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[Invited] Analysis of the production of MQXFA Low Beta Quadrupoles for HL-LHC at 50% coil fabrication

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This summer the US HL-LHC Accelerator Upgrade Project (AUP) reached an important milestone by completing 50% coil fabrication. AUP is fabricating half of the low beta quadrupoles (MQXFA) for the High Luminosity LHC (HL-LHC) at CERN. These magnets will be used in Q1 and Q3 Inner Triplet (IT) elements of HL-LHC. CERN is fabrication the magnets for Q2a and Q2b IT elements. The AUP effort is shared by BNL, Fermilab and LBNL, with strand QC verification tests at NHMFL.
At the time of this conference, conductor procurement is almost complete, cable fabrication is ˜75% complete, 50% coils have been completed, 8 magnets have been assembled and some of them tested.
In this paper we are going to discuss achievements, challenges and lessons learned up to this point of production. Plans up to end of production will also be presented and discussed.

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