Major Tool & Machine, Inc. 1458 East 19th Street Indianapolis, IN 46218-4289 Page: 1
MTM N/C: 19391
Date: 04/06/06
User ID: MCCORKLE

**Customer: PRINCETON PLASMA PHYSICS LAB** Contact: LARRY SUTTON Telephone: 609-243-2441 Fax: 609-243-2021 E-Mail: S-04286-F Customer P.O.: S005243-F/Ln:1 Part: / Drawing ID: SE120-004 Revision: 2 Serial No./Qty: Links: 1-Type:W: 65678/1.0 Sub: 2 Op: 60 Reported By: DOUG MCCORKLE Telephone: 317-636-6433 E-Mail: dMcCorkle@MajorTool.com Fax: 317-634-9420 Problem: The .637 +/-.005 dimension varies around part over and undersized, .480-.9 **Proposed Disposition:** REFERENCE DRAWING SE121-013 ZONE G4. REPAIR PER PPPL DISPOSITION (ATTACHED) Number of additional pages: [ ] Repair Customer Disposition: [ ] Use As Is [ ] Rework [ ] Scrap [ ] Replace Title: \_\_\_\_\_ Date:\_\_\_\_\_ PPPL PTR **Approval**: RLM Approval: Major Tool Implemented By: Title: Date: **Root Cause 1: 802-MANAGEMENT DECISION** Resource: SILVER TEAM, ENGINEERING Equipment: MTM misinterpreted the importance of this dimension. When the vessel was on the machine with dimensional Description: concerns regarding the profile of the flange, it was decided to continue to cut the groove (which establishes the .637 dimension) on location allowing the .637 dimension to vary larger and smaller. This decision was based on previous knowledge gained by other unoleranced three place decimals not really requiring the small tolerance provided in the drawing block, and knowing the 3D model geometry varied more than the drawing tolerance. MTM did not know about the weld penetration requirement that PPPL would be faced with during field installation. Corr Actn: 1: Action: 04/06/06 By: 775-D.MCCORKLE The condition will be corrected by grinding and welding the adjoining seal weld to ensure sound material at least Description: 0.62" deep where the face is smaller. Where the face is larger, the seal will be modified to fit accordingly to provide the required weld. PPPL (Mike Viola) is visiting MTM to personally review the vessel flange / wall condition on the second VVSA. Verify Notes: Mike V will be here 4/6/06

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Contact:	PRINCETON PLASMA PHY LARRY SUTTON S-04286-F	YSICS LAB		•	609-243-2441 609-243-2021		
Part: Drawing ID:	•	Revision: 2		Customer P.O.: Serial No./Qty:	S005243-F/Ln:	:1	
	DOUG MCCORKLE dMcCorkle@MajorTool.com			-	317-636-6433 317-634-9420		
Problem:	The .637 +/005 dimension va	ries around part o	over and undersiz	red, .4809			
	sition: SUBMITTING TO PPPL. REFERENCE DRAWING SE	121-013 ZONE (	G4.				·
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Technical Contact Approval:				itle <u>:                                    </u>		Date:	
	Buyer Approval:			itle <u>:                                    </u>		Date:	
Major Tool Implemented By:				itle:		Date:	

n/munapps/\text{\text{Monel4-qrp}} \times \text{Closed /W0:65678-1}

Nonconformance Report: Major Tool NC19391

This is for REFERENCE DRAWING SE121-013 ZONE G4.

Problem:

The .637 +/-.005 dimension varies around part over and undersized, .480-.9

Doug McCorkle

## **Project Disposition:**

Undersize condition rejected - Flange seal groove cannot be less than .62 -.005" per model. For the undersize condition, "26. ID of seal must be ground back and seal groove filled or additional material added to flange ID to restore the dimension. Oversize condition (0.9") may be tolerated if acceptable corrective action allows seal to be welded to flange." Please propose corrective actions for both conditions for approval.

## Approvals:

Mike Viola

Digitally signed by Mike Viola DN: cn=Mike Viola, c=US Reason: I am approving this document

Date: 2006.04,05 14:38:57 -04'00'

Procurement Technical Representative

Brad Nelson O-ORNL, OU-FED,

Digitally signed by Brad Nelson DN: cn=Brad Nelson, c=US, email=nelsonbe@ornl.gov

Date: 2006.04.05 17:48:33 -04'00'

Responsible Line Manager:

F. Malinowski

Digitally signed by F. Malinowski DN; CN = F. Malinowski, C = US, O = PPPL, OU = QA Reason: I have reviewed this document

Date: 2006.04.05 22:13:29 -04'00'

Project Quality Assurance: