

<b>SPIRE/PACS</b> (CEA-SBT)	<b>Monthly Report – May 2004</b>	<b>Date:</b>	June 1 <sup>st</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>		
<p>- STM : Both STM have been used to validate the tensioning procedure. PACS STM unit returned to SAp. SPIRE STM unit to be taken apart, structure will be used with STM titanium heart</p> <p>- FM/FS assembling</p> <ul style="list-style-type: none"> <li>- Structures (4): Cleaning to be carried out</li> <li>- Cooler heart and heat switches : First EB welding phase done. Brasing phase done on first set. Problem with first cooler heart (line with shunt) : subcontractor took the initiative to use some extra graphite tooling which then got stuck in the line. Problem has been fixed ; apparently no problem to the line (leak tight, etc...). Remaining cooler hearts will be done following as planned procedure. Necessary steps have been taken with the subcontractor. Heat switches : on going.</li> </ul> <p>- Titanium STM : cooler heart available – to be installed in SPIRE STM structure with spare switch</p> <p>- New thermal characterisation of 3 heat switches done. 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 <sup>3</sup>He stage to characterize the STM + switch before and after STM Vtest).</p> <p>- SPIRE CQM : delivered back to SBT end of May. Has been cold vibration tested within SPIRE instrument. SBT will perform an health check on the cooler (with particular focus on heat switch performance).</p>		
<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>		