



Fermi National Accelerator Laboratory

Technical Division-Machine Shop

Welder Performance Qualification Record

In accordance with WPS AMI/Orbital 002

Date
4/07/2010**

Revision: Revision Date : Remarks:

Welders Name:	Leonard Harbacek	Fermi ID#	12261N	Weld Stamp	8
WPS Number:	AMI/Orbital 002	Test Coupon	Production Weld N/A		
Welding Process/Type	GTAW/Orbital	Automatic			
Type of Joint Welded:	Pipe Groove Weld	Joint Types Qualified:	Groove and Fillet Welds		
Base Metals Welded:	ASTM A269 (SA 249) Type 304/304L P8, Group 1				

Welder Variables (QW-350)	Actual Variables Used	Range Qualified
AWS Classification:		
Filler Metal Specification (SFA)	N/A	"See Notes"
Filler Metal F-No.	N/A	
Filler Metal Product Form	N/A	
Consumable Insert	No Insert Used	Without Insert
P- or S- Number to P- or S- Number:	P8, Group 1	All Qualified Materials
Base Metal Thickness (inches):	.035"	WPS Limits
Pipe Diameter (inches):	.5000" \varnothing	Unlimited
Deposit Thickness (inches)	.035"	WPS Limits
Welding Position/Progression	5G	All
Backing Gas	Argon 99.9%	
GTAW-Current/Polarity	DCEN/Pulsing	

Machine Welding Variables (QW-360)	Actual Variables	Range Qualified
Direct/Remote Visual Control	N/A	N/A
Automatic Voltage Control	N/A	N/A
Automatic Joint Tracking	N/A	N/A
Welding Position	N/A	N/A
Consumable Insert	N/A	N/A
Backing	N/A	N/A
Single/Multiple Pass Per Side	N/A	N/A

Fillet Welds: Qualified to make fillet welds of any size on all base material thickness and pipe diameters of any size.
Notes: Qualified for all Qualified Welding Procedures using GTAW/Automatic Welding Process

ASME IX Guided Bend Test (QW-160)				ASME IX Weld Tensil (QW 150)		
Face Bend #1	Acceptable	Root Bend #1	Acceptable	Specimen 001	Ductile-WM	Test Reference No. T002963
Face Bend #2	Acceptable	Root Bend #2	Acceptable	Specimen 002	Ductile BM	

Visual examination results: Visual exam satisfactory per QW-302.4 and QW-194

Radiographic test results: N/A **Radiographic tests conducted by:** N/A

Mechanical Tests Conducted by: Exova Materials Testing Laboratory 3/5/2010

Welding of Test Coupon conducted by: Fermi National Accelerator Laboratory **Verification Number** 2102010-1RH

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

Fermi National Accelerator Laboratory _____
 Authorized Representative

4/07/2010
Date