

Office: **Birmingham**

Date: **21 January 2022**

This Certificate is issued to COLSON X-CEL LTD., Unit 3, Brindley Way, Rotherham, S60 5FS, to certify that the undersigned did attend their works on 6th January 2022 in order to witness fire testing of the item listed below. Testing was carried out on behalf of CRANE/HOKE, in accordance with Testing Procedure EDPTP (FT)-00001 Rev 0 and in general accordance with ISO 10497:2010 - Temperature limits only (Non-Valve component): -

**PIPE/FITTINGS (CLOSED LOOP), ½" x .083" WALL
DRAWING NO: 8X083LOOP316-SALES REV. 1st
MANUFACTURED IN AUSTENITIC STEEL (S31600)**

The loop was mounted in the test apparatus with the bore in a horizontal position, and flame environment and pipe thermocouples located in position. The test apparatus was verified to comply with the requirements of the testing procedure and calibration of test equipment was also verified.

The loop was subjected to a pressure test to a pressure of 1,400 psi.

The loop was then subjected to a 30-minute burn test with the pressure being maintained at 1,000 psi. The average temperature of the thermocouples was maintained between 750°C and 1000°C, with no temperature reading less than 700°C during the burn period. The burner was then shut off, and the loop force cooled to below 100°C within the time specified in the testing procedure and whilst maintaining the pressure at 1,000 psi.

External leakage (at 1,000 psi) during burn and cool-down periods and final external leakage (at 1,000 psi) after cool-down were measured and found to be in accordance with the standard.

With regard to the satisfactory results of the above tests and satisfactory review of the test report (FTR-001), it is considered that the above referenced item meets the requirements of approved Testing Procedure No. EDPTP (FT)-00001 Rev 0 and was in general accordance with ISO 10497:2010 - Temperature limits only (Non-Valve component).

Equipment Calibration: -

Pressure Transducer: Ident. No: 41628 (0-10,000 psi) – calibrated 16/12/21, due 16/12/22, certificate 052425-2, calibrated by Pennine Instrument Services, Sheffield (not to ISO 17025) using Master Equipment: A6-028 calibrated by Chamois Metrology Limited (UKAS 0822), certificate 69085 and A6-034 calibrated by Pennine Instrument Services Ltd (UKAS 0361), certificate 13152

K Type Thermocouples Nos: 61978 thro' 61985 inc – calibrated 10/12/21, 1st use 6/1/22, due 6/1/23, certificate CR11713, calibrated by Rotherham Calibration Service Ltd (not accredited to ISO 17025) using Maser Equipment: 2007C D20 0550A and 59880-TC both calibrated by TMS Europe Ltd(UKAS 0461), certificates 61052A and 59880 refer.

LRQA Verification Ltd	
Name: M. J. Lucas	Signature:
Date: 21 January 2022	
Ref No.: PRJ11100351059	
Office: Birmingham	A member of the LRQA Group Limited

LRQA003 11.2021

M. J. Lucas

Surveyor to LRQA Verification Ltd

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