



Current status of works on the barrel EMC at IHEP

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Major milestones for the EMC Barrel Mechanics

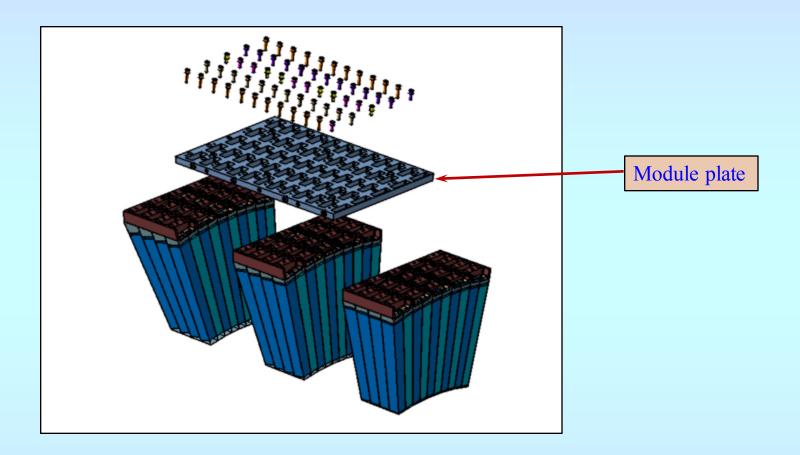


Mile- stone	Work Description	Prerequisites to start work / procurement	Validation Criteria	Date
Pre-Series Slice				
1.1 M6	Finalise technical specifications		Technical specifica- tions	Nov 2013
1.2	Design and delivery of 3D model and design of main support structures (support beam, support feet, module plate)	0.0, 1.1	Delivered 3D model and design drawings	Apr 2014
1.3 M7	Develop design documentation for Pre- Series Slice	0.0, 0.1, 1.1	Final Design Review for Pre-Series Slice	Sep 2014
1.4	Production and delivery of batch 1 of Pre-Series Slice (PSS-B1)	1.2	SAT Aa for PSS-B1	Mar 2015
1.5	Production and delivery of all remaining components (batch 2) for Pre-Series Slice (PSS-B2)	1.3	SAT Aa for PSS-B2	Sep 2015
1.6 M8	Testing of Pre-Series Slice	1.5	SAT Ab for mechanics of Pre-Series Slice	Mar 2016



Super-module structure

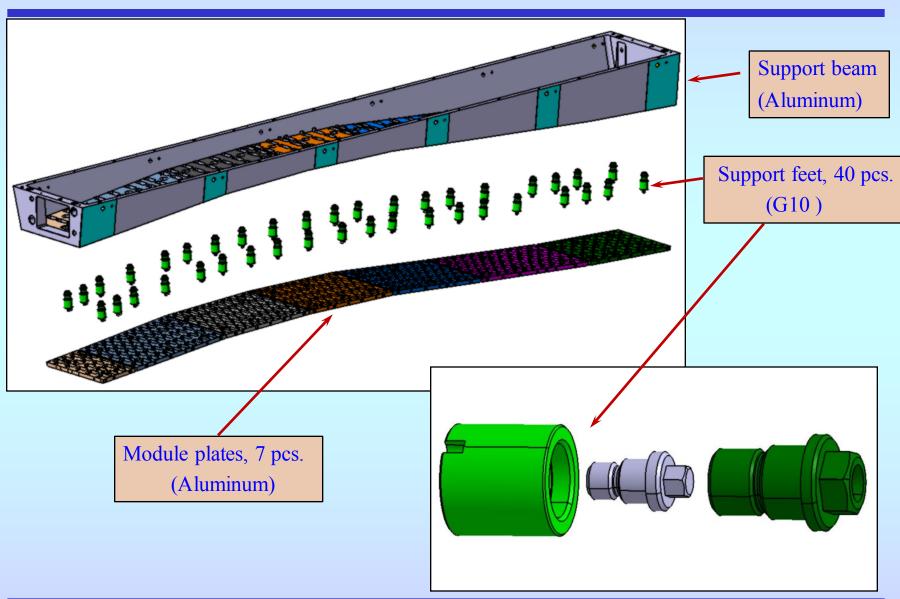






Crystals modular support structure







Support beam at production facility













Support beam delivered at IHEP

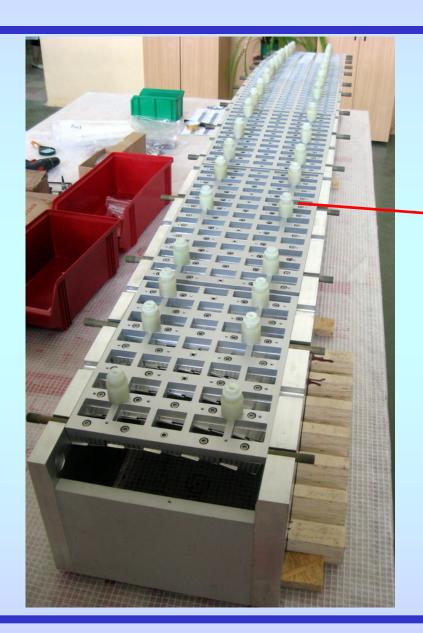


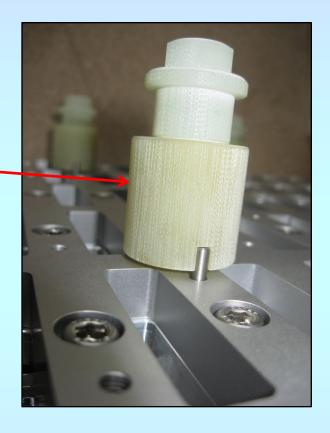




Module plates with mounted support feet









Front inserts production at IHEP

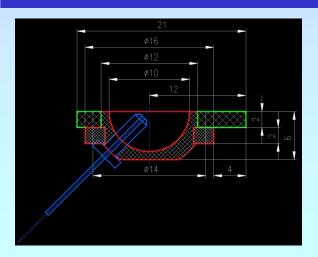


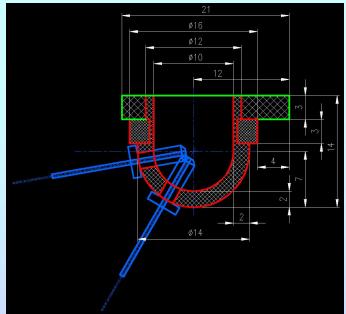


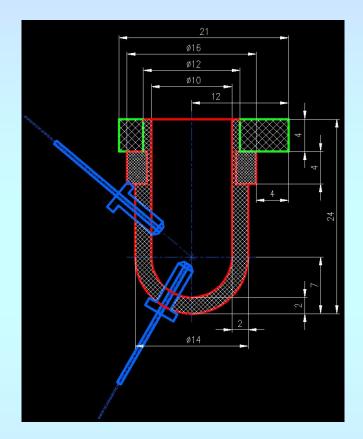


Design of front inserts and optical fibers coupling











Summary



- Manufacturing of single carbon alveoli units of 18 different types for the whole barrel was completed. Spare units of each type were produced in amount of about 10%.
- Special mold is ready for the mass production of front inserts at IHEP. Production rate is about 100 pcs./day.
- Module plates and support feet as well as the support beam were produced and delivered to IHEP; pre-assembling test is in progress.
- Addendum 3 and Addendum 4 to the Collaboration Contract which are necessary to solve custom formalities and perform delivery of Batch #2 of the components and devices for the pre-series slice assembling were written and sent to FAIR for the final approval and signing.
- We plan to finish all the tests during couple of weeks and hope to get signed Addenda a.s.a.p.