

**Cryogenics Operations 2018** 

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## Construction and Application of the 2nd KSTAR Cryo-plants

## Summary

The old cryoplant (1 kW @ 4.5 K), which was used for the tests of the KTSAR cryogenic components from 2002, was installed into the KSTAR building for the operation of the new cryogenic facilities such as in-vessel cryopumps, supersonic molecular beam injector, pellet injection system, 2nd neutral beam injector, and the other technical experimental components. Before the installation, there have been maintenances in the warm compressor station, electrical power supply, oil-filter, and so on. In 2015, new 3rd distribution box was constructed for the cryogenic components mentioned above. From 2016, the cryoplant started operation for the plasma experiments. Recently, 2nd neutral beam injector started installation and preparing commissioning of the cryopanel in the beam injector. Details of constructions and application results will be presented.

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