FINAL DESIGN STAGE OF PORT PLUG TEST FACILLITY FOR ITER TOKAMAK

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To achieve the overall ITER machine availability target, the availability of diagnostics and heating port plugs shall be as high as 99.5%. To fulfill these requirements, it is mandatory to test the port plugs at operating temperature before installation on the machine and after refurbishment. The ITER port plug test facility (PPTF) provides the possibility to test upper and equatorial port plugs before installation on the machine.

“Project Center ITER” and “Cryogenmash” have finished design with necessary technical and physical reports of all the subsystems of the test stand. The major subsystems are:

- test tank

-vacuum system;

-heating system;

- control system;

- PSS system.

The report describes the final stage of characteristics of subsystems and of integration of vacuum stands in a "hot cell" ITER and in Domestic Agencies.

The example of integration design of PPTF for Domestic Agencies with all subsystems is presented on the figure bellow.

