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Status of SRF cavity fabrication in Cavity Fabrication Facility (CFF) at KEK.

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We have Cavity Fabrication Facility (CFF) at KEK which is a dedicated facility to fabricate SRF cavities. CFF was constructed in the year 2011 and now it has two Electron-Beam Welding (EBW) machines, a press-forming machine, a lathe, a Chemical-Polishing room, and so on in clean rooms. We have been mainly focusing on the fabrication of 1.3-GHz Nb elliptical 9-cell cavities. Recently we fabricated six single-cell cavities where four of them were made from conventional Fine-Grain (FG) Nb material and two of them were made from the Medium-Grain (MG) Nb material which has the grain-size ranging from sub-mm to mm. We also fabricated three 9-cell cavities where two of them were made from FG Nb material and one of them was made from MG Nb material. The fabrication of MG-Nb 9-cell cavity is the first trial in the world. This presentation reports the updated status of machines and the detailed status of fabrication of cavities in CFF at KEK.

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Footnotes

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