





# Procedure 03-8083-P06

# **Cleaning Vacuum Chambers**

PRECISION					
metal work	s				



ADTECH manufacturing

Procedure 03-8083-P06 Date: 02/12/04

Quality Procedure

Cleaning

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**REVISION RECORD** 

Revision	Date of Issue	Description of Change	Prepared by	Reviewed by	Approved by
0	01/15/03	New	Elaine Steele	Tom Gilmore	Dave Rioux
1	01/12/04	Modified to address Rohwedder's comments	Gary Armstrong	Tom Gilmore	Dave Rioux
2	02/12/04	Modified to address Rohwedder's comments	Gary Armstrong	Tom Gilmore	Dave Rioux

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# **Purpose:**

To establish a method for cleaning the Prototype Vacuum Vessel Segment for the National Compact Stellarator Experiment.

#### Scope:

The interior and exterior shall be cleaned to remove all foreign particulate and inspected by a Quality Assurance Inspector.

#### **References:**

• National Compact Stellarator Experiment (NCSX) Specification NCSX-CSPEC-121-01-01.

# **Equipment:**

Pressure Steam Washer Walter Stainless Cleaner Filtered water Argon Vinyl gloves A-Tork wipes Lint-free wipes Alcohol Methyl Hydrate Enviroterra Cleaner Distilled water

# **Procedure:**

- 1. Wear vinyl gloves at all times to prevent oil from skin from reaching the surface of Vessel walls as well as protecting hands against exposure to cleaning chemicals.
- 2. Pressure steam clean Vessel with hot, high pressure filtered water, long enough that the entire Vessel becomes hot to the touch.
- 3. Wipe down Vessel with Walter Stainless Cleaner and let stand for long enough to allow the soap to be effective (approximately 10 minutes).
- 4. Pressure steam clean Vessel with hot, high pressure filtered water, to remove all Cleaner residue.
- 5. Blow Vessel completely dry using compressed argon.
- 6. Wipe down interior and exterior, examining for any remaining stains. The following cleaners can be used to remove stains on the Vessel depending upon the severity:
  - Distilled water
  - Methyl hydrate
  - Enviroterra
  - Walter Stainless Cleaner
- 7. Wipe the entire Vessel using lint-free wipes and methyl hydrate.
- 8. Wipe the inside of the Vessel clean using A-Tork wipes and methyl hydrate.
- 9. Continue cleaning the inside of the Vessel using lint-free wipes and alcohol until there are no traces of residue shown on wipe.