



Contribution ID: 151 Contribution code: WEP010

Type: Poster Presentation

Centrifugal Barrel Polishing of a 650 MHz Single-Cell Niobium SRF Cavity

Wednesday 13 August 2025 16:00 (2 hours)

This work reports the first application of centrifugal barrel polishing (CBP) to a 650 MHz single-cell niobium superconducting radio frequency cavity. The CBP was performed using a newly installed large tumbler designed to accommodate four large-sized 650 MHz multi-cell cavities. The CBP process was applied to reset the cavity's internal rough surface prior to electropolishing (EP). The study presents results on the surface condition and SRF performance following the CBP and subsequent standard cavity surface processing.

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No

Would you like to submit this poster in student poster session on Sunday (August 10th)

No

Footnotes

Funding Agency

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Yes

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Session Classification: WEP: Wednesday Poster Session

Track Classification: MC7 –Accelerator Technology and Sustainability