

SPIRE/PACS (CEA-SBT)	Monthly Report –December 2001	Date: 07/01/02
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Work Package: Cooler SPIRE-SBT-REP-001071

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 in progress (“standard” test cryostat available). Product Assurance plan implemented.		
2. Subsystem Progress This Month		
<ul style="list-style-type: none"> - First Electron Beam welding phase on cooler heart and heat switches successfully performed - All structures have also been successfully EB weld. Will be transported to subcontractor this week for final machining (for EB welding purpose, some sections were left thicker) - Brasing phase on cooler heart and heat switches in progress - ITT for clean room issued on December 21st. ITT closing date : Week 4 January 2002 - Kevlar characterisation campaign : fatigue test set up being modified to speed up tests – so far, after over a month Kevlar 34 (breaking at 12 DaN) has been sollicitated over 800 000 times between 7.8 – 9.2 DaN (nominal tension in cooler : 5 DaN) – New motor can rotate at speed up to 10 Hz (against 0.2 Hz right now) - Large test cryostat : manufacturing in progress - Most project documents have been reviewed following SAp’s comments. 		
3. Problem Areas	Remedial Action	
4. Engineering Activities		
Tensiometer to be developed to check for Kevlar cord tension in situ - In progress – possible solution identified		
5. Design Changes		
6. PA/QA Activities		
Inspection, anomalies, etc...– documentation updated - General QA management.		
7. Subsystem Management Issues		
None		
8. Actions Requiring Immediate Attention		
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	On schedule
Nov/Dec 2001	STM Coolers Assembling and Vtest	On schedule
Dec 2001	STM Coolers delivery	On schedule
Winter 01-02	CQM Coolers Qualification	On schedule
Spring 2002	CQM Coolers Delivery	On schedule
12. Schedule Changes		
None		