

PART I - DESCRIPTION

WBS Number: 1.5.1	Title: Cryostat shell and structure
Originator: B. Nelson	
<u>Description</u>	
<u>General Description of Work to be Performed:</u>	
<p>A cryostat is provided for thermal isolation. The cryostat must also seal the coil space from the outside air to prevent condensation on the cold surfaces and to provide a means for circulating dry nitrogen inside the cryostat. The cryostat is approximately 250 inches in diameter and 140 inches tall.</p>	
<p>The baseline concept consists of a simple frame and panel design covered with urethane insulation. The frame consists of fiberglass channels mounted along the edges of each of the radial TF coil support plates, or on the bottom, suspended from the base frame. Fiberglass panels are attached to the frame to form a surface for the urethane. This WBS covers the frame and panels.</p>	
<i>Design</i>	
<p>All drawings and analysis required for the cryostat are included in this element.</p>	
<i>R&D</i>	
<p>None</p>	
<i>Materials and Subcontracts</i>	
<p>The fiberglass channels and panels would be procured from an industrial subcontractor, with pieces cut to size and length.</p>	
<i>Fabrication and Assembly</i>	
<p>No additional fabrication or sub-assembly is expected on site.</p>	
<i>Installation and Testing</i>	
<p>Installation of the frame and panels on the machine is provided in WBS 7.</p>	
<u>Description of Existing Equipment/Facilities to be Reused:</u>	
<p>None</p>	
<u>Description of Major Modifications Required to Existing Equipment/Facilities:</u>	
<p>None</p>	