



## ATTESTATION

Le Soussigné                      SURVEYOR  
*The undersigned*

du BUREAU VERITAS, agissant dans le cadre des conditions générales de la Branche Industrie  
*from BUREAU VERITAS, acting within the scope of the general conditions of the Industrial Branch*  
(mentionnés au verso), certifie  
*(mentioned on the back), certifies*

The following tests were performed at TECHLOK LTD, Manufacturer of TECHLOK PIPELINE CONNECTORS.

TEST CARRIED OUT AT:- UNIT 18  
BAGLAN WAY,  
BAGLAN INDUSTRIAL PARK,  
PORT TALBOT,  
WEST GLAMORGAN. SA12 7DJ.

TEST PERFORMED:- FIRE TEST IN COMPLIANCE WITH  
THE API SPEC 6FB PART 2.

TEST ASSEMBLY NO: TFA 003

ASSEMBLY SUB-ELEMENTS: TFO21 Hi6in Adaptor spool (lower)  
: TFO27 Hi6in Adaptor spool (upper)  
: TFO05 Hi6in Butt weld hub with  
integral tappings.  
HH16134106A Hi6in Butt weld hub.  
: TFO13 Flexible interspace ring.  
: R134201A2 Size 134 seal ring.  
: CH16204B Hi6in Clamp set plus bolting  
: W4201A Conical Washer

SUB-ELEMENT MATERIALS: TFO21 ASTM A350 LF2 52000 psi yield  
: TFO27 ASTM A350 LF2 52000 psi yield  
: TFO05 ASTM A350 LF2 52000 psi yield  
HH16134106A ASTM A350 LF2 52000 psi yield  
: TFO13 AISI 4140  
R134201A2 AISI 4140 PTFE coated  
: CH16204B AISI 4140  
: Bolting ASTM A193 B7/A194 2H  
: W4201A BS; 970 Part 1 1982 817 M40

TEST DATE: 11th June 1990

TEST PARAMETERS.

The fixture was pressurised to full rated pressure with the pressure being maintained during the test duration.





The test was performed to combine both the pressure only and pressure plus bending section of the API specification 6FB part 2.

TEST PROCEDURE STEPS.

The following stages were taken to qualify the Sin connector:-

- a. The fixture was pressurized to 265 bar. This pressure was maintained during the entire test duration to within  $\pm 10\%$
- b. The burner was ignited and achieved a flame temperature in excess of  $1093^{\circ}\text{C}$  within two minutes. Average temperature maintained throughout the test was  $1132^{\circ}\text{C}$ .
- c. Within fifteen minutes of the burner being ignited, the calorimeters had exceeded the minimum required temperature of  $982^{\circ}\text{C}$ . Maximum calorimeter temperature achieved was  $1041^{\circ}\text{C}$ .
- d. After twenty-five minutes a bending moment was applied at regular two minute intervals.
- e. The highest bending moment achieved without loss of pressure was 257748 ft lbs.
- g. The burner was extinguished and the bending moment removed. The fixture was then allowed to cool with no leakage occurring. During the cool down period the internal pressure was maintained to within  $\pm 10\%$ .
- h. Once the fixture reached ambient temperature, the internal pressure was removed.
- i. To test the integrity of the seal, the fixture was repressurised and held for five minutes with NO loss of pressure

NOTE: All temperature data is contained on Chart No. TPC006.

TEST INTERPRETATIONS.

The Techlok H16in134 was successfully subjected to a combination of the pressure and pressure plus bending criteria of the API specification 6FB Part 2.

The test was equivalent to a forty-five minute burn duration with a bending moment greater than the minimum specified being applied in the last twenty minutes.

Dated this 18th. day of July 1990

at CARDIFF.

*McConnell*

Surveyor.

