

# **Beam Wire Scanner for PSB**

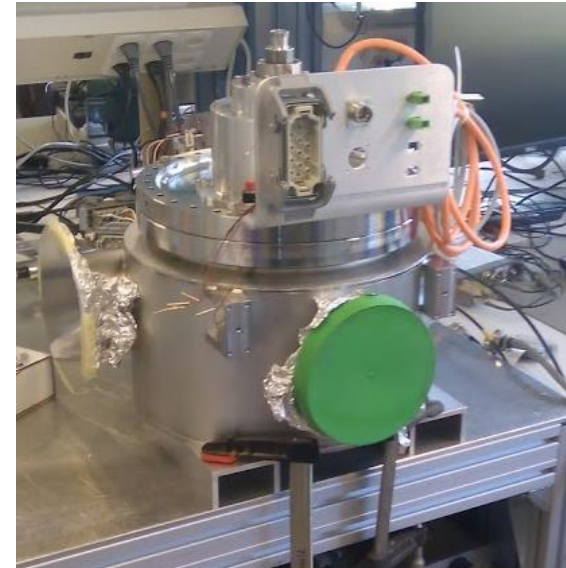
## **Update**

*8-Nov-2016*

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**BE-BI-ML**

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<b>Assembly</b>	W37	W37	W37
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# BWS prototype for PSB. Test program

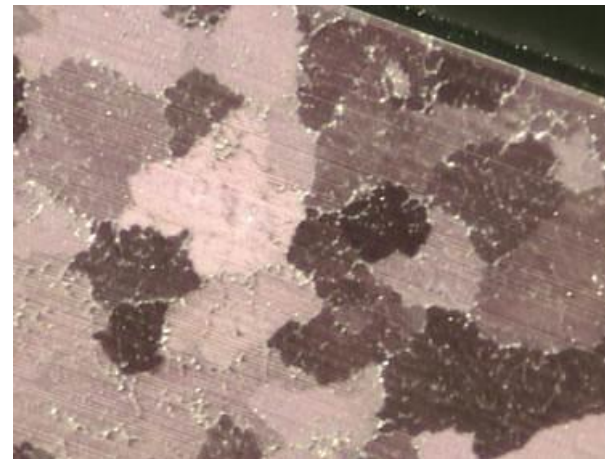
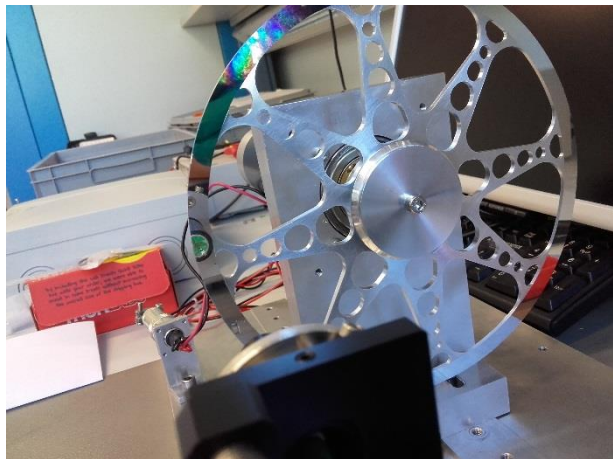
	<b>BWS in PSB</b>	<b>LAB prototype</b>	<b>Test bench (no tank)</b>
<b>Assembly</b>	W37 - <b>done</b>	W37 - <b>done</b>	W37 - <b>done</b>
<b>Electromechanical test</b>	W38 - <b>done</b>	W38 - <b>done</b>	W38 – <b>under way</b>
<b>Impedance test</b>		W39 – <b>under way</b>	
<b>Installation test</b>		W41 - <b>done</b>	
<b>Calibration test</b>		W42	
<b>Control system test</b>			W39... – <b>under way</b>
<b>Mechanical reliability test</b>			W40....
<b>Optical system</b>			W40....
<b>Disassembly</b>	W39 - <b>done</b>		
<b>Cleaning</b>	W40 - <b>done</b>		
<b>Assembly</b>	W40 - <b>done</b>		
<b>Vacuum qualification</b>	W41..44 - <b>under way</b>		
<b>Fiducialiasation</b>	W45 – <b>this week</b>		
<b>Calibration</b>	W45		
<b>Installation</b>	W50		

# **BWS prototype for PSB**

1. Bearings with standard clearance should arrive 29-Nov-2016 for tests.
2. Auxiliary vacuum chambers are in production (Vacuum project (SP)).
3. All the supports (for vacuum tank and auxiliary chambers arrived).

