



This project has received funding from the European Union's Horizon 2020 Research and Innovation programme under GA No 101004730.

Task 9.2 Progress @



3rd iFAST WP9 meeting - 18th November 2021

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iFAST



Task 9.2 Objectives

- Optimize and industrialize the **manufacturing of seamless elliptical copper cavities**

MS38: First seamless copper 1.3 GHz cavity produced as substrate for the coating of the SC film (Report)

M12

1 May 2022

- Demonstrate the possibility to replace the current Nb bulk technology with an innovative **SRF cavity coated with a superconducting film**

D9.2: RF test on coated resonant cavity.

Resonant cavity coated and tested with an alternative material to Niobium with a $Q_0 > 10^9$ at 4.2 K and 1.3 GHz.

M46

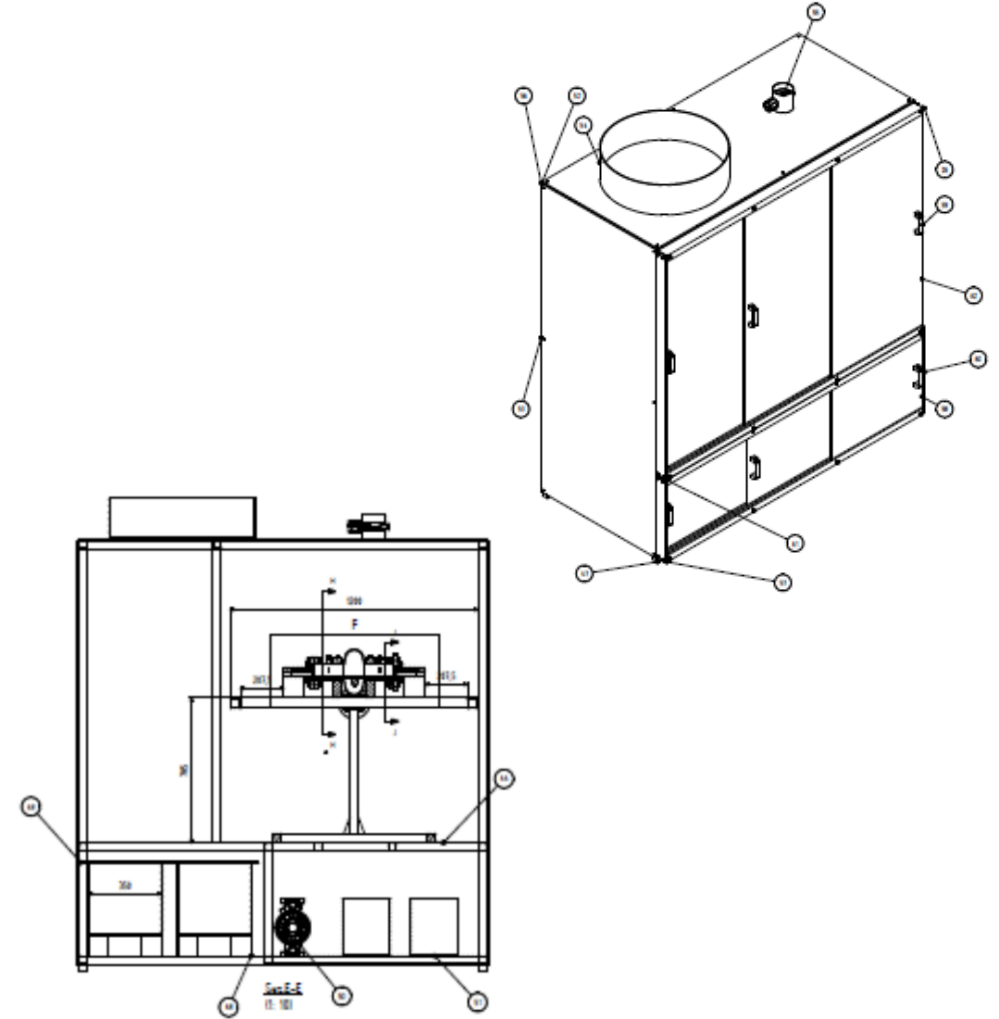
Strongly connect to task 9.3

1.3 GHz seamless cavity production

- No advancements to report on spinning R&D since last meeting (still waiting characterizations from UniPD)
- Pre-financing arrived @ Piccoli → Ready to buy copper
- Definition of MOU with JLab (for EBW and CBP)
- Started MOU process with PTI (material-cavity exchange)

1.3 GHz electro-polishing implant

- Commissioning ongoing (design phase)
- Installation @ LNL expected in the first half of 2022



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Thanks for your attention



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