

PPPL NONCONFORMANCE REPORT NO: 3655 **Open Date 05/31/06**

Status	2 - Disposition Needed		Trend	07-Out Of Tolerance	
Department	NCSX		Division	NCSX Project	
Source/Org	VENDOR				
Item Dwg/Part#	NCSX-CSPEC-121-02-06	Procurement #	S005243-F	Cost Center	
RAP#	3245	Job Doc #	S005243-F	Vendor	MAJOR TOOL AND MACHINE, INC.
RAP Title	Field Period Assembly Component Receipt Inspection				

HoldTag Applied

Nonconforming Condition (include requirement(s) violated):

VVSA-1, The attached port to vessel fillet welds (Attachment 1) were found to be undersize in accordance with AWS D1.6 paragraph 6.29.1 and Annex II. All of the undersize areas are where the angle between the port and the vessel is greater than 90°. Annex II of AWS D1.6 requires a larger fillet weld size than indicated on the weld symbol in areas greater than 90° in order to produce a weld of equal strength. Annex II (Attachment 2) and pictures of effected areas (Attachment 3) are also attached. This NCR covers the weld inspection on the vessel only and does not include welds on the individual ports.

Lot Size Recd	0	Sample Size Insp	0	<input type="checkbox"/> Lot Rejected	# Rejected	0
Reported By	Phelps C	Validated By	Boscoe J	Validated Date	05/30/06	

Disposition: Rework*__ Repair*__ Use As Is*__ Return To Vendor*__ Scrap*__

For rework or repair of vendor supplied equipments, fill in information below:				Distribution	
#Hours	_____	\$Est Labor	_____	\$G&A	_____
\$Material	_____	\$Burden	_____	\$Total	_____
Disposition By	_____	Date	_____	Cog M. Viola Insp Phelps C Proj. Doc Control (when closed) QC Files Malsbury J Boscoe J Malinowski F Edwards J Nelson B Reiersen W Williams M Tyrrell M	
Supervisor's Concur	_____	Date	_____		
Eng. Dept. Head Concur	_____	Date	_____		
WCO/Other	_____	Date	_____		
PQA/QC Mgr Dispos Concur	_____	Date	_____		
QC Field Verification By	_____	Date	_____		

Disposition: Rework___ Repair ___ Use As Is___ Return to Vendor___ Scrap___

For rework or repair of vendor supplied equipment, fill in information below:

Hours _____ \$ Est Labor _____ \$ G&A _____
\$ Material _____ \$ Burden _____ \$ Total _____