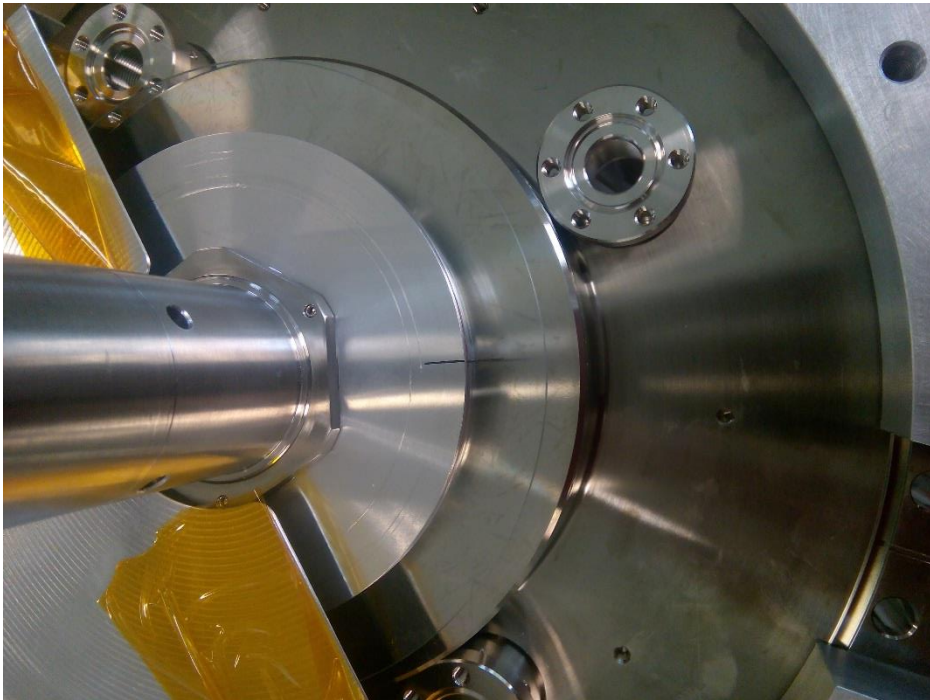
# Optical Disks Status CW 41

<b>Mechanical polishing of optical face</b>	1 extra disk, visit to the company for discussion (11.10)
<b>Electrochemical polishing</b>	25 samples (AW-2219) + 25 samples (AW-6082), study is under way
<b>Electrochemical polishing</b>	SS sample for tests with optical system is under preparation (CW41..CW42)
<b>4 disks order (AW-6082)</b>	P.O. sent to VDL, they will give us special sample so we can choose the desired surface finish (CW41).
<b>Glass disk</b>	Holder design done, in production, integrated with current design. Test with smaller glass disk (no chrome coating) is foreseen



# Optical Disks Status CW 45

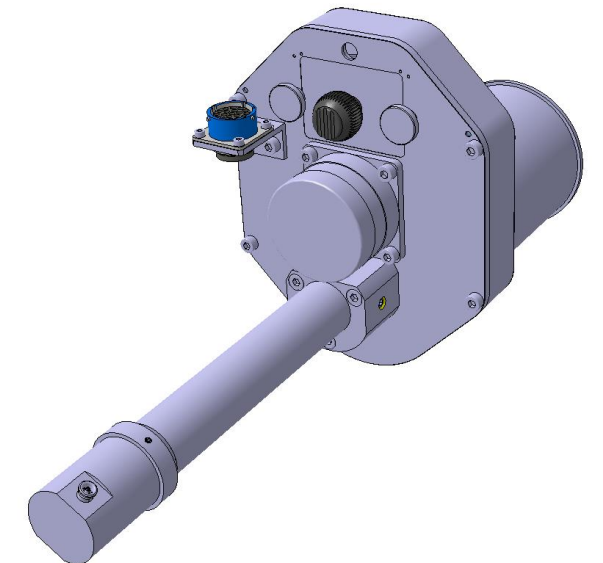
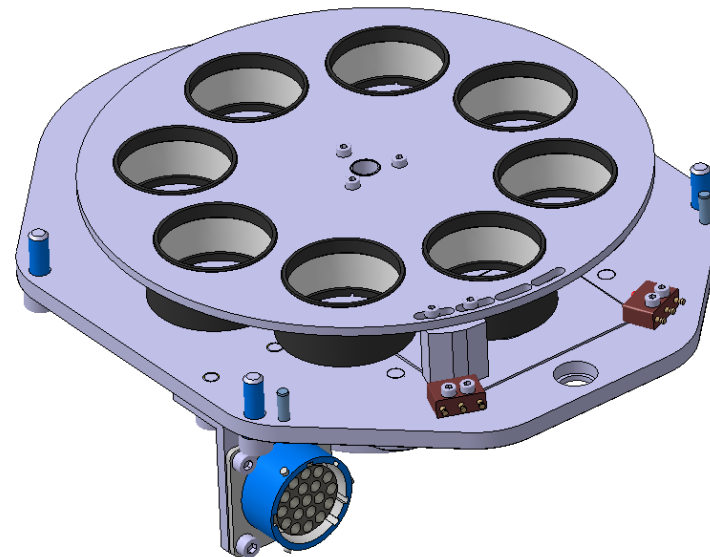
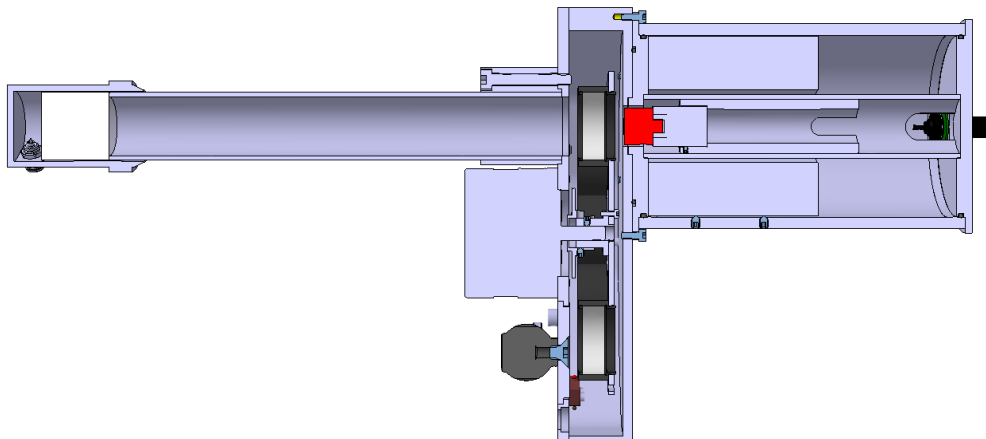
<b>Mechanical polishing of optical face</b>	Polishing done, result is not satisfactory. Most probably material problem.
<b>Electrochemical polishing</b>	study is under way, will try to apply coating on AW-2219 disks
<b>Electrochemical polishing</b>	
<b>4 disks order (AW-6082)</b>	P.O. sent to VDL, they will give us special sample so we can choose the desired surface finish (CW41).
<b>Glass disk</b>	Holder design done, produced, integrated with current design. Test with smaller glass disk (no chrome coating) is done, 2200 cycles – OK.





