

SPIRE/PACS (CEA-SBT)	Monthly Report – January 2003	Date: January 31 st , 2003
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Work Package: Cooler

SPIRE-SBT-REP-001521

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 delivered.		
2. Subsystem Progress This Month		
<p>- CQM units : CQM2 successfully filled with ³He and crimped. Pre-testing OK : 284 mK in all orientations with T_{bath}@1.85 K (using lab. Spare heat switches). . CQM1 : filled – to be crimped shortly. Pre testing OK : 280 mK in all orientations with T_{bath}@1.65 K (using lab. Spare heat switches).</p> <p>- Heat switches : Last FE soldering and gold plating done. He filling in progress. Thermometers and heaters gluing to follow</p> <p>- Structures : available – To be confirmed : minor modifications to be implemented following SAp demand (additionnal threaded holes for thermal shields mounting – might be done only on PACS structure).</p> <p>- STM units : both STMs delivered</p> <p>- Kevlar characterisation campaign and Tensiometer : First tensiometer prototype validated. Mock up of suspension system (pump side) being manufactured : will be used to characterize / validate various Kevlar aspects.</p>		
3. Problem Areas	Remedial Action	
Peculiar behaviour of Kevlar	Under investigation	
4. Engineering Activities		
Tensiometer		
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	In progress
Nov/Dec 2001	STM Coolers Assembling and Vtest	Completed
Nov. 2002	STM Coolers delivery	Completed
Winter 02	CQM Coolers Qualification	In progress
Early 2003	CQM Coolers Delivery	TBD
12. Schedule Changes		
See above – related to subcontractor problem with heat switches		