

## STATUS OF THE KSTAR TOKAMAK CONSTRUCTION<sup>1</sup>

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The KSTAR is a superconducting tokamak under construction at the Korea Basic Science Institute (KBSI) in Daejeon, Korea. The project mission aims at a steady-state operation and advanced tokamak physics. After the substantial engineering progress, the project is in the fabrication and assembly phase. The fabrication of the major tokamak structures such as vacuum vessel, cryostat, port system, thermal shields, and gravity support, is completed. The manufacture and testing of the 30 superconducting magnets are rigorously progressed. As of August 2005, 9 toroidal field magnets, 4 large poloidal field coils, and 3 central solenoid coils are completed. To verify the operational feasibility of the KSTAR coils, cool-down and current charging tests of a real sized prototype TF coil and a pair of CS model coil have been finished. The assembly of the device has begun from beginning of 2004. Now, the vacuum vessel body, thermal shields and 6 toroidal field magnets are assembled on the tokamak pit within specifications. All magnet structures will be delivered by October 2006. Assembly finish is scheduled for August of 2007. This paper describes the manufacture and assembly progress of the KSTAR tokamak.

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