Disposition by _____

Supervisor's Concurrence _____

Eng. Dept. Head Concurrence _____

Other (i.e., WCO/FPE) Concurrence _____

PQA/QC Mgr Disposition Concurrence _____

QA Field Verification by _____

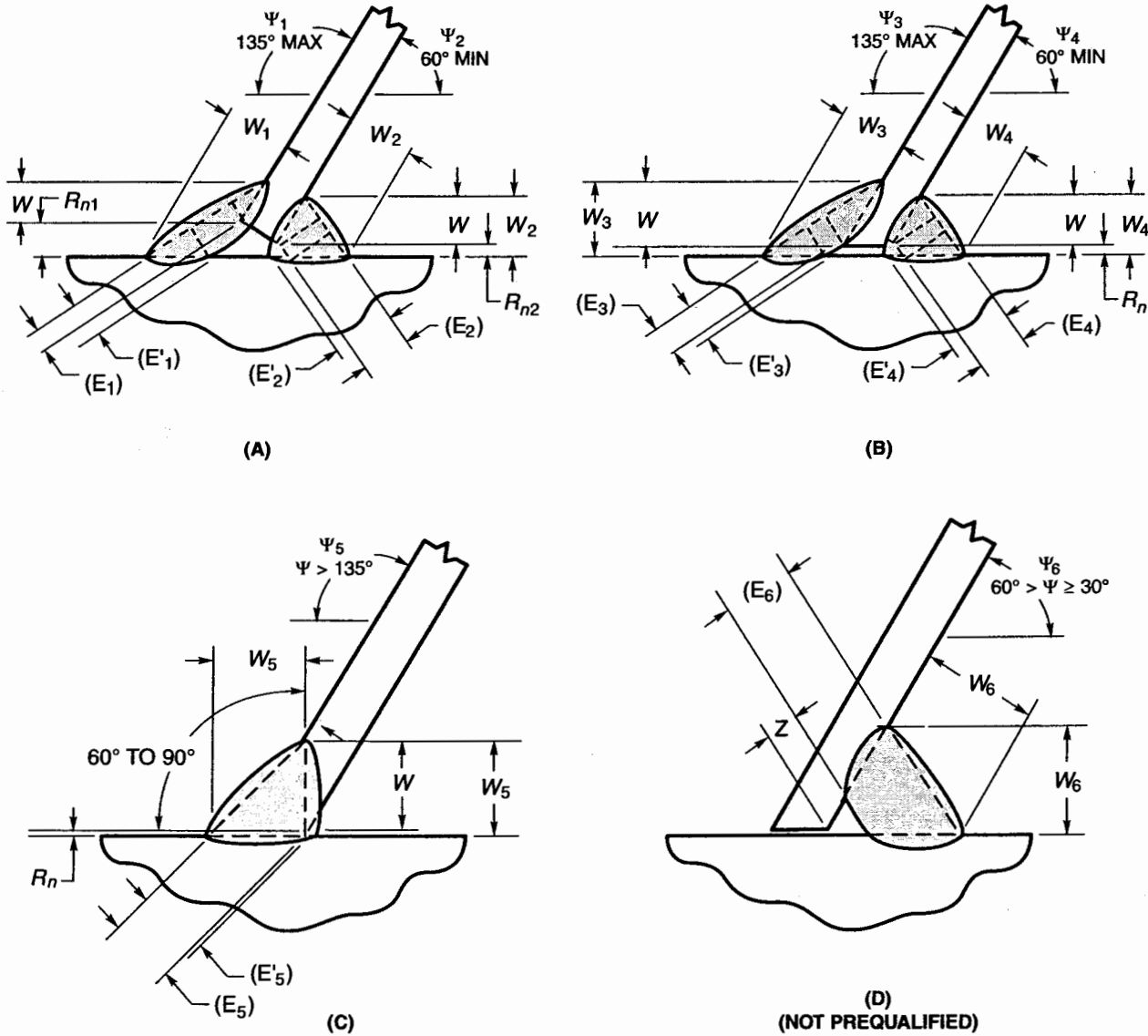
NCR 3655 - Attachment 1

Port to Vessel Fillet Welds

Port No.	Dwg Weld Size	Length of Undersize	Actual Weld Size	Angle Port to Vessel	Annex II Weld Size
9B	3/16"	1 area 5"	1/8"	125°	0.23"
4A	3/16"	1 area 2", 1 area 2.5"	1/8"	1 area 135°, 1 area 125°	0.23" to 0.25"
NB	3/16"	2 areas 2" ea.	1/8"	1 area 135°, 1 area 125°	0.23" to 0.25"
11A	3/16"	1 area 3.5"	1/16"	155°	> 0.25"
11B	3/16"	1 area 3"	1/16"	155°	> 0.25"
10A	3/16"	1 area 3"	1/8"	110°	0.22"
Dome B	3/16"	1 area 2"	1/8"	Not able to measure	> 3/16"

Table II-1
Equivalent Fillet Weld Leg Size Factors for Skewed T-Joints (see Annex II)

Dihedral angle, Ψ	60°	65°	70°	75°	80°	85°	90°	95°
Comparable fillet weld size for same strength	0.71	0.76	0.81	0.86	0.91	0.96	1.00	1.03
Dihedral angle, Ψ	100°	105°	110°	115°	120°	125°	130°	135°
Comparable fillet weld size for same strength	1.08	1.12	1.16	1.19	1.23	1.25	1.28	1.31



Notes:

1. $(E)_{(n)}$, $(E')_{(n)}$ = Effective throat dependent on magnitude of root opening (R_n) (see 5.4.1). (n) represents 1 through 5.
2. t = thickness of thinner part.
3. Not prequalified for gas metal arc welding using short circuiting transfer.

Figure II-1—Details for Skewed T-Joints^{1,2,3} (see 2.17)

VVSA-1 Undersize fillet weld areas – port to vessel welds – 5/30/06









4A-1



4A-2

