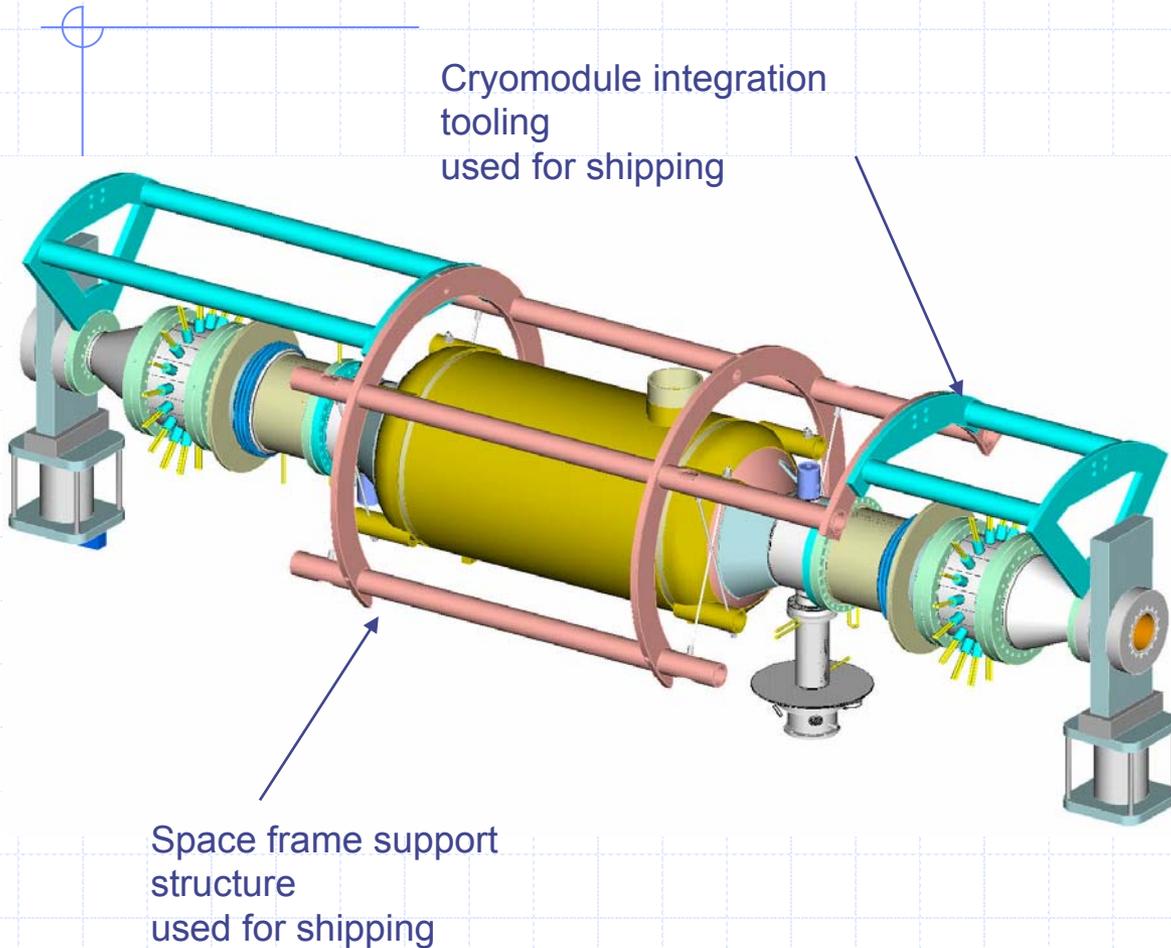


SCRF Cavity / ERL Schedule

◆ Overview:

- Proposed Installation Process for Construction of Cryomodule
 - ◆ May 2005 through July 2005
- Highlights of ERL schedule
 - ◆ Major Components

