

## SuNAM's Coated Conductor Development for NMR/MRI Applications

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**Abstract**— SuNAM has been producing and providing coated conductors (CCs) for many years. We also developed HTS magnets including a 26.4-T Liquid Helium cooled one, an 18 T magnet for the axion detector, and a 400 MHz conduction-cooled NMR magnet. From our own experience and customer feedback we learned which properties of CC we should pay more attention to for a homogeneous magnet development. We have a new HTS MRI magnet project in Korea, details of which will be presented in this session, and we're going to provide tapes. From discussions with contractors for the project, we arranged qualification criteria, and methods to verify them. We report on our developments of CC for NMR/MRI applications in terms of in-field critical currents, mechanical properties, process control, measurements for verifications, and post-processing for specific needs.

**Keywords (Index Terms)**— Critical current, superconducting magnet, coated conductors, mechanical strength, quality control.

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