

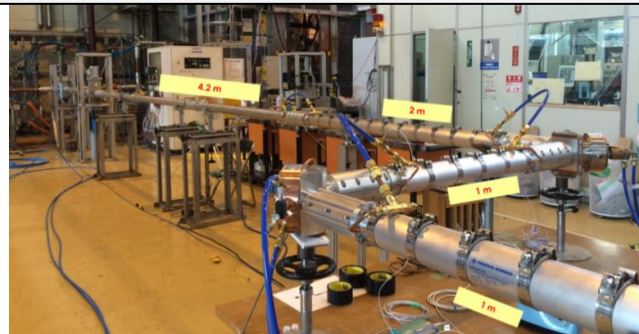
4.2-m Waveguide Assembly and Other ECH Components for ITER Tested Under High Power Conditions

- **Fabricated New Components Required for ITER ECH Transmission Line**
 - Water-cooled waveguide, including 4.2-m assembly (longest, straightest produced)
 - Meet strict tolerances necessary for Tx line high mode purity req.
- **Tested Components with High Power at QST Fusion Facility**
 - ITER-like conditions (450 kW for 300 s)

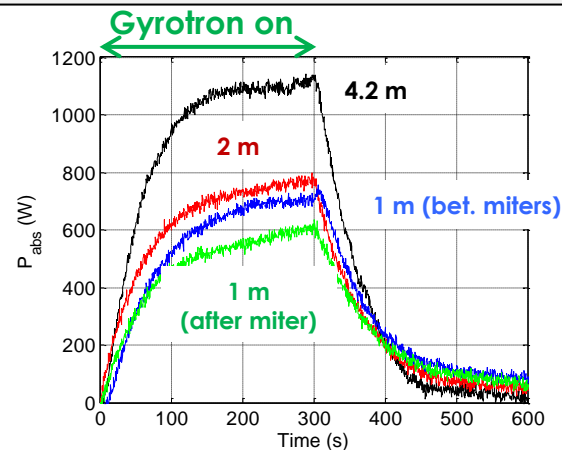
4.2-m Corrugated Waveguide Assembly for ITER ECH



Tx Line Testing at QST Fusion Facility (Naka, Japan)



Absorbed Power ($P_{\text{gyrotron}} = 450 \text{ kW}$, $t = 300 \text{ s}$)



 **Demonstration of new waveguide components for the demanding ITER ECH environment**