

<b>SPIRE/PACS</b> (CEA-SBT)	<b>Monthly Report – April 2004</b>	<b>Date:</b>	May 3 <sup>rd</sup> , 2004
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**Work Package: Cooler**

<b>1. Subsystem Progress Since Project Inception</b>		
FM / FS units assembling in progress		
<b>2. Subsystem Progress This Month</b>		
<ul style="list-style-type: none"> <li>- Kevlar characterisation campaign : tensioning procedure performed on both STM (SPIRE and PACS) : results satisfactory (tension remains around 100 N at end of procedure after several bake out)</li> <li>- FM/FS manufacturing : All parts available and checked</li> <li>- Laser marking : done</li> <li>- FM/FS assembling <ul style="list-style-type: none"> <li>- Structures (4): EB welding done, last machining phase done (removal of extra thickness left for EB welding process). Cleaning to follow.</li> <li>- Cooler heart and heat switches : First EB welding phase done. Brasing phase to follow.</li> </ul> </li> <li>- Titanium STM : manufacturing almost done.</li> <li>- Assembly of spare heat switch from CQM program completed (two extra already available) : the design of the miniature sorption pump for this 3<sup>rd</sup> one is slightly different, however the active part (thin wall titanium tube) is nominal (thus can be used if necessary to characterise STM unit – see below)</li> <li>- New thermal characterisation of these 3 heat switches on going. Selection of best one to be used with titanium STM (switch will be mounted on STM with new strap. Plan is then to build a test set-up using a lab 3He stage to characterize the STM + switch before and after STM Vtest).</li> </ul>		
<b>3. Problem Areas</b>	<b>Remedial Action</b>	
<b>4. Engineering Activities</b>		
<b>5. Design Changes</b>		
<b>6. PA/QA Activities</b>		
General QA management.		
<b>7. Subsystem Management Issues</b>		
None		
<b>8. Actions Requiring Immediate Attention</b>		
SBT documents approval by SPIRE and PACS projects		
<b>9. Status of Previous Actions</b>		
None		
<b>10. Activities Yet to be Achieved</b>		
<b>11. Milestones</b>		<b>Status</b>
Winter 00-01	Coolers Detailed Design	Completed
May 17 <sup>th</sup> 2001	Coolers DDR (PACS & SPIRE)	Completed
June 26 <sup>th</sup> 2001	Subcontractor selection for machining	Completed
October 2001	Parts Delivery	Completed
Spring 2003	CQM Coolers assembling	Completed
Nov/Dec 2001	STM Coolers Assembling and Vtest	Completed
Nov. 2002	STM Coolers delivery	Completed
Spring 2003	CQM Coolers Qualification	Completed
Autumn 2003	CQM Coolers Delivery	Completed
Winter 2003	FM manufacturing	Completed
Spring 2004	FM assembling	In progress
<b>12. Schedule Changes</b>		