Cabling Test At CSU

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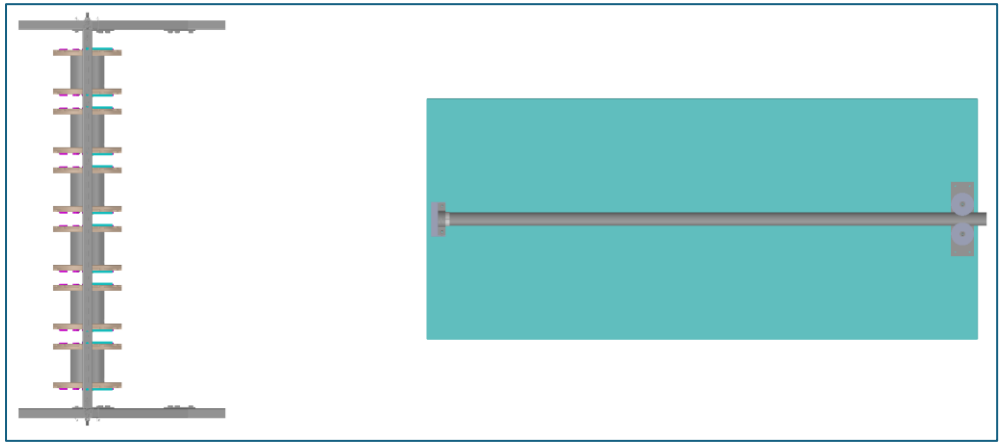
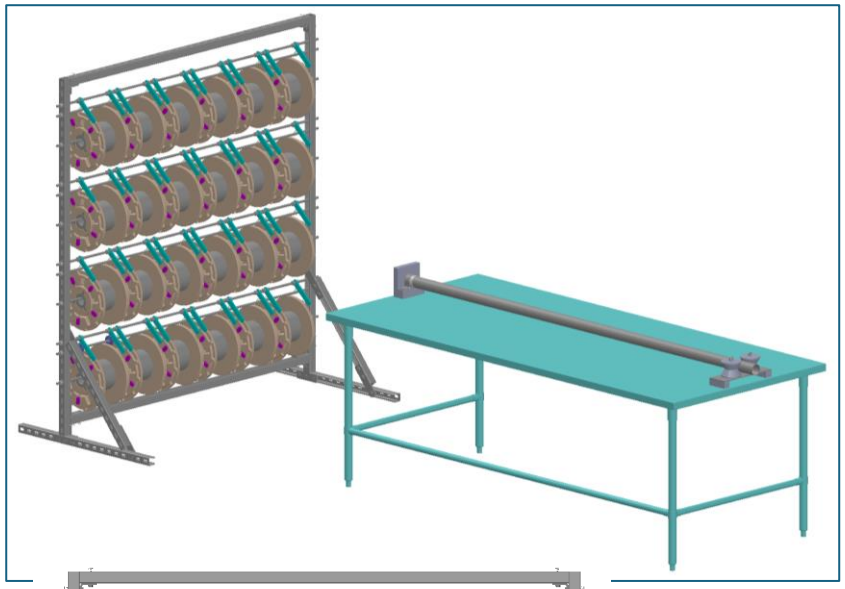
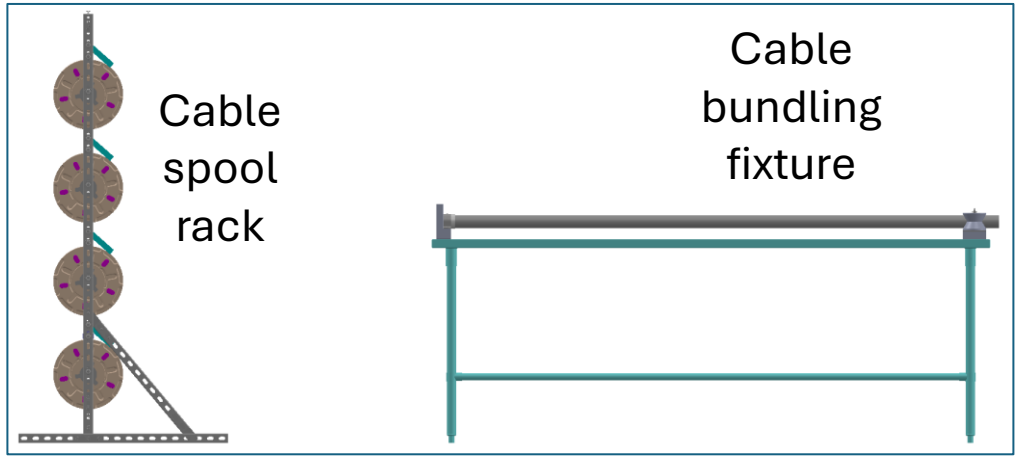
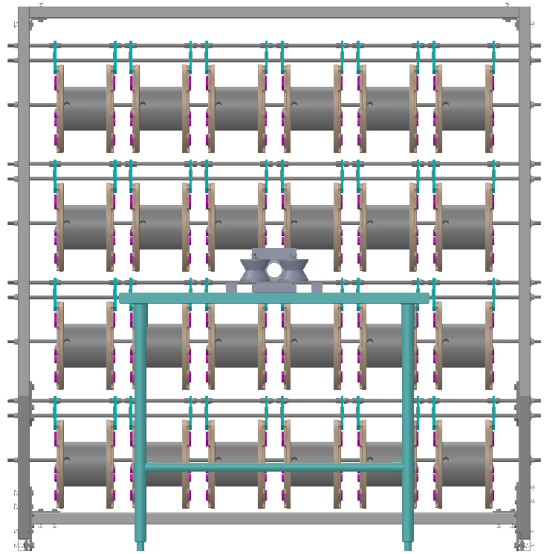
Cable bundle assembly station

