

Preliminary Test Results of GDC Electrode with Gap Insulation On SWIP Test Bed

Electrodes with two gap structures are designed. The objective of these tests was to explore the relationship between the glow discharge and different gap. At the same time, through engineering example, the reasonability and practicability of gap insulation and stainless steel grid used as electrical shielding was proved.

Contribution

- ✓ We studied the relationship between the glow discharge and different gap;
- ✓ We found that , heat load changed little when the pressure value above 0.6 Pa. This seems to suggest that heat load is not changed obviously with increasing pressure. So I guess it could be the same for ITER GDC.
- ✓ Through engineering example, the reasonability and practicability of gap insulation and stainless steel grid used as electrical shielding was proved.
- ✓ Operation condition of ITER GDC is explored.