



**Major Tool and Machine, Inc.**  
 1458 E. 19th Street, Indianapolis, Indiana, 46218  
**Welder Performance Qualification (WPQ)**  
 WeldOffice WPQ

Welder's name	Miethe, Robert		Test date	7/26/2005
ID Number	763		WPQ record number	Miethe 435
Date of birth			Standard test number	Rev.
Stamp number			WPS record number	WPS435 Rev. 0
Company name	Major Tool and Machine, Inc.		Qualification code	ASME Section IX
Division				

**BASE METALS (QW-403)**

	Product form	Specification (type or grade)	P no.	Grp-no.	Size	Sch.	Thick. (in.)	Dia. (in.)
Welded to:	Pipe	SA-106 (B)	1	1	n/a	n/a	0.625	2.75
	Pipe	SA-106 (B)	1	1	n/a	n/a	0.625	2.75
Joint type	Groove							

**VARIABLES**

	Actual values	RANGE QUALIFIED
Type of weld joint	Pipe - Groove	Groove and Fillet welds
Base metal	P1 to P1	P-no./S-no. 1 thru 11, 34, 41 thru 47

**BASE METAL THICKNESS**

	Groove	Fillet	Overlay	Groove	Fillet	Overlay
Plate thickness (in.)	-	-	-	no limit	no limit	-
Pipe/tube thickness (in.)	0.625	-	-	no limit	no limit	-
Pipe diameter (in.)	2.75	-	-	1.0 min	no limit	-

**PROCESS VARIABLES**

	Actual values	RANGE QUALIFIED
Welding process	GTAW	GTAW
Type	Manual	Manual
Backing	Without	With, without
Filler metal specification	5.14	5.xx
Filler metal classification	ERNiCrCoMo-1	Any
Filler metal F-number	43	34,41..45
Filler metal variety (QW-404.23)	Bare (solid)	Solid, metal cored
Consumable insert	None	Without
Number of layers deposited	3 min	
Weld deposit thickness (in.)	0.625	no limit
Weld position (Actual position tested)	6G	
Groove - Plate & Pipe >24"		All
Groove - Pipe 2.875" to 24"		All
Groove - Pipe < 2.875"		All
Fillet - Plate & Pipe >24"		All
Fillet - Pipe 2.875" to 24"		All
Fillet - Pipe < 2.875"		All
Progression	Up and down	Up and down
Backing gas	With	With
GTAW welding current/polarity	DCEN	DCEN

**TESTS**

Type of test	Acceptance criteria	Result	Comments
Radiographic examination per QW-191 and QW-302.2	QW-191.2	Acceptable	see - ASME IX - QW-142/3, QW-304/5
Visual examination per QW-302.4	QW-194	Acceptable	see - ASME IX - QW-452.1 (a)

Notes	For Radiographic See MQS Report No. 13850205
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**CERTIFICATION**

Tests conducted by	MQS Inspections (radiography)	Laboratory test number	
Mechanical tests by	n/a	Test file number	n/a

We certify that the statements in this record are correct and that the test welds were prepared, welded and tested in accordance with the requirements of the Code.

**Signature**

Name	Signature	Name	Signature
David Leapley			
Date		Date	
8/31/2006			