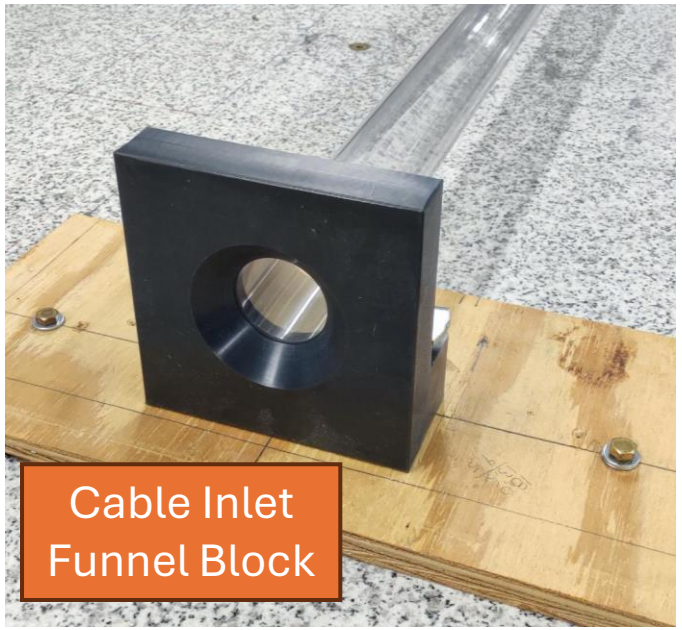








Machined parts of the cable bundling fixture

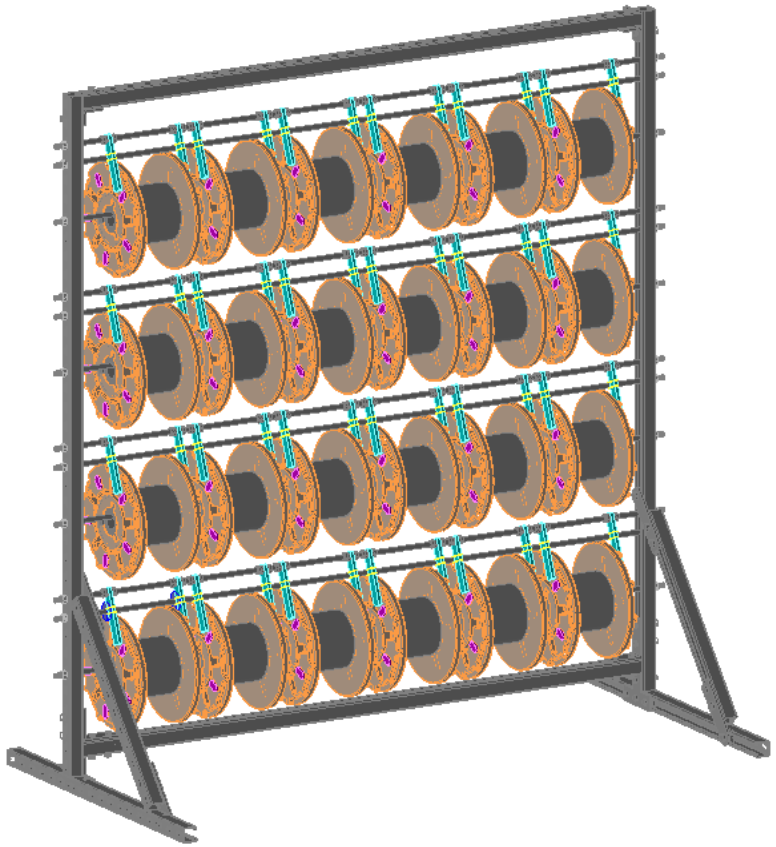


