

Major Tool & Machine, Inc.  
1458 East 19th Street  
Indianapolis, IN 46218-4289

MTM N/C: 18459

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Date: 10/25/05  
User ID: MCCORKLE

**Customer: PRINCETON PLASMA PHYSICS LAB**

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**Part: /**

Drawing ID: SE120-004

Revision: 2

Customer P.O.: S005243-F/Ln:7  
Serial No.: 3/7

Reported By: DOUG MCCORKLE  
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Problem: Profile requirement of 0.188 (+ Unilateral) checks +0.275 / -0.101

**Proposed Disposition:** This measurement represents the in-process check of Port 12A profile after welding and machining the flange (the sub-assy is structurally complete). The part is currently out of tolerance on the plus side as much as 0.087" along the straight sides. Both ends (radii) are within tolerance. This condition will likely remain to some extent after the port is installed and final inspected (without reworking the port sub-assy prior to installation).

Request "use as is" disposition if the condition will not create interference with mating components.

Number of additional pages: \_\_\_\_\_

**Customer Disposition:**     Use As Is     Rework     Repair     Scrap     Replace

**Technical Contact Approval:** \_\_\_\_\_

**Title:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Buyer Approval:** \_\_\_\_\_

**Title:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Major Tool Implemented By:** \_\_\_\_\_

**Title:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Nonconformance Report: Major Tool NC18459.**

This is for the port 12A out of tolerance condition on the first VVSA (MTM lot 7)

**Project Disposition:**

Use as is:

The data was taken on two fully welded port assemblies (port 12A and port 12B) that had not yet been welded to the vacuum vessel shell. Although there are a few points that are out of tolerance, recommendation is to accept the parts as is. The vast majority of out of tolerance points are away from the modular coil which should not impose significant problems. The VV heating/cooling mounting flange (se123-167) that will be welded to the vertical ports at final assembly at PPPL will need to have its inner flange surface trimmed to match the surface of the port.

**Approvals:**

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Procurement Technical Representative

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Responsible Line Manager: