



Contribution ID: 168

Type: Poster

Test Results of ITER 52-kA HTS Current Lead Prototypes

Monday, 5 June 2017 13:40 (2 hours)

The Institute of Plasma Physics, Chinese Academy of Sciences (ASIPP) is responsible for the construction and performance testing of the 30 pairs of ITER high-temperature superconducting (HTS) current leads. A first pair of Poloidal Field (PF) coil type, 52-kA HTS current lead prototypes was built and cold tested in ASIPP in mid-2016. The test results approved their excellent performance on low joint resistance, long loss-of-flow accident time and high current-sharing temperature. The overheating time, mass flow, and heat loads to 5-K ends also meet the expectation. This paper summarizes the major test results for the PF 52-kA HTS current lead prototypes.

Eligible for student paper award?

No

Authors: LIU, Chenglian (Institute of Plasma Physics, CAS); DING, Kaizhong (Institute of Plasma Physics, CAS); Dr ZHOU, Tingzhi (Institute of Plasma Physics, CAS); Mrs DU, Qingqing (Institute of Plasma Physics, CAS); DONG, Yujun (Institute of Plasma Physics, CAS); Dr LU, Kun (Institute of Plasma Physics, CAS); Prof. SONG, Yuntao (Institute of Plasma Physics, CAS); Dr NIU, Erwu (ITER China); BAUER, Pierre (ITER Organization)

Presenter: LIU, Chenglian (Institute of Plasma Physics, CAS)

Session Classification: M.POS: Poster Session M

Track Classification: Magnets