Preload the sleeve onto the sleeve application tube

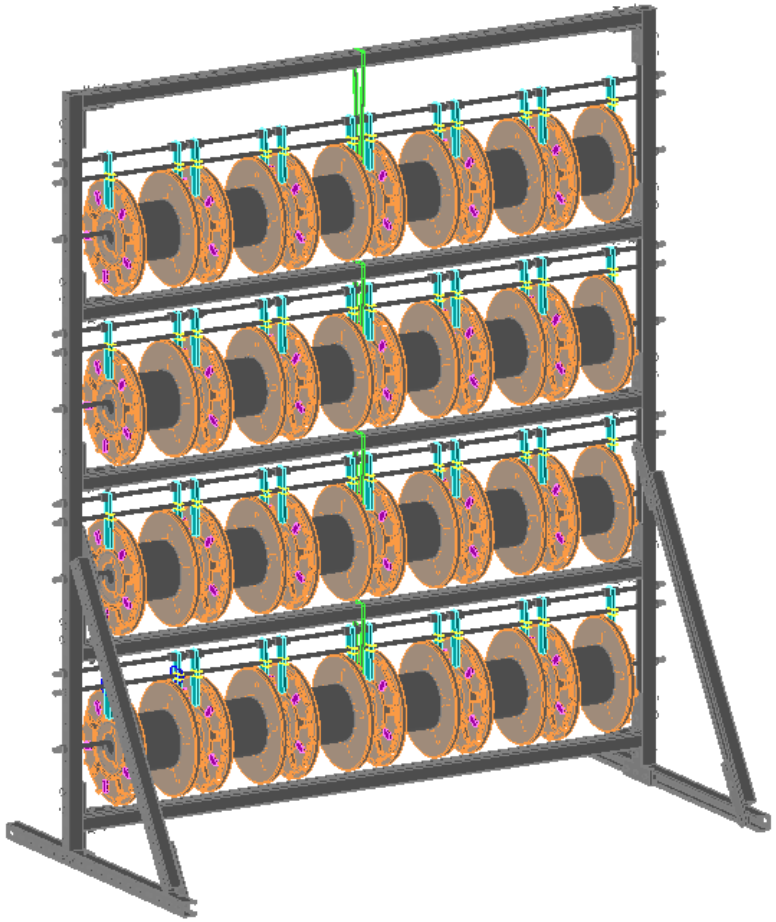
126 ft (38.4 m) long sleeve is loaded on the 8 ft long tube.

