

**QF-483(b) SUGGESTED FORMAT FOR ELECTROFUSION FUSING PROCEDURE
QUALIFICATION RECORDS (PQR)**

[See QF-201.5(d), Section IX, ASME Boiler and Pressure Vessel Code]

Company Name _____

Procedure Qualification Record No. _____ Date _____

FPS No. _____

Fusing Process: Electrofusion Socket-type Electrofusion Saddle-type

<p>Joints (QF-402)</p> <p>Joint Design _____</p> <p>Manufacturer _____</p> <p>Model No. _____</p> <p>Fit-up gap - See below</p>	<p align="center">Coupon Detail</p>
<p>Material (QF-403)</p> <p>Fitting Specification _____ Classification _____</p> <p>Pipe Specification _____ Classification _____</p> <p>Pipe Size (diameter) _____</p> <p>Pipe Wall Thickness _____</p> <p>Fitting Manufacturer _____</p> <p>Other _____</p> <p>_____</p> <p>_____</p>	<p>Equipment (QF-406)</p> <p>Power Supply _____</p> <p>Power Cord Material _____ Gage ___ Length _____</p> <p>Processor Manufacturer _____</p> <p>Model No. _____</p> <p>Saddle clamp _____</p> <p>Technique (QF-407)</p> <p>Scraping Device _____</p> <p>Cleaning Agent _____</p>

Low Temperature Coupons:

Joint Number:									
Temperature (QF-405.8)									
Fit-up Gap (QF-402.4)									
Pipe alignment									
Pipe out-of-round									
Fusion Voltage (QF-405.6)									
Fusion Time (QF-405.7)									
Cool-down time (QF-405.5)									

High Temperature Coupons:

Joint Number:									
Temperature (QF-405.8)									
Fit-up Gap (QF-402.4)									
Pipe alignment									
Pipe out-of-round									
Fusion Voltage (QF-405.6)									
Fusion Time (QF-405.7)									
Cool-down time (QF-405.5)									

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Visual Examination (QF-141)

Elevated Temperature Sustained Pressure Test (QF-142.1)

Low Temperature Coupons						High Temperature Coupons					
Joint	Pressure	Failure			Accept	Joint	Pressure	Failure			Accept
		Fitting	Joint	Pipe (Ductile)				Fitting	Joint	Pipe (Ductile)	

Minimum Hydraulic Quick Burst Test (QF-142.2)

Low Temperature Coupons					High Temperature Coupons				
Joint	Pressure	Failure		Accept	Joint	Pressure	Failure		Accept
		Fitting	Joint				Fitting	Joint	

Joint Integrity Test (QF-145)

Low Temperature Coupons — Crush Test (QF-145.1)							High Temperature Coupons — Crush Test (QF-145.1)						
Joint	Specimen	Failure Bond	Ductile			Accept	Joint	Specimen	Failure Bond	Ductile			Accept
			Fitting	Pipe	Wire					Fitting	Pipe	Wire	
	1						1						
	2*						2*						
	1						1						
	2*						2*						

*Two specimens required for socket-type joints.

Low Temperature Coupons — Bend Test (QF-143.3)								High Temperature Coupons — Bend Test (QF-143.3)							
Joint	Specimen	Visual Accept	Failure Bond	Ductile			Accept	Joint	Specimen	Visual Accept	Failure Bond	Ductile			Accept
				Fitting	Pipe	Wire						Fitting	Pipe	Wire	
	1							1							
	2							2							
	3							3							
	4							4							
	1							1							
	2							2							
	3							3							
	4							4							

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Electrofusion Axial Load Resistance Test (QF-144.2)

Low Temperature Coupon Tensile Test [QF-144.2(a)]				High Temperature Coupon Tensile Test [QF-144.2(a)]			
Joint	Pipe Elongation	Failure Pipe Break	Accept	Joint	Pipe Elongation	Failure Pipe Break	Accept

Low Temperature Coupon Peel Test [QF-144.2.1(b)(1)]						High Temperature Coupon Peel Test [QF-144.2.1(b)(1)]							
Joint	Specimen	Failure Brittle Sep	Ductile Tears Wire Fitting Pipe			Accept	Joint	Specimen	Failure Brittle Sep	Ductile Tears Wire Fitting Pipe			Accept
	1							1					
	2							2					
	3							3					
	4							4					

Short-Term Hydrostatic Test [QF-144.2.1(b)(2)]				Short-Term Hydrostatic Test [QF-144.2.1(b)(2)]					
Joint	Fitting	Failure Fusion Interface		Accept	Joint	Fitting	Failure Fusion Interface		Accept

Impact Resistance* (QF-145.2)

***Only when required by contract**

Low Temperature Coupon Impact Resistance (QF-145.2.4)			High Temperature Coupon Impact Resistance (QF-145.2.4)		
Joint	Failure Bond Separation >15%	Accept	Joint	Failure Bond Separation >15%	Accept

Attach additional sheet(s) for explanation as required.

Fusing Operator Name _____ Identification No. _____ Stamp No. _____

Tests Conducted by _____ Laboratory Test No.(s) _____

We certify that the statements in this record are correct and that the test joints were prepared, fused, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code.

Manufacturer or Contractor _____

Date _____ Certified by _____

(Record of test details are illustrative only and may be modified to conform to the type and number of tests required by the Code.)