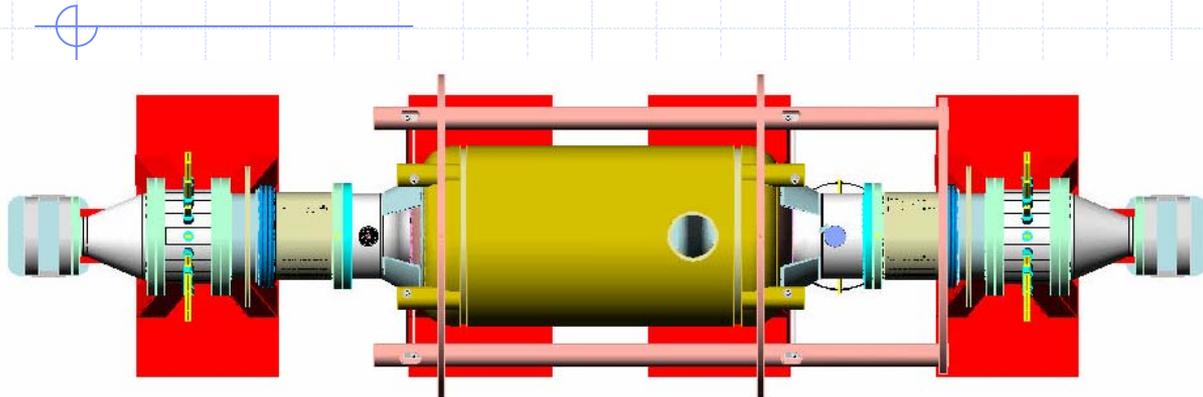
SCRF Cavity Installation



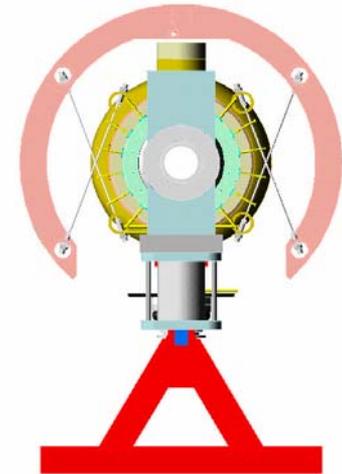
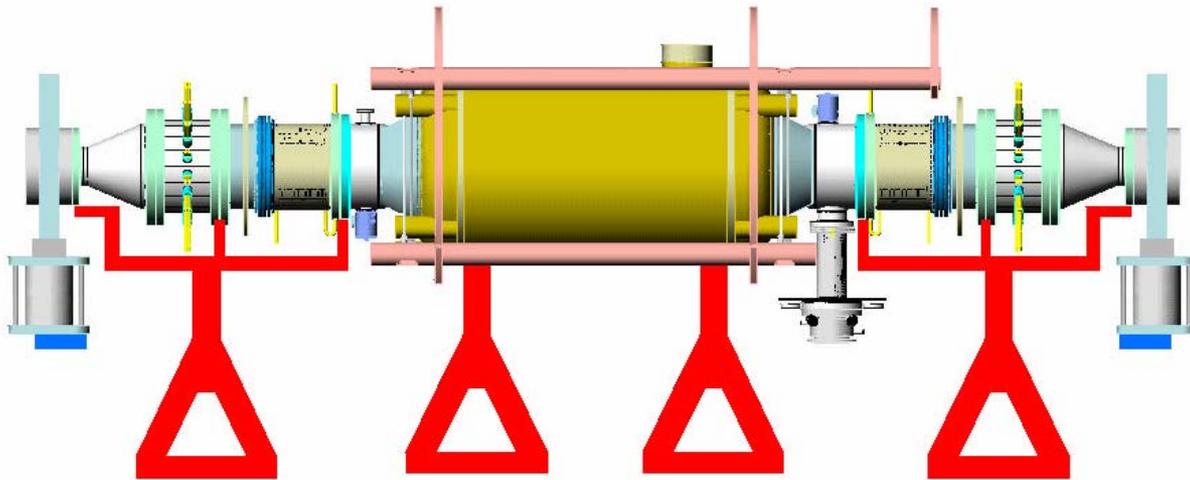
- ◆ Cavity Arrival
 - Removal from crate & inspect

SCRF Cavity Installation

Place on interim stands.

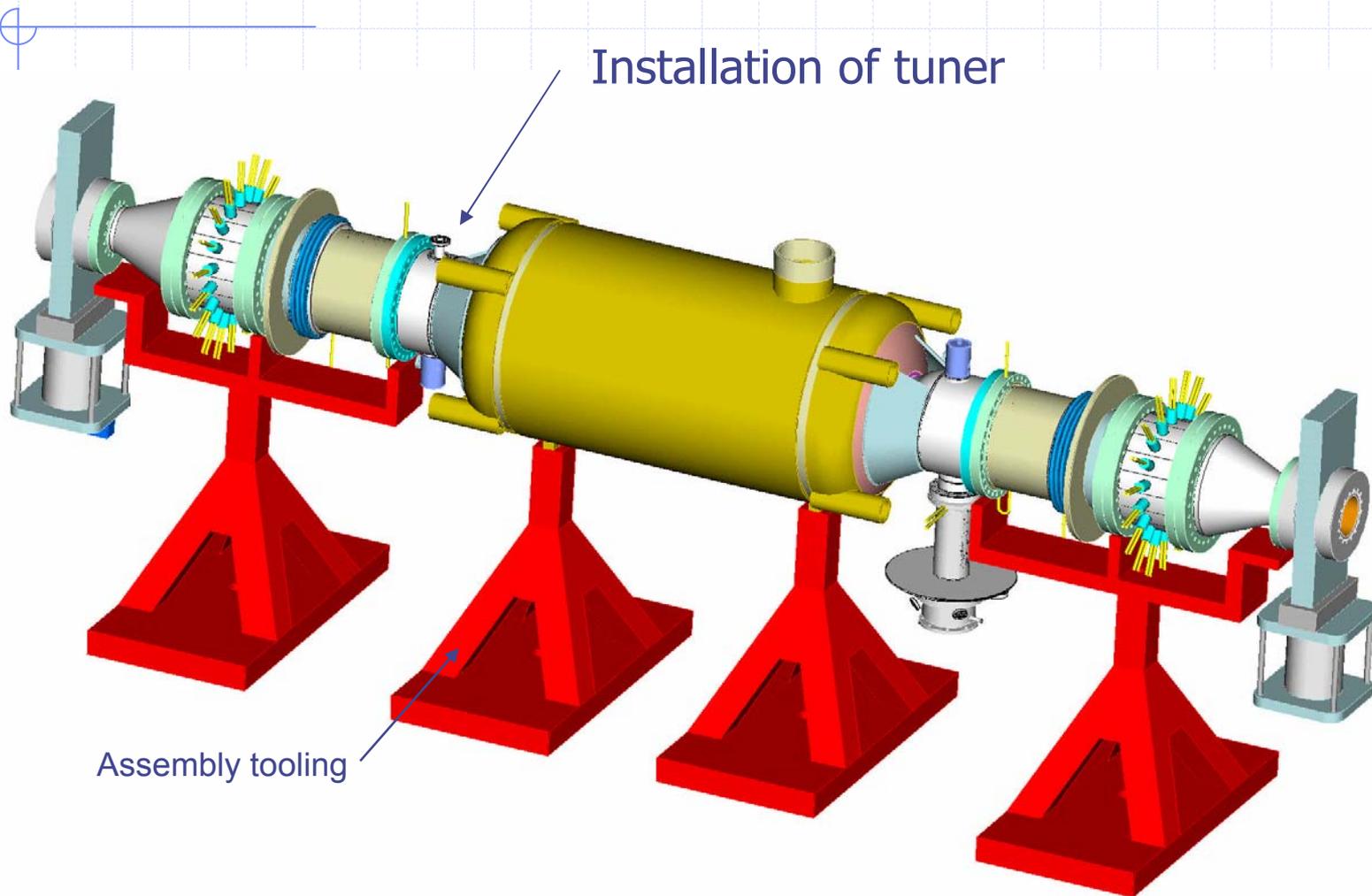


Support cavity, ferrite dampers and vacuum valves during initial construction.



