

**Customer: PRINCETON PLASMA PHYSICS LAB**

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**Part: /**

Drawing ID: SE121-003P

Revision: 0

Customer P.O.: S-04344-F/Ln:1  
Serial No./Qty:

Reported By: DOUG MCCORKLE  
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Problem: THE MATERIAL THICKNESS ON PANEL #5 AND PANEL #4 IS OUT OF TOLERANCE. THE TOLERANCE IS 0.375 +0.040 / -0.060. PANEL #5 RANGES FROM 0.404-0.430. PANEL #4 RANGES FROM 0.388-0.418. REFER TO I.D.C'S FOR 64880/1 SUB: 39 OP: 40.

**Proposed Disposition:**

SUBMIT TO PPPL FOR EVALUATION / REMEDIAL DISPOSITION

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

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

A major goal of the prototype effort is to obtain feedback on the dimensional accuracy achievable by the proposed manufacturing methods, and therefore these tolerances are not cause for rejection and the prototype will be accepted "as is." Keeping in mind that for the "production" vessel the material thickness can be measured and controlled before and after the forming process, the required thickness tolerance can be easily achieved for production.

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

**Title:** PVVS Technical Rep.    **Date:** 4/20/04

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

**Title:** NCSX Deputy  
Engineering Manager    **Date:** 4/20/02

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

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

**Root Cause 1: 819-PROCESS DEVELOPMENT**

Resource: SILVER TEAM, ENGINEERING    Equipment:

Description: THE MATERIAL THICKNESS WAS DISCOVERED TO BE OVER TOLERANCE EARLIER IN THE MANUFACTURING CYCLE. KNOWING THERE WAS SUBSTANTIAL WELDING / BLENDING / POLISHING TO BE DONE THE DECISION WAS MADE TO CONTINUE WITH THE PROCESS. THE OVER THICKNESS AMOUNT DID NOT EXCEED WHAT IS CONSIDERED "NORMAL THINNING" AND WAS ESTIMATED THAT IT WOULD BE WITHIN TOLERANCE AFTER ALL MANUFACTURING SEQUENCES WERE COMPLETED. SOME AREAS REMAINED SLIGHTLY OUT OF SPECIFICATION.

**Corr Actn: 1:**    Action: 04/16/04 By: 775-D.MCCORKLE

Description: BASED ON KNOWLEDGE AND EXPERIENCE GAINED DURING THE PRODUCTION OF THE PVVS, THE PLATE MATERIAL WILL BE PROCURED SURFACE GROUND TO A SPECIFIED THICKNESS WITH LESS OVERTOLERANCE THAN PREVIOUSLY SPECIFIED.

Verify Notes: CONFIRMED