

Status of 84 GHz Transmission Line System of KSTAR ECH System

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The 84-GHz, 500-kW electron cyclotron heating (ECH) system has been developed and installed for the KSTAR tokamak at National Fusion Research Center (NFRC). The 84-GHz millimeter wave is transmitted from the gyrotron to the launcher through 31.75 mm-ID circular corrugated waveguide with propagation mode of the HE₁₁ mode. In this paper, we present the status of the KSTAR 84 GHz ECH transmission line system, the alignment method during the assembly of the waveguide components, and the evacuated system.