SCRF Cavity Installation

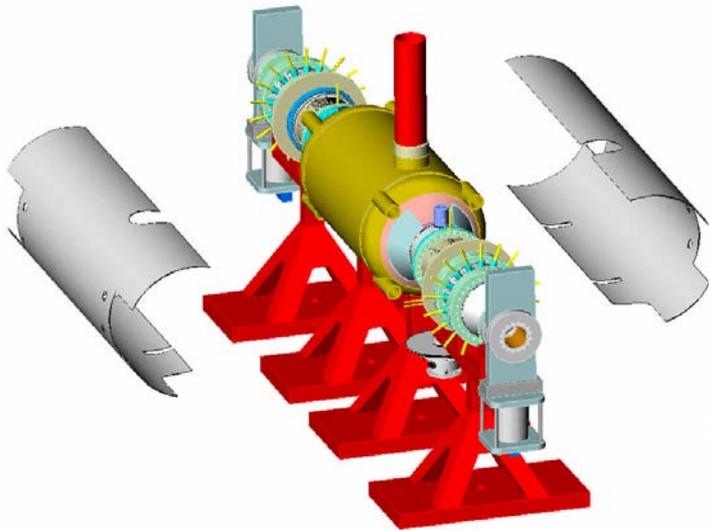
Remove Space Frame



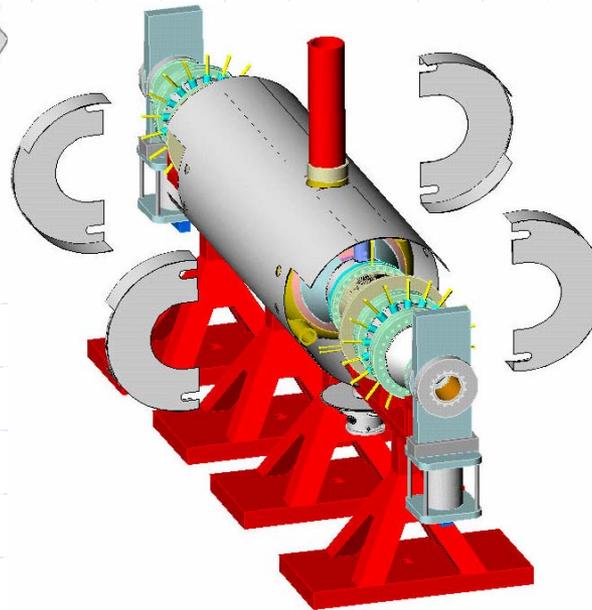
SCRF Cavity Installation

Inner Magnetic Shield Build-up

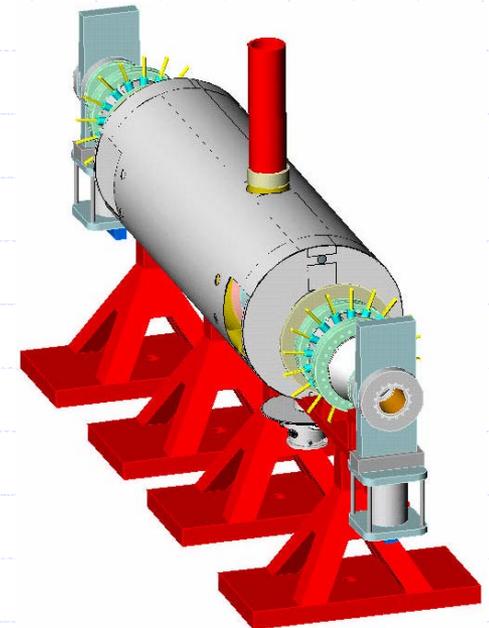
- Install Inner Magnetic Shield
- Insulate He Vessel / Shield
- Run cables & cold lines
- Leak check new "buried" connections



