

**YBCO 박막형 선재를 이용한 초전도 전류제한기의 연계에 따른 고온 초전도
케이블의 사고전류 통전 특성에 관한 연구**

**Study on Transport Current Properties of HTS cable connected with SFCL by using
YBCO Thin Film type wire**

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Abstract : HTS(High Temperature Superconductor) cable has a high possibility of practical use due to the possibility of low voltage and high capacity transmission caused by its lower power loss than copper cable. On the other hand, when fault current occurred, resistance increase caused by superconductivity loss, the amount of power supplies has diminished, furthermore, it's necessary to take the possible danger of damage to HTS cable into account. Therefore, an effective plan for dealing with the above problem is to link HTS cable to SFCL. In this study, we researched the possibilities of normal transport current as well as the safety of HTS cable by analyzing the properties of transport current in HTS cable connected with SFCL.

Key Words : HTS cable, SFCL, YBCO coated conductor

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