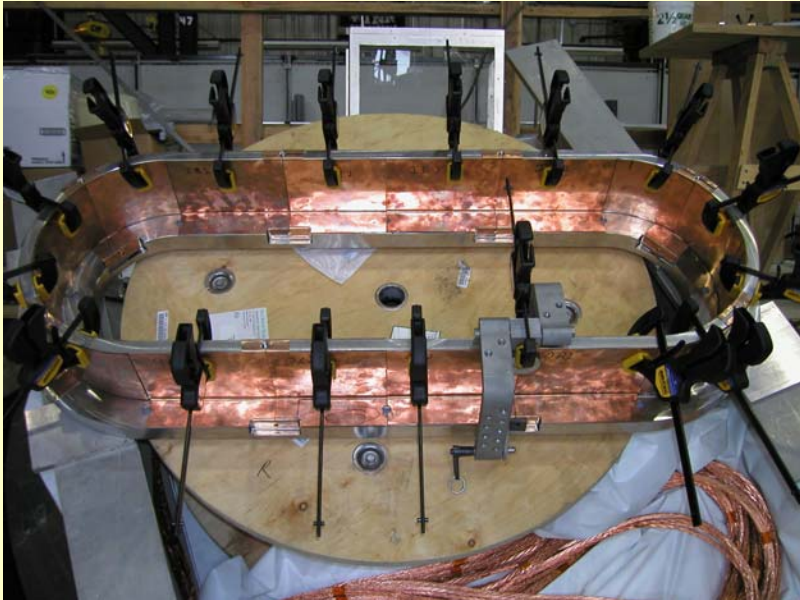


NCSX R&D Activity Update

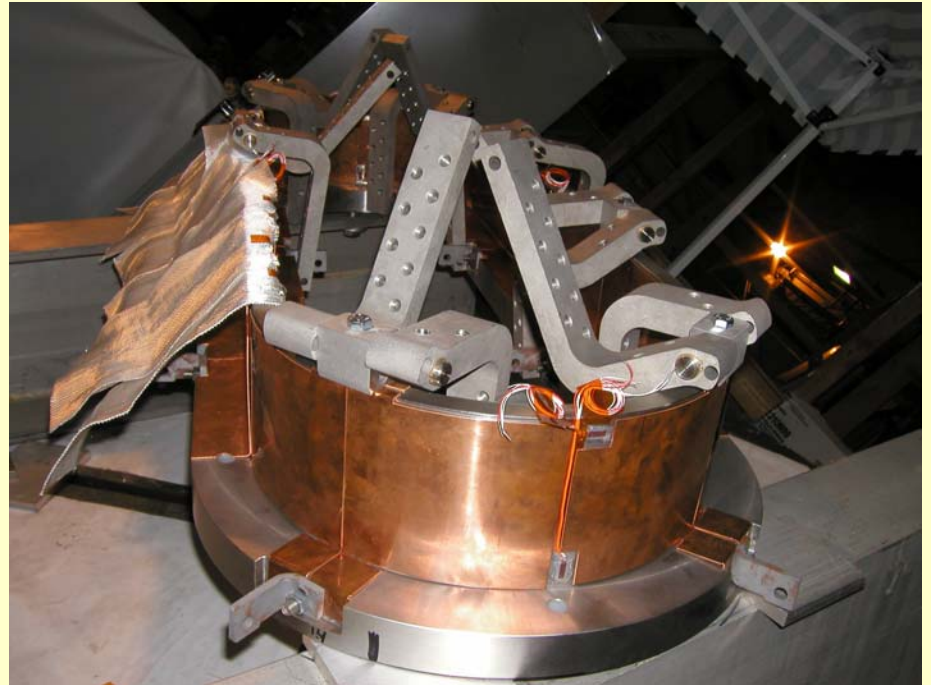
Jim Chrzanowski

July 8, 2003

Racetrack Coil Winding Activities



Inner wall of copper cladding



Racetrack Coil Winding Activities



