

SPIRE/PACS (CEA-SBT)	Monthly Report – July 2002	Date: August 2 nd , 2002
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SPIRE-SBT-REP-001353

Work Package: Cooler

1. Subsystem Progress Since Project Inception		
Detailed design of the coolers (CQM, STM, PFM & FS) done. Manufacturing of 2 CQM + 2 STM done. Manufacturing of new large test cryostat done (“standard” test cryostat available). Product Assurance plan implemented. STM units available (vibration tests performed).		
2. Subsystem Progress This Month		
<ul style="list-style-type: none"> - CQM units : cooler hearts cleaned – now under cleanliness and contamination control. Mounting of thermometers and heaters to follow - Heat switches : qualification of titanium/copper brasing done (new subcontractor) – procedure established. Assembly of heat switches to follow - Heat switches support : New geometry qualified on samples (ease one of the EB weld). In addition 2 TIGs on miniature sorption pump replaced by EB welds (also qualified on samples). New parts have been machined and EB welded (switch support); now ready for brasing. - Structures : surface treatment on titanium along with subcontractor identified. Structures to be treated by OAS (Oxydation Anodique Sulfurique) in the course of September. - Kevlar characterisation campaign : continue. Unexpected creep (?) detected during multiple cycles between room T and LN2 is under investigation. - Solution for the electrical isolation identified – to be implemented in the design. New parts to be manufactured. 		
3. Problem Areas		Remedial Action
Peculiar behaviour of Kevlar		Under investigation
4. Engineering Activities		
Tensiometer & electrical isolation		
5. Design Changes		
6. PA/QA Activities		
General QA management.		
7. Subsystem Management Issues		
None		
8. Actions Requiring Immediate Attention		
SBT documents approval by SPIRE and PACS projects		
9. Status of Previous Actions		
None		
10. Activities Yet to be Achieved		
11. Milestones		Status
Winter 00-01	Coolers Detailed Design	Completed
May 17 th 2001	Coolers DDR (PACS & SPIRE)	Completed
June 26 th 2001	Subcontractor selection for machining	Completed
October 2001	Parts Delivery	Completed
Nov/Dec 2001	CQM Coolers assembling	Pending solution to problem with heat switches
Nov/Dec 2001	STM Coolers Assembling and Vtest	Completed
Dec 2001	STM Coolers delivery	When needed - Available
Winter 01-02	CQM Coolers Qualification	Pending solution to problem with heat switches
Spring 2002	CQM Coolers Delivery	Pending solution to problem with heat switches
12. Schedule Changes		
See above – Pending solution to problem with heat switches		