Cable Spool Rack Design

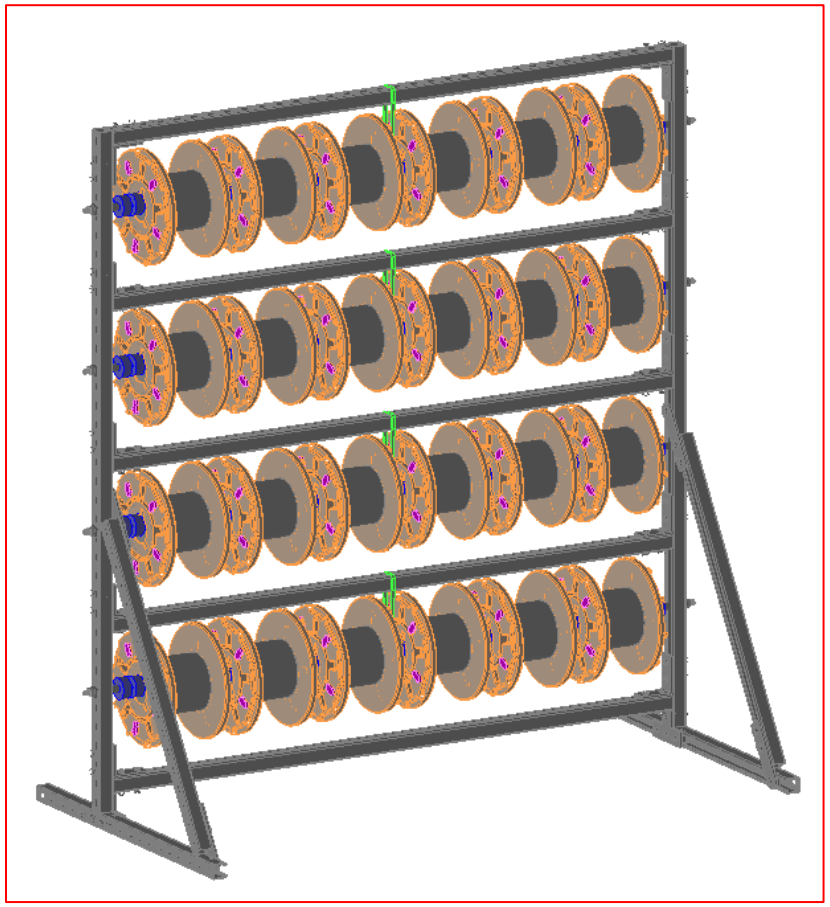
Spool rack design #1