"Clam shell" halves



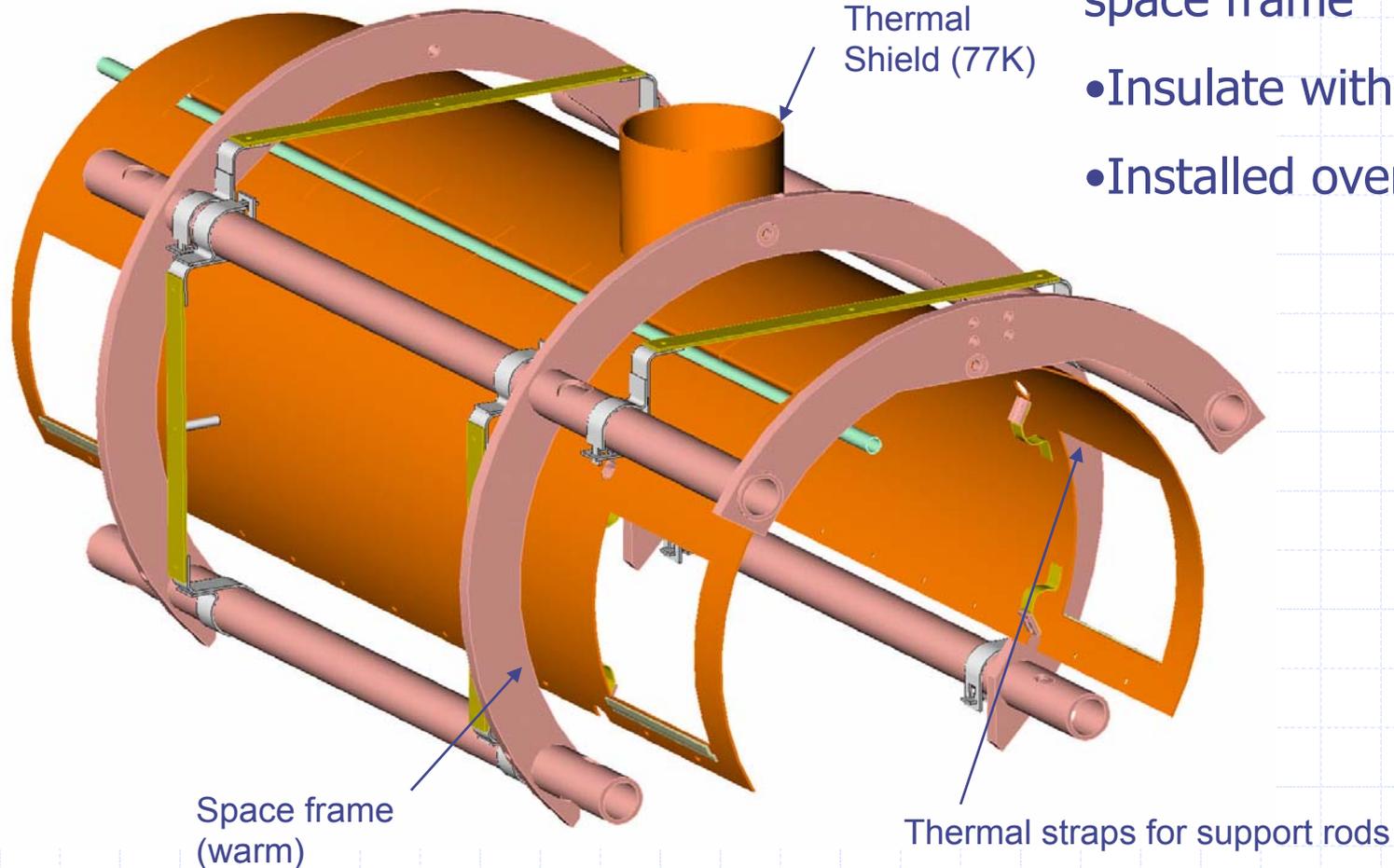
Split end caps



SCRF Cavity Installation

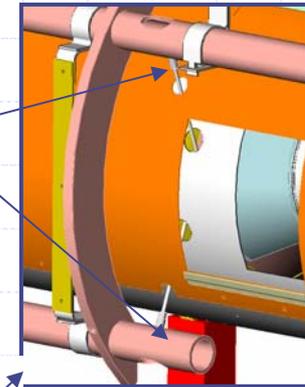
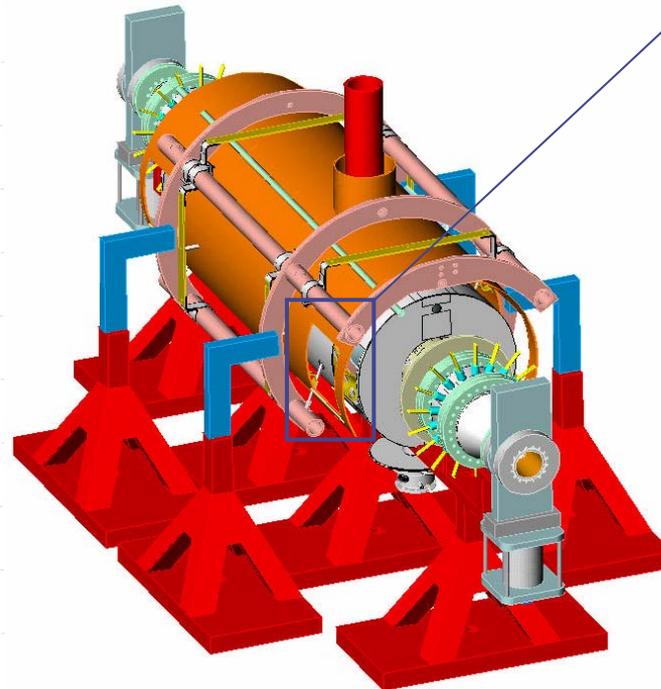
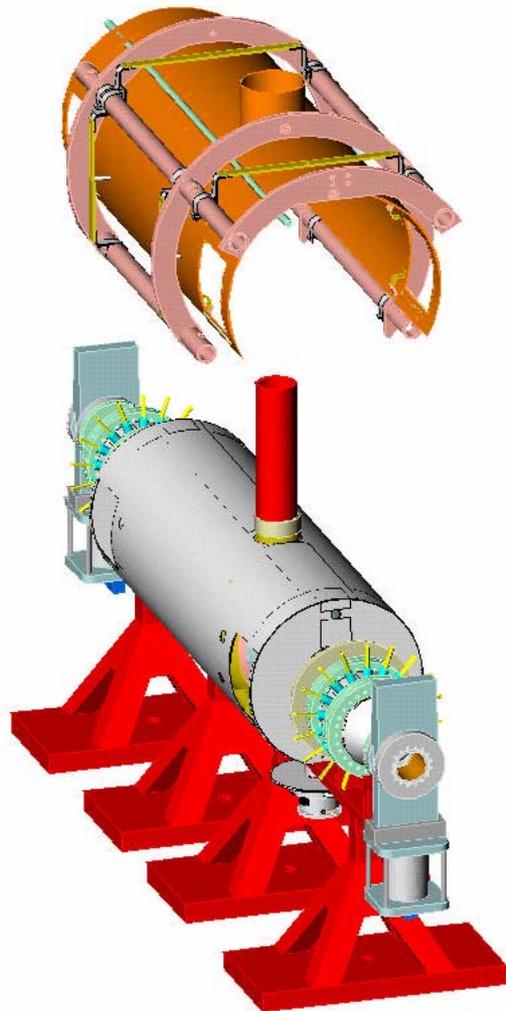
Thermal Shield Construction

- Shield assembled in space frame
- Insulate with MLI
- Installed over cavity



SCRF Cavity Installation

Place Space Frame on Cavity

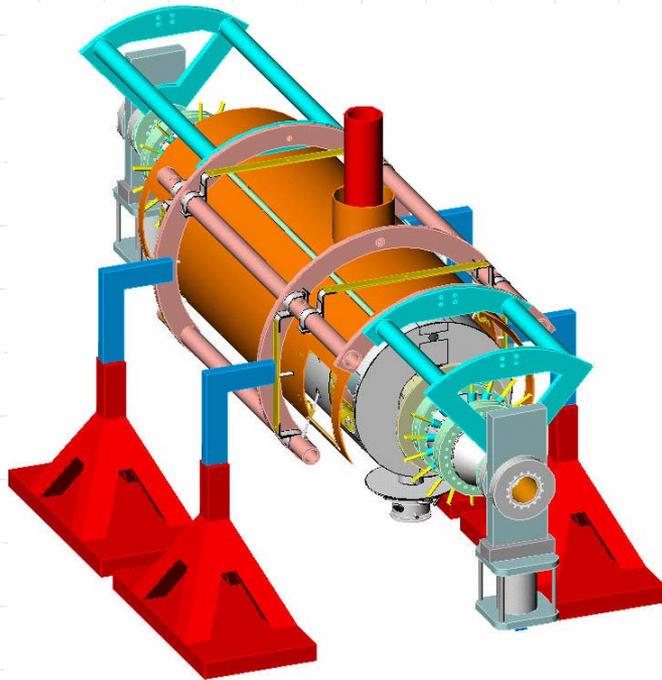


Support Rod Penetrations

- Assemble External Supports to Space Frame
- Mount Rods from Cavity to Space Frame
- Survey frame to cavity