# Scintillator/Filter box/Photomultiplier

Status CW41	Status CW45
<ol style="list-style-type: none"><li>1. Detailed design is nearly completed (97.5%)</li><li>2. Drawings are in CDD: <b>PS_BWSA_0067...PS_BWSA_0092</b></li><li>3. Approval process: 1<sup>st</sup> control – William, 2<sup>nd</sup> control – Jose</li><li>4. Filter wheel will be requested from Thorlabs (CERN – design)</li><li>5. 10 units to be confirmed (2 with higher priority for EYETS '16-'17)</li></ol>	<ol style="list-style-type: none"><li>1. All the drawings are ready</li><li>2. Drawings are in CDD: <b>PS_BWSA_0067...PS_BWSA_0092</b></li><li>3. Approval process: 1<sup>st</sup> control – William - done, 2<sup>nd</sup> control – Jose – under way (CDD access requested).</li><li>4. Filter wheel is inquired from Thorlabs (CERN – design) – waiting for the offer.</li><li>5. 10 units are in production by MME subcontracting (J-M Malzaker); tender close – 9-Nov-2016.</li></ol>





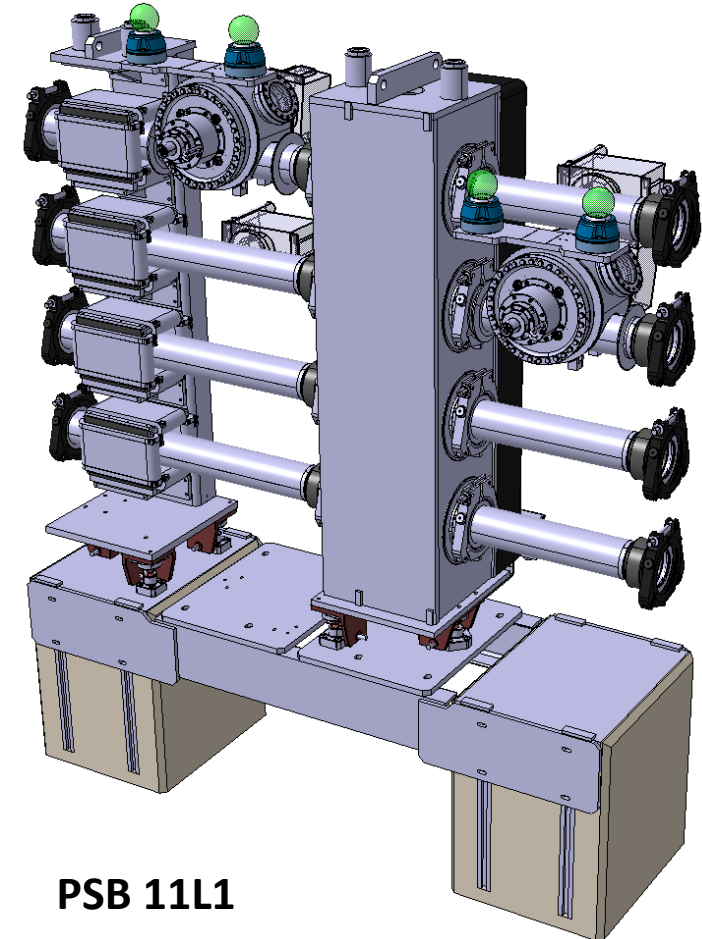
# LIU series status

1. Critical raw material for series production is requested from CERN store:

Definition	S.C.E.M.	Quantity	Status
GALET FORGE 3D (BLOCS FORGES 3D 316LN Ø330mm x 55mm) - 316LN	<a href="#">18.60.20.355.5</a>	25	requested
<a href="#">EBAUCHE FORGEE 3D Ø71 MM</a> - 316LN	<a href="#">18.60.19.071.0</a>	25	requested
BAUCHE FORGEE 3D Ø158 MM - 316LN	<a href="#">18.60.19.158.0</a>	25	requested
BRIDE UHV FIXE 316LN 325/273 - 316LN	<a href="#">18.60.18.045.5</a>	25	ordered

2. MME launched design and integration process for BWS (PSB-V), PS and SPS.

*It is planned to have design of all the instruments ready by Dec-2016..Jan-2017*



**PSB 11L1**