Fifteen strain gauges installed on winding form

- Ground wrap insulation installed

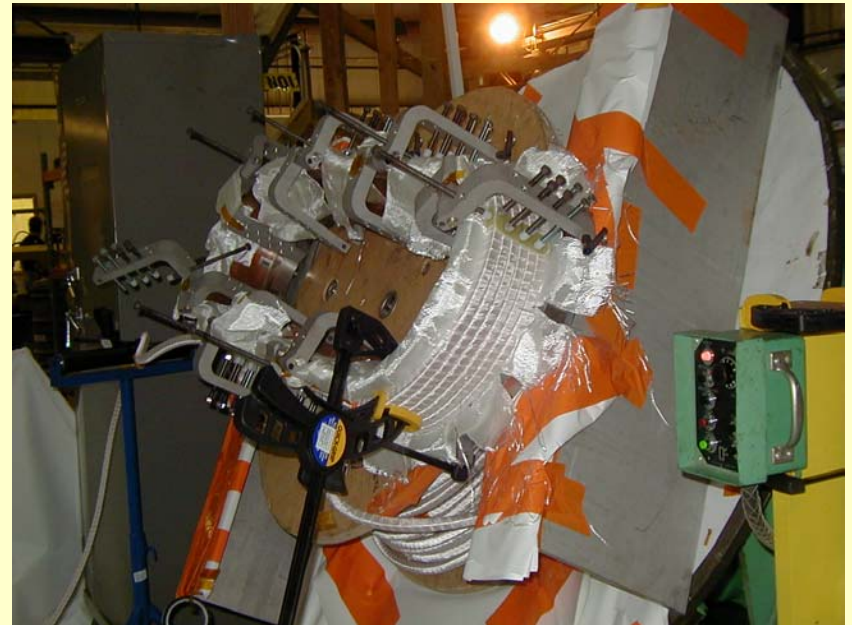


Racetrack Coil Winding Activities

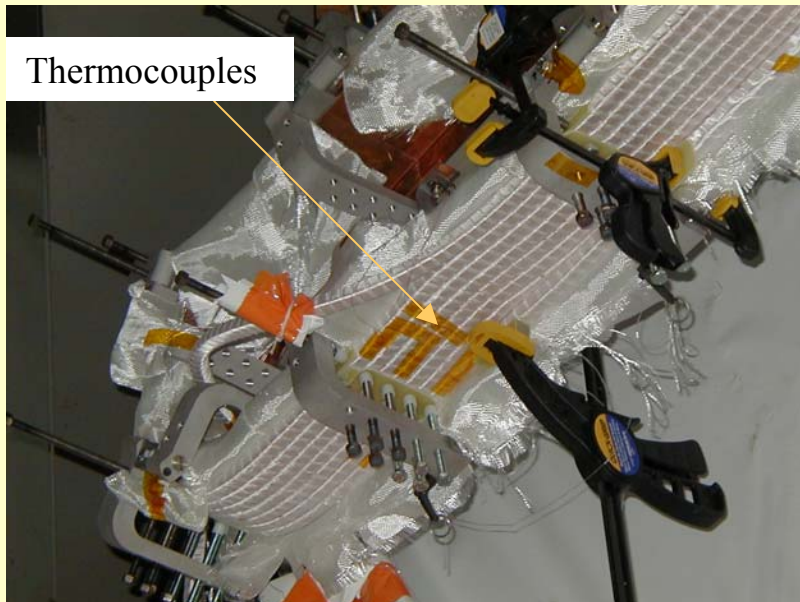


Forming conductor in place

- Winding clamps working fine. Closer spacing is required.