SCRF Cavity Installation

Remove Interim Supports

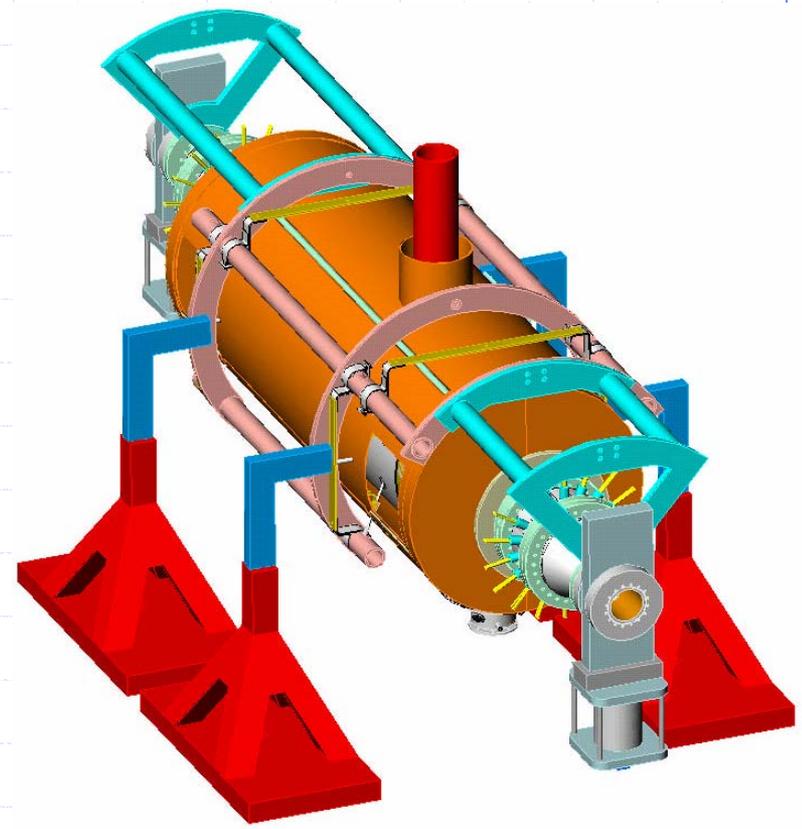
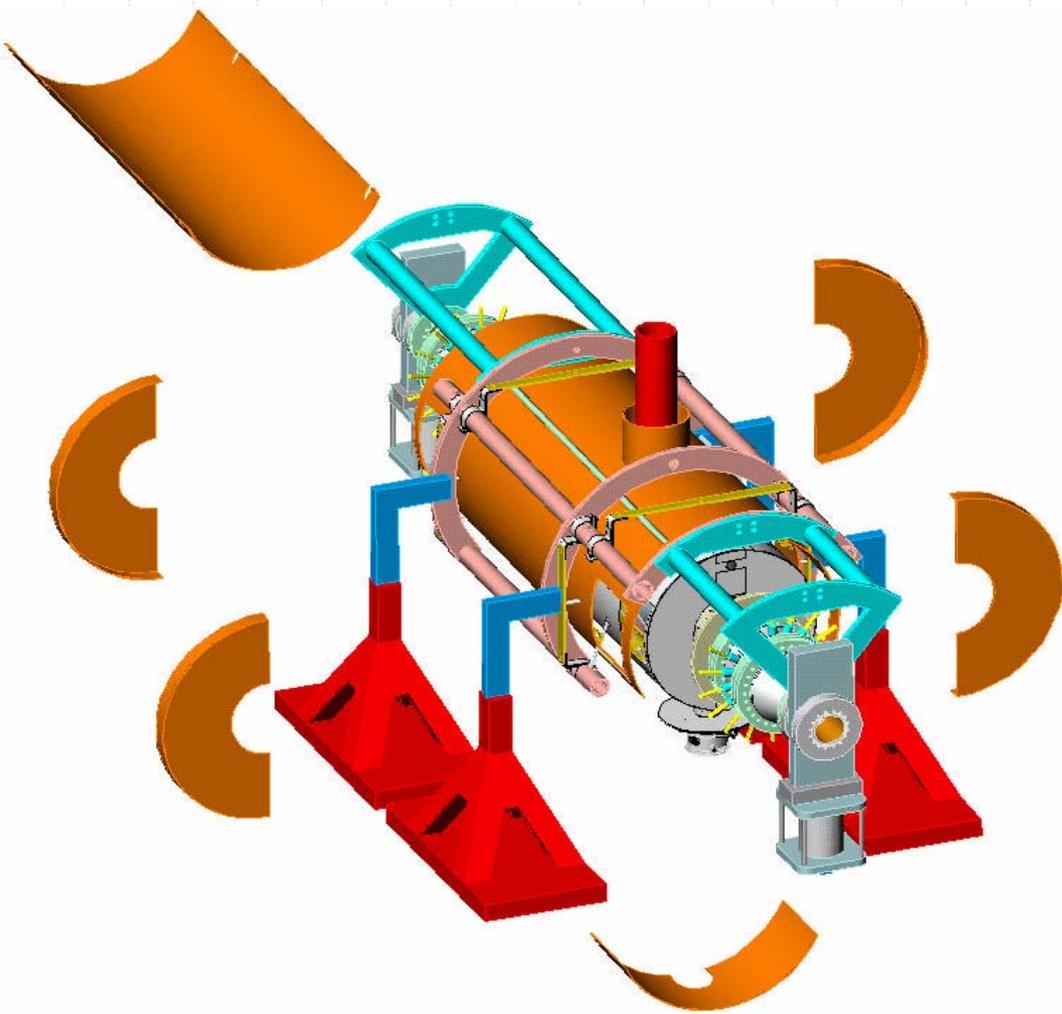


- Reattach Space Frame to Valve Fixtures
- Secure External Supports & Remove Interim fixtures
- Continue line runs

