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***National Compact Stellarator Experiment (NCSX) SubC# S-04344-F  
Vacuum Vessel Manufacturing Development and Prototype Fabrication***

**Weekly Status Report 04/14/03 thru 05/21/03**

**Project Management**

Received letter via Email on May 20<sup>th</sup> stating the Ribs have been removed, the drawing status and changed some of the statement of work requirement due dates.

**Process Engineering**

We are continuing with the development of our plan for the SOW and based on Tuesday's letter we will begin the procurement process for the long lead materials; however we are waiting for the final design to place orders for any material. We will begin the preliminary design of the required dies with the expectation that the new designs coming in two weeks will require only slight modifications.

**Fabrication**

No Activity

**Quality Control**

Continuing with the integration of the Quality Plan into the Manufacturing Plan.

**Questions and Answers**

- 1) Does Princeton have a cleaning procedure available for MTM to follow? If not, is there any recommend cleaning materials that will satisfy the requirements of NCSX-CSPEC-120-01-00 3.3.2.4?
- 2) Drawing SE121-003P (rev. 0), please observe the weld symbol (zone B-5). It is a single v-groove, 11 deg. included angle, produced by tig process. Is this a correct interpretation? If so, is this prep size required by the automatic welding machine that you will be installing for the production vessel port extensions? (automatic tig?) This requirement will provide a gap of approximately 0.025" on the surface. MTM will require a slightly larger opening on the prototype vessel to ensure full penetration welding is achieved (we will be using manual tig process). The included angle will likely need to be approximately 30 Deg. prior to welding. This will provide a 0.05 - 0.07" gap to help ensure full penetration is achieved. Is this acceptable?

**Pictures**

None at this time.

Prepared By: Mike Manuel  
May 21, 2003