

Designs of New Components for ITER ECH&CD Transmission Lines*

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The ITER Electron Cyclotron Heating and Current Drive (ECH&CD) transmission line components will need to be suitable for 2 MW cw operation and have high transmission efficiency. The high heat loads compared to existing transmission lines will require enhanced cooling and, for some components, new or modified designs. Portions of the transmission line between the closure plate and the tritium barrier window have special design considerations to assure that tritium from the tokamak plasma does not leak into the tokamak building. Design aspects of new components meeting the ITER requirements are presented.

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