MT27, 27th International Conference on Magnet Technology



Contribution ID: 312 Contribution code: WED-PO2-723-07

Type: Poster

Inductive Method for the Critical Current Measurements on the Aluminum stabilized cable

Wednesday, 17 November 2021 10:30 (20 minutes)

An aluminium stabilized superconducting cable is developed for the Circular Electron Positron Collider(CEPC) detector magnet. In order to measure the critical current of the prototype cable, an inductive method is developed: the cable is closed in a low resistance loop forming the secondary coil of a transformer, while the 6 Tesla background magnet serves as the primary.

The critical current is measured for the prototype cables before and after co-extrusion to ensure that the degradation from this progress meet the design requirements.

Primary authors: ZHAO, Ling (Institute of High Energy Physics, Chinese Academy of Sciences); ZHU, Zian (IHEP Beijing); Ms WANG, Menglin; Mr XIE, Zongtai; Dr ZHANG, Guoqing

Presenter: ZHAO, Ling (Institute of High Energy Physics, Chinese Academy of Sciences)

Session Classification: WED-PO2-723 Moel Coil II & Test Facilities