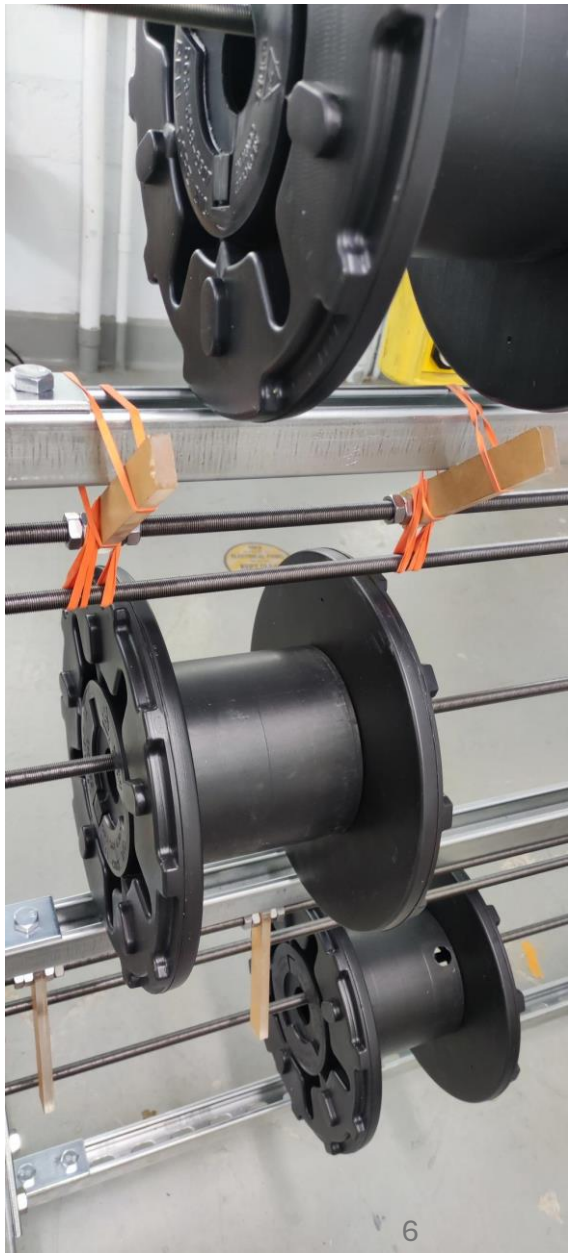
Spool rack design #2



Spool rack design #3



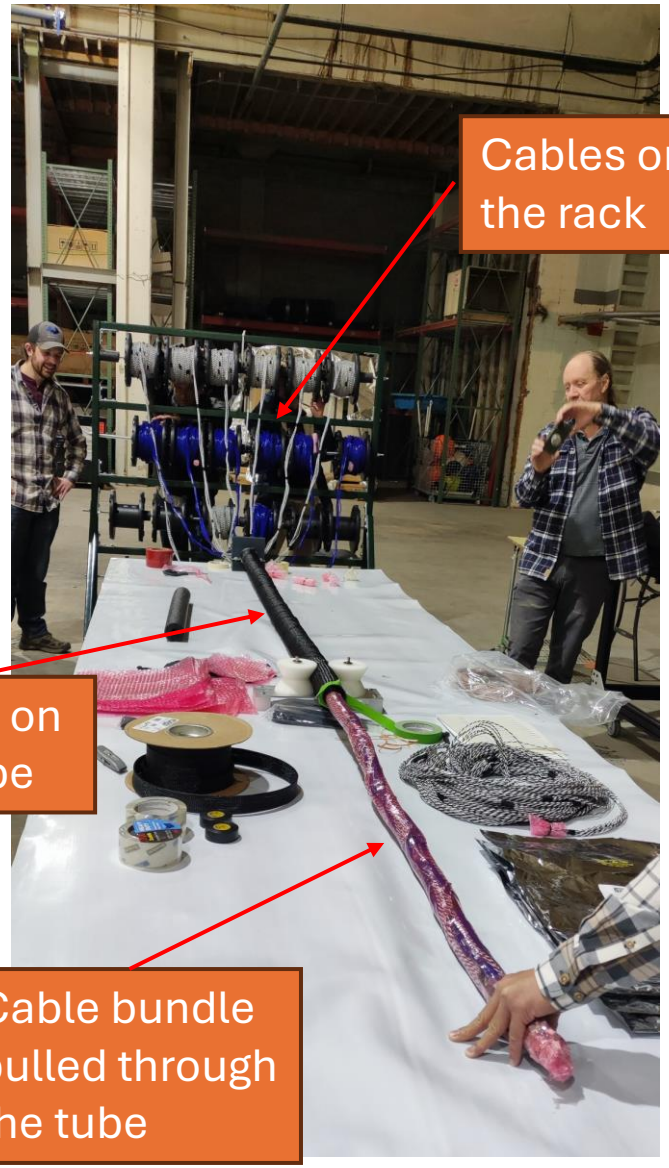
