



# **Procedure 03-8083-P10**

## **Weld Inspection**



## WELD INSPECTION

### 1.0 Purpose:

To establish the method for Visual Weld Inspection for the Prototype Vacuum Vessel Segment for the National Compact Stellarator Experiment.

### 2.0 Scope:

A Visual Weld Inspection of all joints shall be completed with documented results. This procedure is supplied by and shall be completed by an External Supplier (Technico) and provides general instructions that are not specific to the Prototype Vacuum Vessel Segment for the National Compact Stellarator Experiment only. Requirements stated by Precision Metal Works shall supersede requirements or procedural options listed in the accompanying Technico procedure.

### 3.0 References:

- National Compact Stellarator Experiment (NCSX) Specification NCSX-CSPEC-121-01-01.
- Technico -- Quality Control and Technical Operations Procedure for Visual Weld Inspection (General) QC-TOP-VIP-2, Rev. 00.
- ASME Section V, Article 9.

### 4.0 Equipment:

- See Technico -- Quality Control and Technical Operations Procedure for Visual Weld Inspection (General) QC-TOP-VIP-2, Rev. 00.

### 5.0 Procedure:

- All welds designated with a "VT" in the tail of the weld symbol shall be visually examined with 8X magnification.
- Visual weld inspection shall be done by Inspectors certified to perform visual inspection of welds in accordance with AWS QC1 or SNT-TC-1A, Level II or Level III.
- Normal viewing conditions of approximately 24" (maximum) eye-to-surface distance shall be acceptable.
- Ensure that all specified requirements of the welding procedure are being followed.
- Acceptance criteria shall be in accordance with NCSX-CSPEC-121-01-01, 4.2.6.1.
- See Technico -- Quality Control and Technical Operations Procedure for Visual Weld Inspection (General) QC-TOP-VIP-2, Rev. 00.