



Contribution ID: 648

Type: **not specified**

P2.076 Electrical performance characterization of helium inlet of the ITER PF6 coil double pancakes

Tuesday, 18 September 2018 11:00 (2 hours)

The helium inlet is one of the most important components of ITER Poloidal Field (PF) coils. The insulation structure of helium inlet is critical to provide sufficient electrical and mechanical properties in practical application. In this paper, an ITER PF6 coil double pancake helium inlet trial mock-up was designed and manufactured by simulating the actual manufacturing process. A thermal cycling test on the sample was carried out from 290 to 77 K, and before and after the thermal cycling, the turn-to-turn DC HV tests and Paschen test, also the final breakdown DC test after the thermal cycling test, were carried out. The test results satisfied the requirement of ITER. It is therefore verified that the PF6 coil double pancake helium inlet insulation has good electrical properties, and can be applied to the formal production of the PF6 coil double pancakes.

Presenter: XIE, Yanyu (Institute Of Plasma Physics Chinese Academy Of Sciences)

Session Classification: P2