Prototypes of Cable Spool Rack

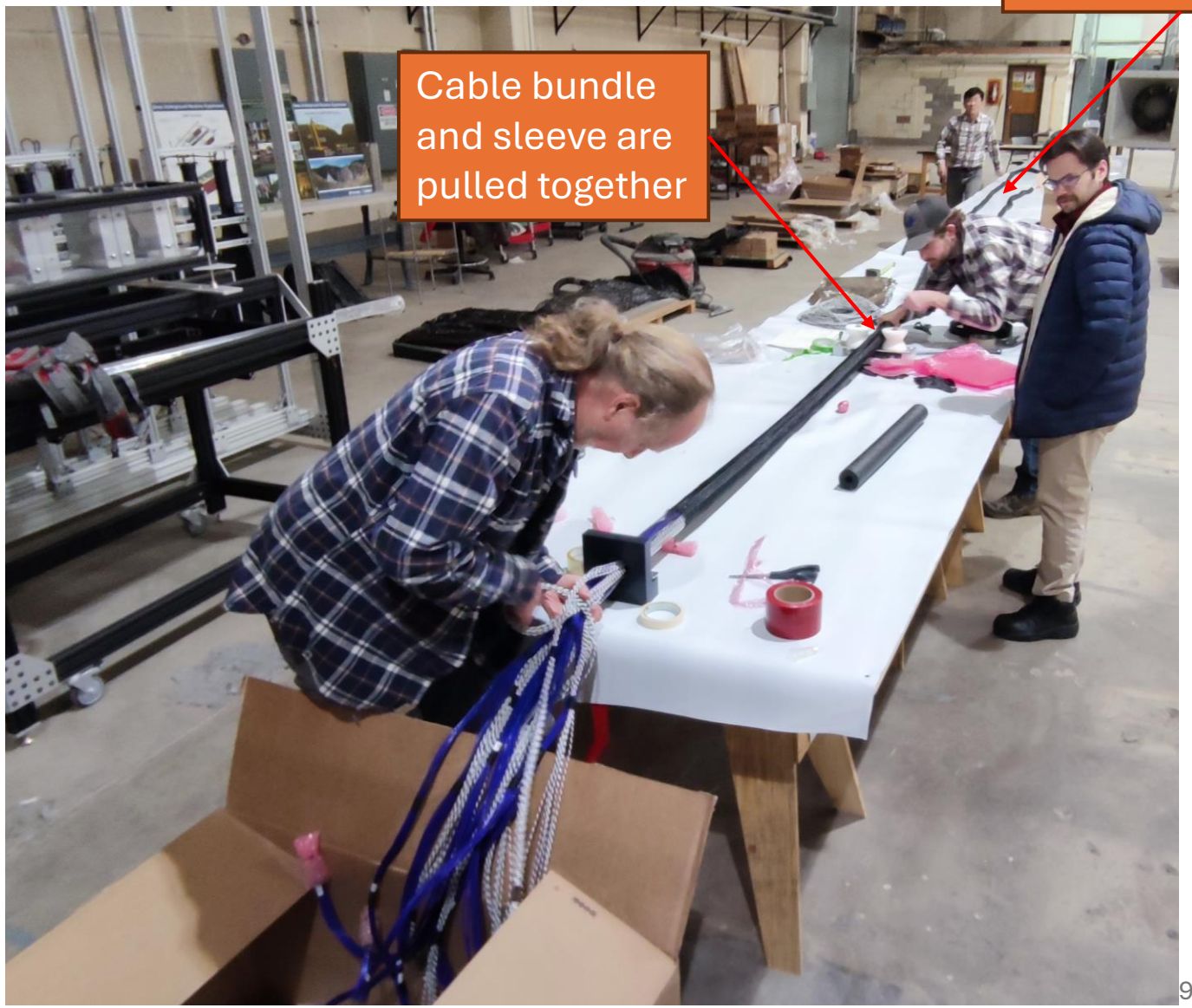


Cable bundle assembly