Racetrack Coil Winding Activities

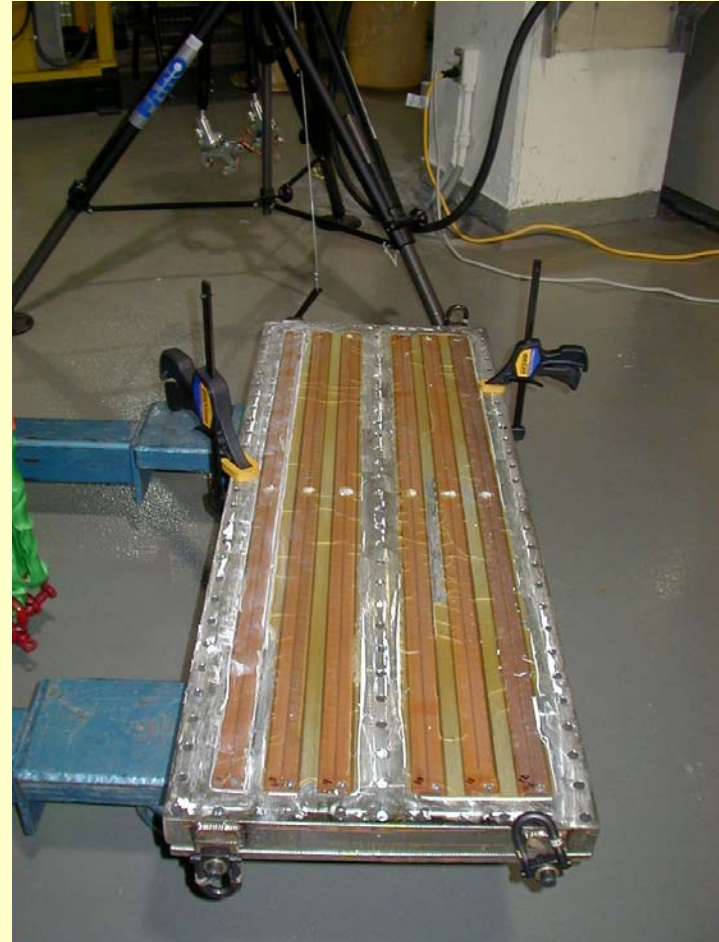
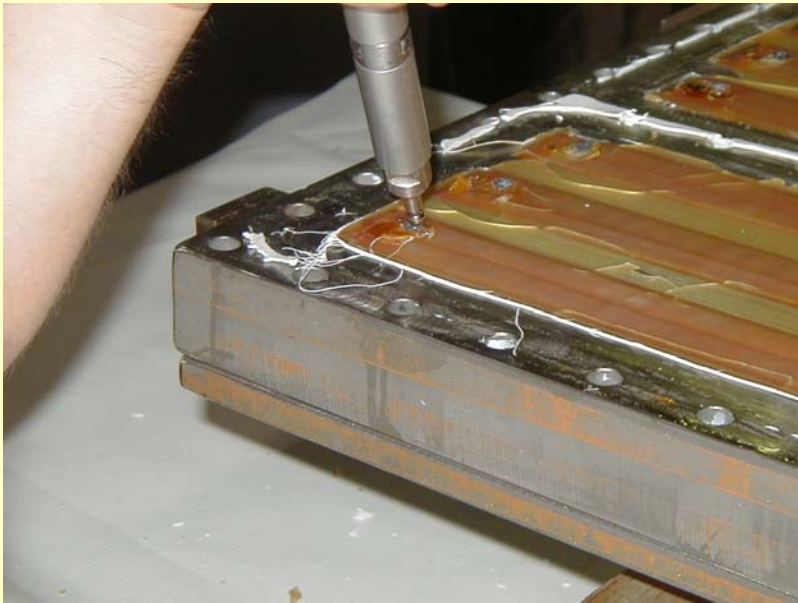


Layer number 1 complete with thermocouples

- Layer number 2 complete- 14 turns



Shrinkage Measurements



July 8, 2003

Shrinkage Measurements



July 8, 2003

Shrinkage Measurements

• Bar #	Length	Length	Delta	% Delta
	<u>Prepreg</u>	<u>Postpreg</u>		
Bar-07	39.157"	39.093"	-0.064	-0.16%
• Bar-08	38.968"	39.060"	+0.092	+0.24%
• Bar-09	38.940"	39.050"	+0.090	+0.23%
• Bar-10	39.043"	38.963"	-0.087	-0.22%
• Bar-11	39.039"	38.982"	-0.076	-0.19%
• Bar-12	39.008"	39.178"	+0.170	+0.44% (Considered invalid)
+/-Average (not including bar 12)			+/-0.082	+/-0.21%