

TPOT Status

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for the TPOT team
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Micromegas production at Saclay

- 9 modules total (1 at BNL, 8 at Saclay), out of which 8 are validated
- Module 10 ready for assembly. **Production almost complete**
- TODO: mount modules on support frames, perform metrology (survey strips vs alignment targets)
- All modules will be brought to BNL on July 25 (corresponds to the second batch delivery milestone)
- Assembly schedule has been updated accordingly. No change on delivery date, provided we can assemble TPOT sectors in parallel

Mechanics

- Many parts already received (detector tray, FEE support plate, cooling plates, SAMTEC transition cables). **Assembly has started.**
- Remaining parts (cable trays, patch panels, EMCAL feet) ordered this week. Expect 4w lead time -> early August
- TPOT transportation cart will be built at MIT/Bates. Lead time: mid-August
- TPOT lifting fixture/support being finalized
- Schedule is tight but mitigated by ongoing pre assembly steps (detectors on trays at Saclay, FEE boards on plates at BNL)

Others

- **All FEE boards for TPOT readily available**
- Setting up module testing room at SBU this week and the next (week 29) to be ready when detectors arrive
- Meeting with Saclay next Tuesday (July 19) to discuss detailed status of all modules before shipping
- Placing orders for remaining services (fibers, HV cables)
- Getting ready for the July 20 ALD review

High level milestones and risk



With respect to PMG meeting on 6/24, dates have shifted further, but risk is now lower as they are more firm.
Delivery date unchanged

Milestone	date	Status	risk
Number of TPOT modules produced	Today	9	low
FEA analysis finished and reviewed	18/05/22	FDR happened. more FEA analyses requested. Agreed with TC to move forward	low
First batch of 5 TPOT Modules assembled & tested (Saclay)	06/03/22 → 07/06/22	6 modules assembled, test ongoing	done
FEE to detector fabricated and tested	06/23/22 → 07/23/22	cables/boards received on 6/21	low
HV system tested	06/16/22	happened on Week 21 (May 23)	done
Second batch of 5 TPOT modules assembled & tested (Saclay)	07/15/22 → 07/22/22		low
Characterization of first 5 all TPOT modules at SBU	07/01/22 → 08/08/22	(modules arrive at BNL on 7/25)	low
Gas system designed, ES&H reviewed and tested	07/07/22	designed and ESRC reviewed on 6/21	low
TPOT mechanical support assembled	07/14/22 → 08/19/22		moderate
installation of modules 1-4 on support structures	07/01/22 → 08/26/22		moderate
installation of modules 5-8 on support structures	08/26/22	same date. In parallel to modules 1-4	moderate
End of TPOT assembly	09/30/22		moderate
Installation of TPOT in sPHENIX	10/07/22	(also depends on sPHENIX schedule)	moderate