station at CSU

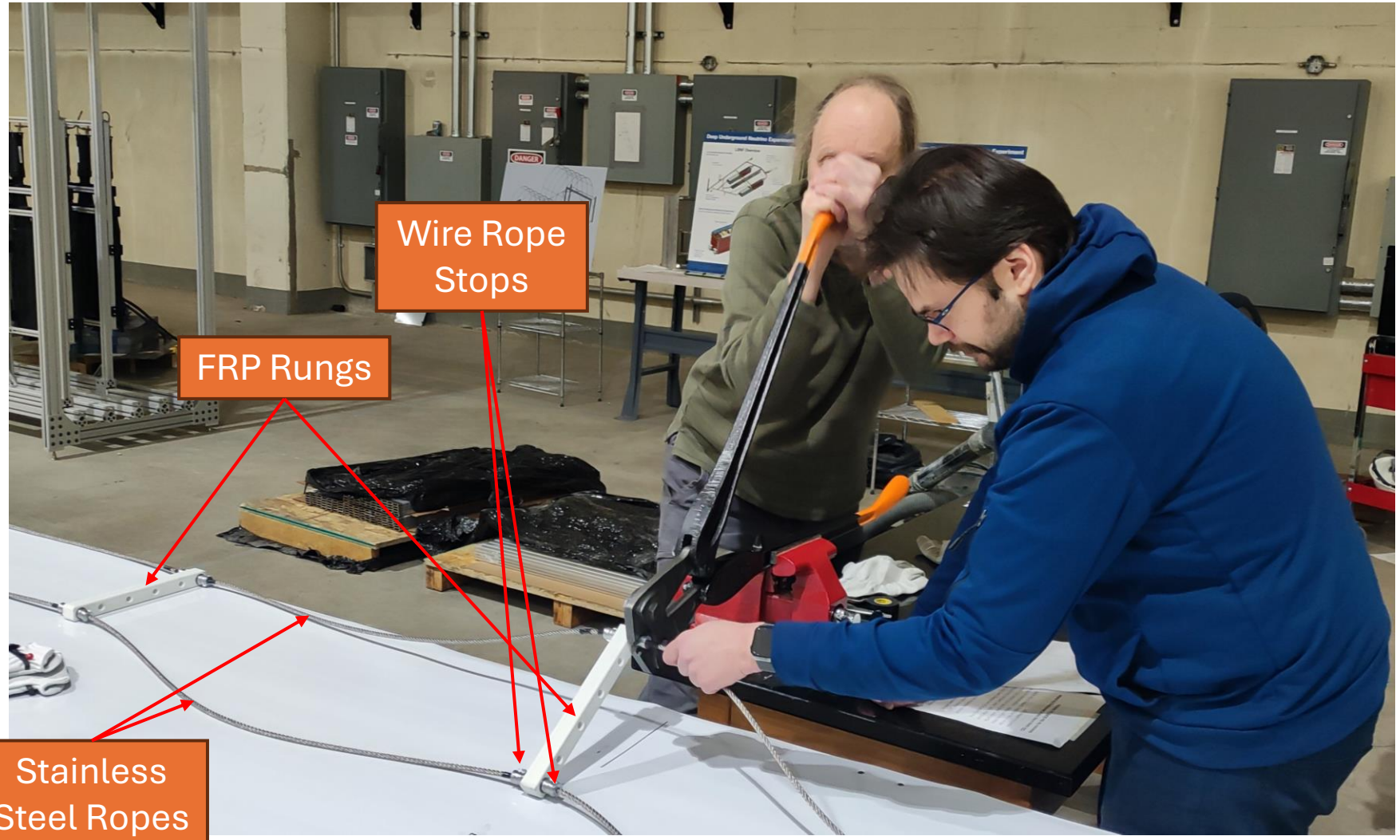
Winding individual cables onto separate spools

