

Project Engineering and Design

for ePIC pFRICH cylindrical vessel outer shell

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on behalf of the Stony Brook team

Center for Frontiers in Nuclear Science

pFRICH meeting

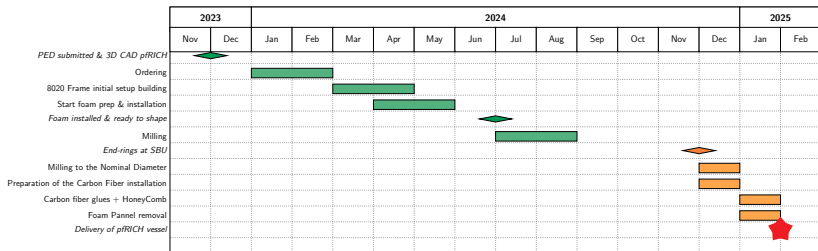


Vessel Construction Update

- ▶ **Milling Precision:** Achieved 0.1 mm circularity precision.
Video: [Mandrel Video](#)

- ▶ **3rd End-Rings:**
 - ▶ The geometry of the new end-ring is more uniform and of higher quality.
 - ▶ Diameter variations of up to 1 mm were observed, with approximately 68% within 0.250 mm.
Video: [3rd End-Ring Video](#)
 - ▶ **The circularity of the 3rd end-ring is acceptable.**
 - ▶ **Awaiting a decision regarding the 4th end-ring.** The first two end-rings have been returned to Purdue University.

pfRICH vessel building



- ▶ **Awaiting a decision regarding the 4th end-ring.**
- ▶ **The 2 next steps:**
 - ▶ Finalize milling to nominal diameter (ND = 1260.540 mm - 0.5 mm - glue).
 - ▶ Apply primer to smooth the foam surface and improve adhesion.