SCRF Cavity Installation

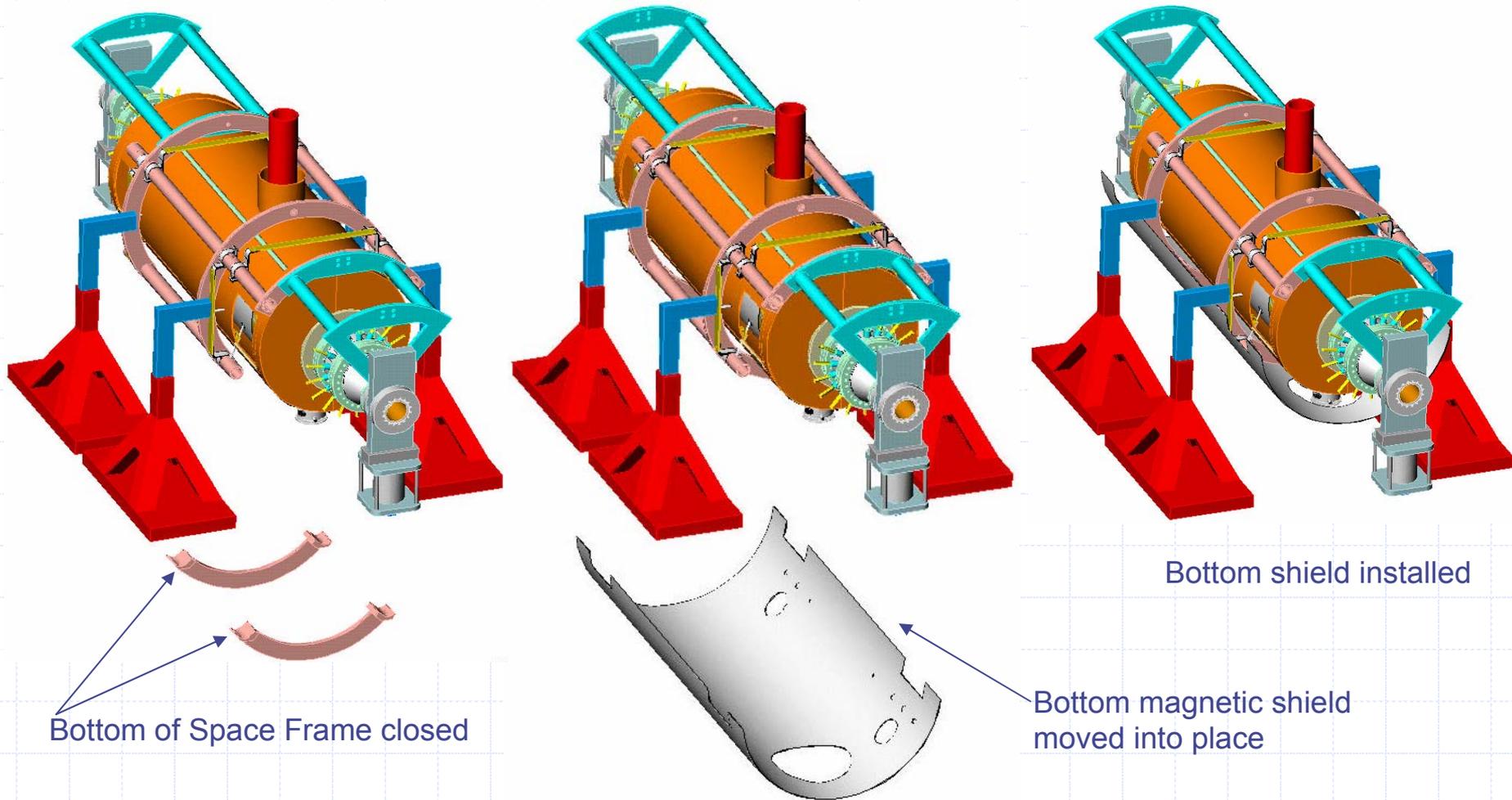
Complete Thermal Shield

Install Bottom & End Cap Sections & Insulate



SCRF Cavity Installation

Construction of Outer Magnetic Shield Begins



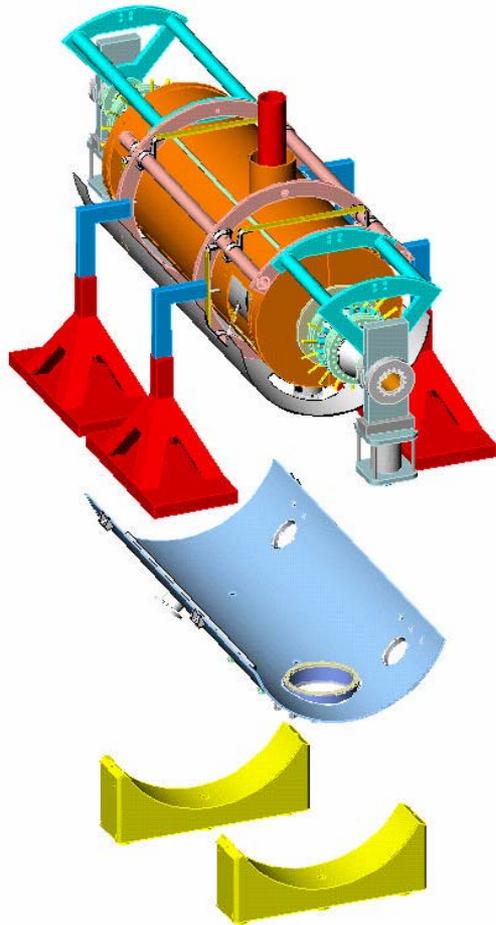
Bottom of Space Frame closed

Bottom shield installed

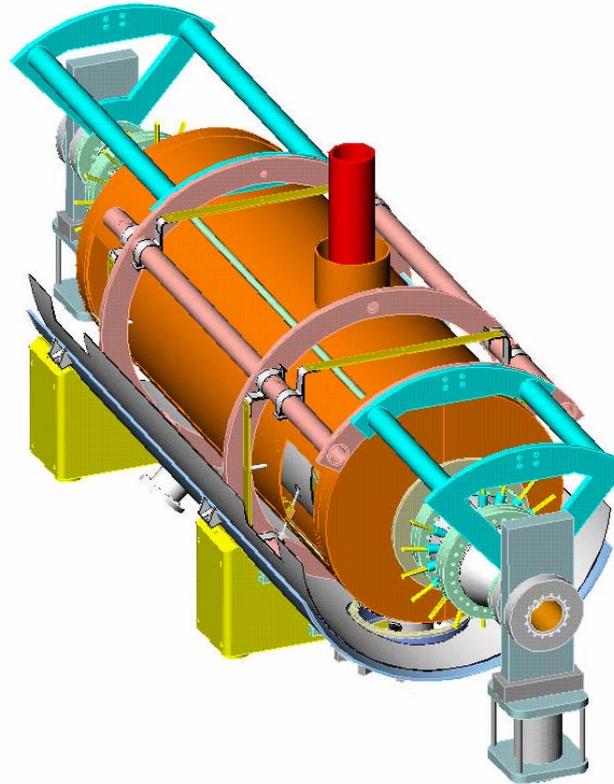
Bottom magnetic shield moved into place

SCRF Cavity Installation

Construction of Vacuum Vessel & Base Installation