Assembling the cable bundle

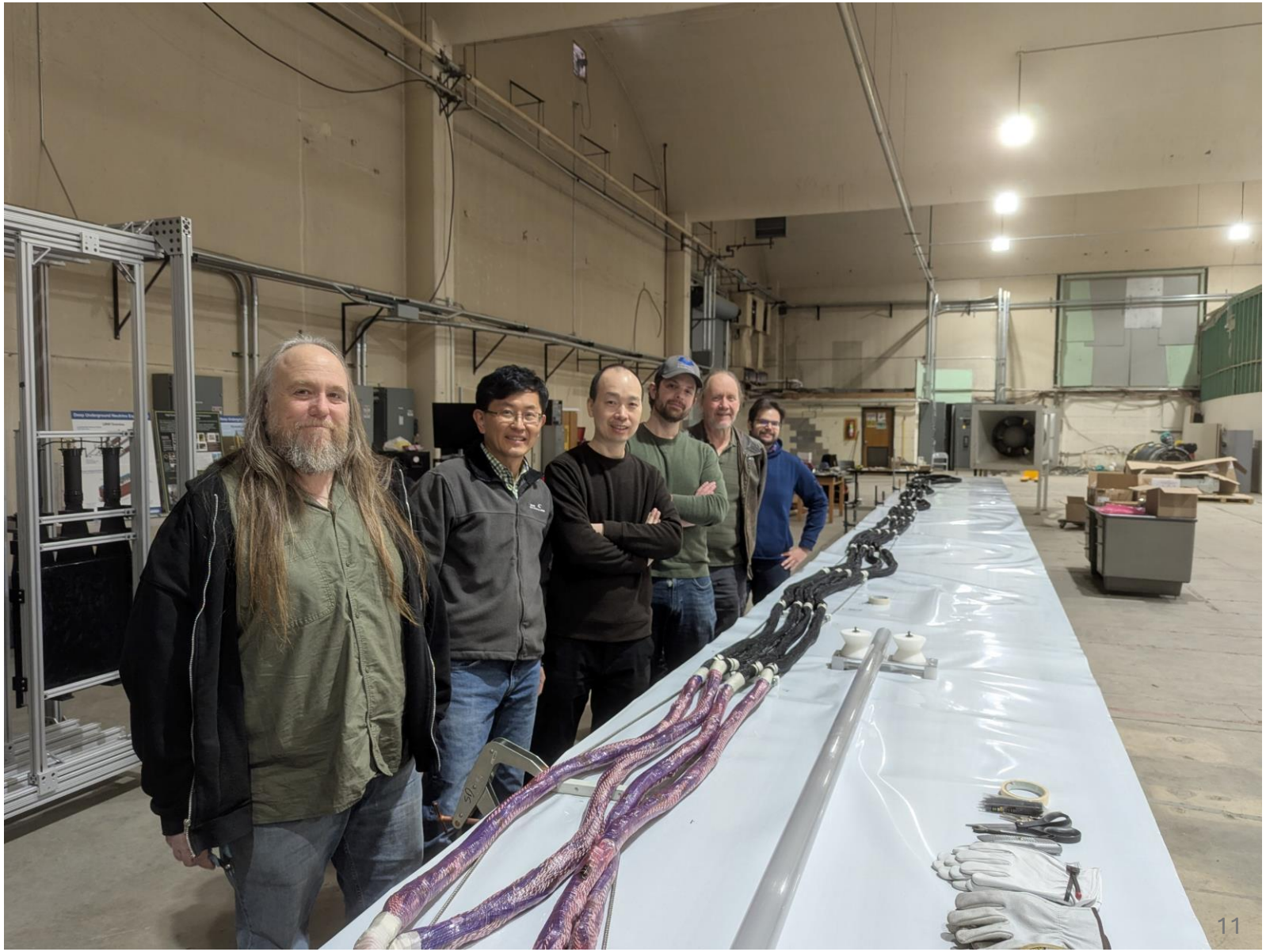




Ladder cable tray assembly



Cable bundles attached to the cable tray



Summary

- Two cable bundles are assembled using the cable bundle assembly station.
- One ladder cable tray is assembled.

Issues Found:

- Winding cables onto the spools is time-consuming.
- Cables on the spool unwind due to their own weight.
- Cables fit very tightly into the tube, and the connectors must be staggered.

Improvements CSU Plans to Make:

- Design a fixture for winding cables onto the spools.
- Implement a brake mechanism on the cable spools.
- Split the 8 ft tube along its axis to allow for direct placement of cables inside.