PROCEDURE QUALIFICATION RECORD (PQR)

for SAW, SMAW, GMAW, GTAW, FCAW

Company _____ Approved by _____
(Signature Required)

PQR No. _____ Date _____

Welding Process(es) _____ Type(s) _____
(Manual, Semiautomatic, Automatic, Robotic, Mechanized)

Joints

Joint Type _____
Backing _____
Backing Material (Type) _____
Groove Angle _____
Root Opening Radius: U ☐ J ☐
Root Face _____
Backgouging: Yes ☐ No ☐
Backgouging Method _____

Joint Details

Sketches, production drawings, welding symbols, or written description should show the general arrangement of the parts to be welded. Where applicable, the root details of the weld groove may be specified.

Base Metals

M-No. _____ Group No. _____ or to M-No. _____ Group No. _____
Specification Type and Grade _____ to Specification Type and Grade _____
Thickness Range of Base Metal: Groove _____ Fillet _____
Pipe Diameter Range: Groove _____ Fillet _____
Other _____

Filler Metals

Filler Metal F-No. _____ Other _____
AWS Classification _____ AWS Specification _____
Weld Metal Analysis A-No. _____ Other _____
Filler Metal Size _____ Electrode Flux (Class) _____
Weld Metal Thickness _____ Flux Trade Name _____
Consumable Insert _____ Other _____

Positions

Position(s) of Groove _____
Position(s) of Fillet _____
Weld Progression _____

Preheat

Preheat Temperature (Min.) _____
Temperature (Max.) _____

PWHT

Temperature _____ Time _____

Shielding

	Torch Shielding	Root Shielding	Trailing	Environmental Shielding
Gas(es)				
Composition				
Flow Rate				

Electrical Characteristics and Welding Parameters

Current Type/Polarity_____
Pulsing: Yes ☐ No ☐
Current (Range) _____
Voltage (Range) _____
Wire Feed Speed (Range) _____
Travel Speed (Range) _____
Tungsten Electrode Size/Type_____
Transfer Mode _____
Pulsing Parameters_____
Heat Input _____
Other_____

Other Variables

Cup or Nozzle Size _____
Collet Body ☐ or Glass Lens ☐
Cleaning Method_____
Technique: Stringer ☐ or Weave Bead ☐
Number of Electrodes _____
Number of Passes per Side _____
Other_____
_____
_____
_____
_____

Test Results

Visual Test Results _____
_____
_____

Tensile Results

Specimen No.	Width	Thickness	Area	Results		Failure Type and Location
				Maximum Load	Ultimate Tensile Strength	

Guided Bend Tests	Qualification Results for Toughness Application
Type and Figure Number	Type and Figure Number
Results	Results

Fillet Weld Tests	Other Tests
Type and Figure Number	Type and Figure Number
Results	Results

We, the undersigned, certify that the statements in this record are correct and the test welds were prepared, welded, and tested in accordance with the requirements of AWS B2.1/B2.1M, (_____), *Specification for Welding Procedure and Performance Qualification*.
(year)

Manufacturer or Contractor_____

Date _____ By _____ _____
Please Print Signature Required