Vacuum vessel Base assembly



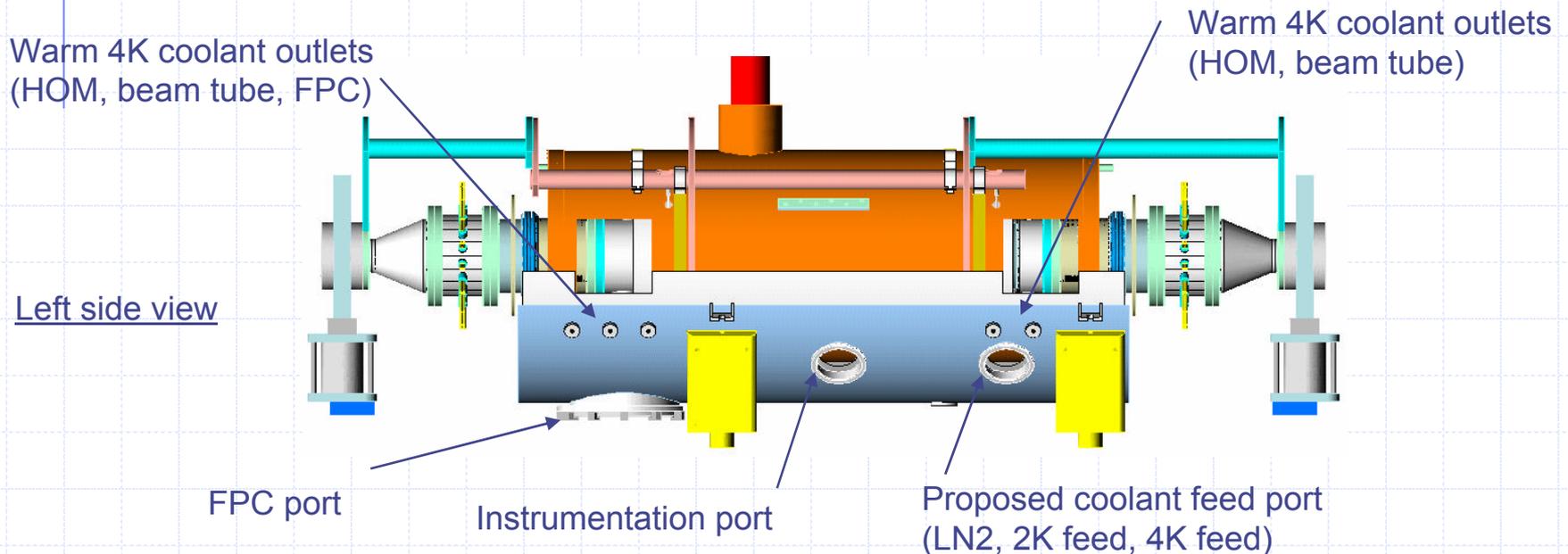
Vacuum Vessel Base installed

- Install bottom & Base (shown).
- Install adjusting base.
- Run cables & cold lines to feedthroughs.
- Survey & adjust.

SCRF Cavity Installation

Construction of Vacuum Vessel

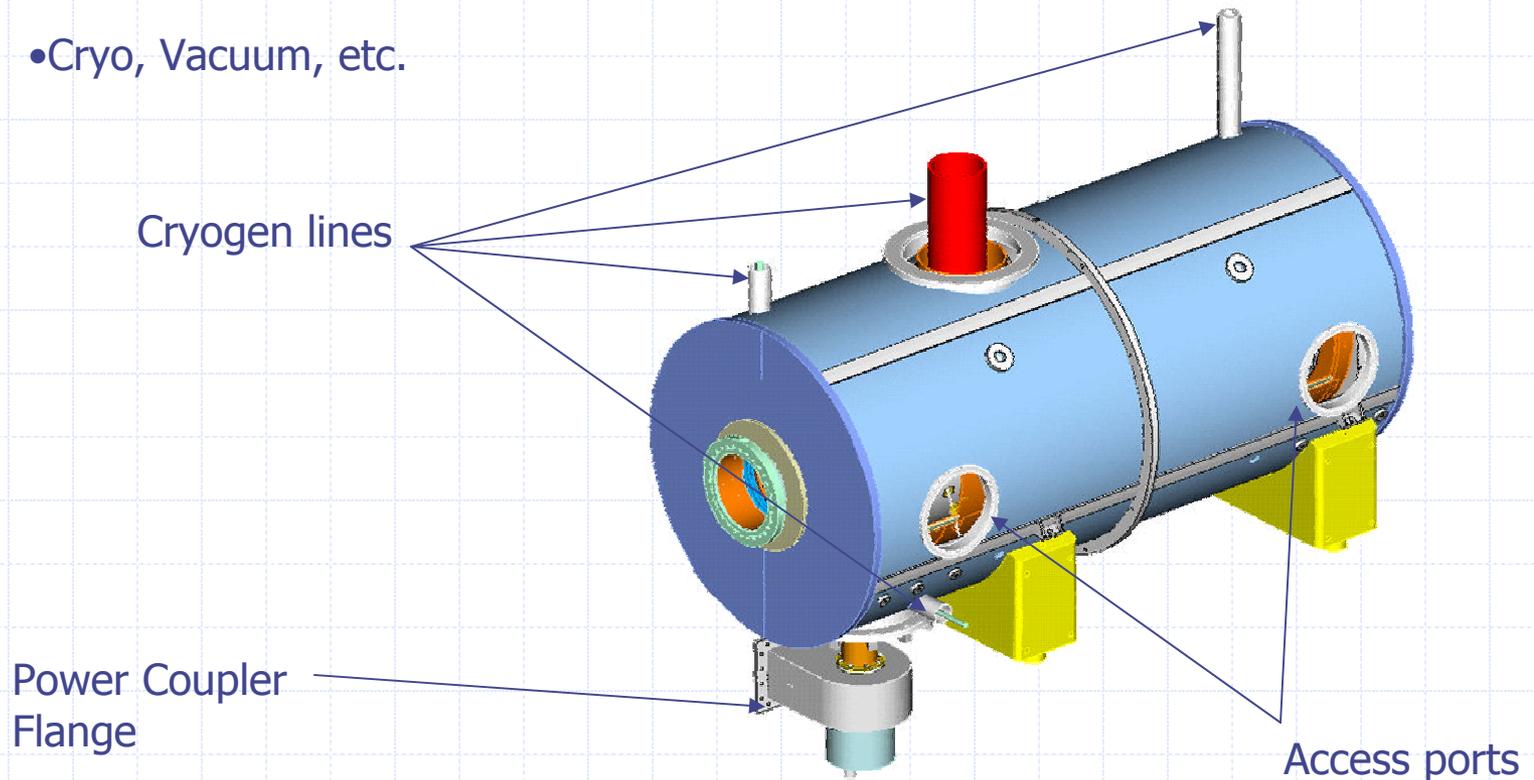
- Complete all line runs to outer shell & leak check.
- Mount valve / damper stands, remove valve/ SF supports
- Complete Outer Magnetic Shield installation.



