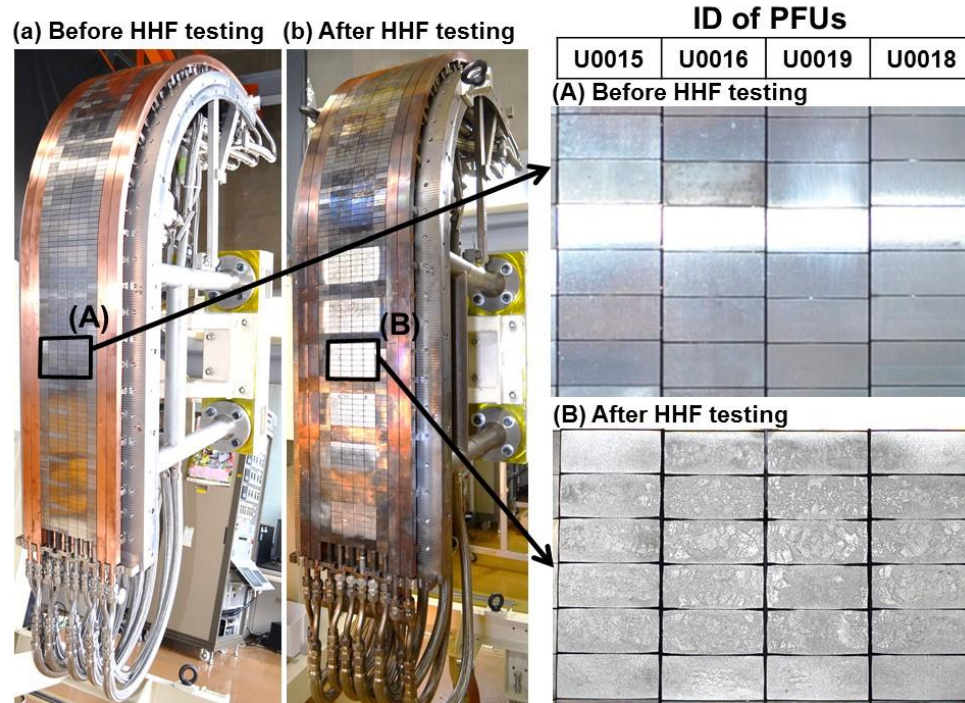


FIP/2-1Ra Summary Slide

Progress of Qualification Testing for Full-Scale Plasma-Facing Unit Prototype of Full Tungsten ITER Divertor in Japan

Y. SEKI, K. Ezato, S. Suzuki, K. Yokoyama, H. Yamada, T. Hirayama (QST), T. Hirai, F. Escourbiac (ITER Org.), A. Volodin and V. Kuznetsov (NII-EFA)



Through full-scale prototyping, JAEA demonstrated the manufacturing ability of the full-tungsten plasma facing unit.

- All joint surfaces in four PFUs with a casting Cu interlayer successfully passed ultrasonic testing.
- Surface profile in the target part stayed within the required profile tolerance of ± 0.25 mm.
- Full-scale prototype withstood the repetitive heat load of $10 \text{ MW/m}^2 \times 5000$ cycles and $20 \text{ MW/m}^2 \times 1000$ cycles which are three times higher than the requirement (300 cycles).