SCRF Cavity Installation

Construction of Vacuum Vessel

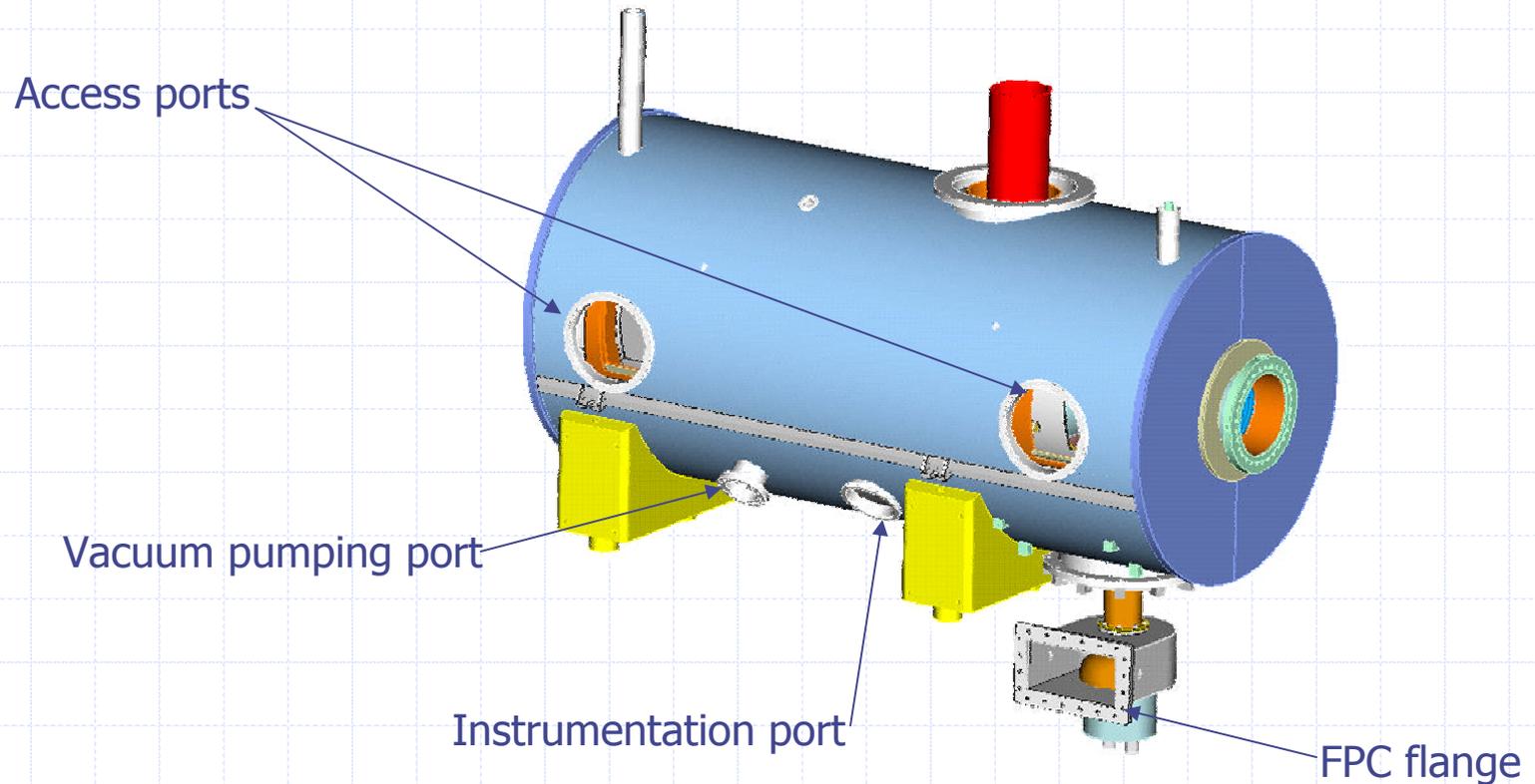
- Close & weld vacuum vessel.
- Make final connections
 - Cryo, Vacuum, etc.



SCRF Cavity Installation

Construction of Vacuum Vessel

Leak check closed & connected Vacuum Vessel



ERL Scheduled Completion Dates

◆ Delivery of RF Components for Cavity	5/03/05
◆ Installation of SCRF Cavity	7/28/05
◆ Testing of Cavity Systems	8/25/05
◆ Delivery of e-Gun	2/16/06
◆ Gun RF Components In-house	6/07/05
◆ Beam Dump Delivered	1/17/06
◆ Gun Beam Instrumentation	3/03/06
◆ Photocathode /Laser Delivery	6/23/06
◆ Gun / Cavity/ Dump Test	9/13/06
◆ ERL Magnet / Vacuum System Installation	12/11/06