

Lacing the Winding Pack: Initial Results

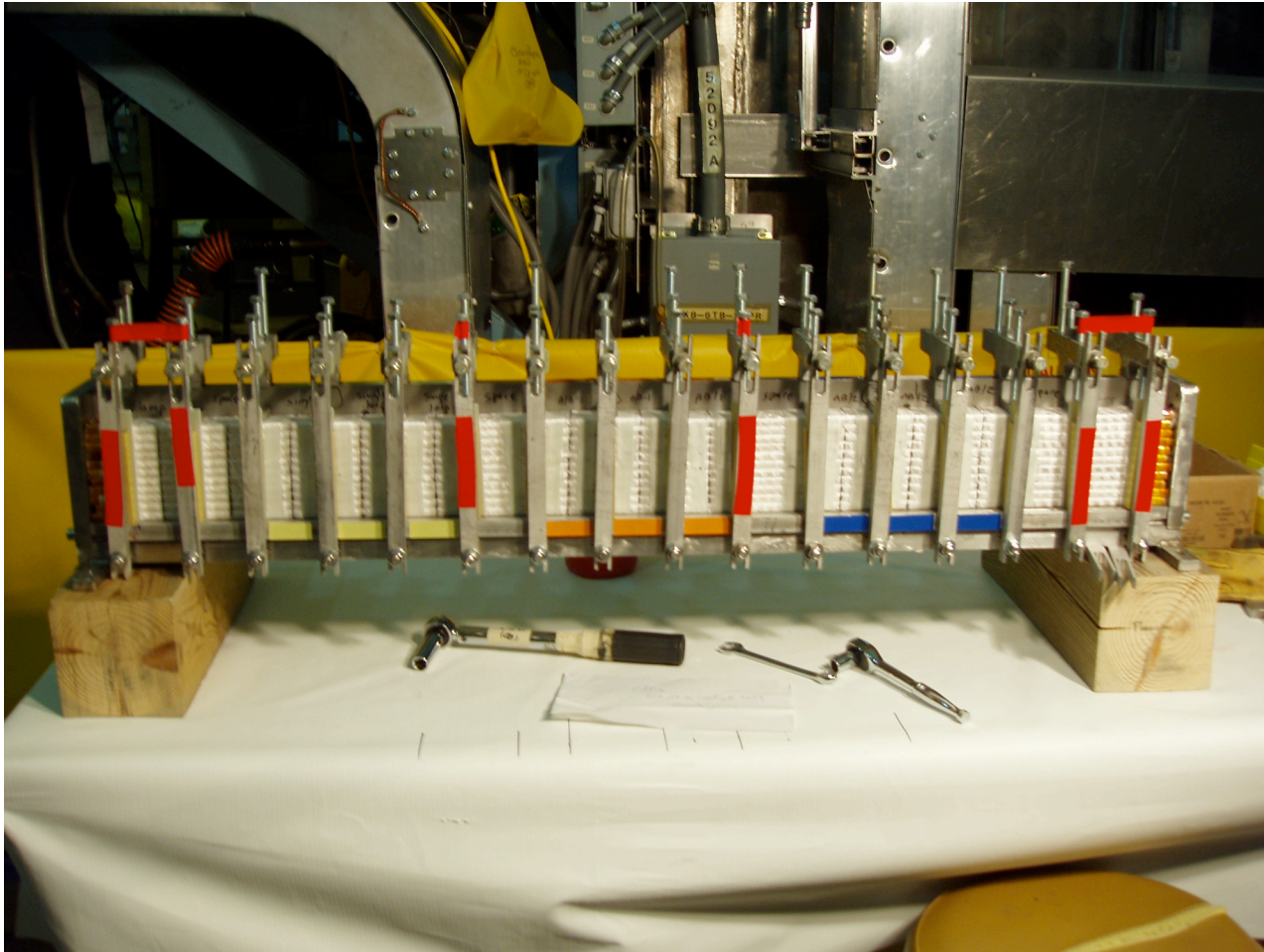
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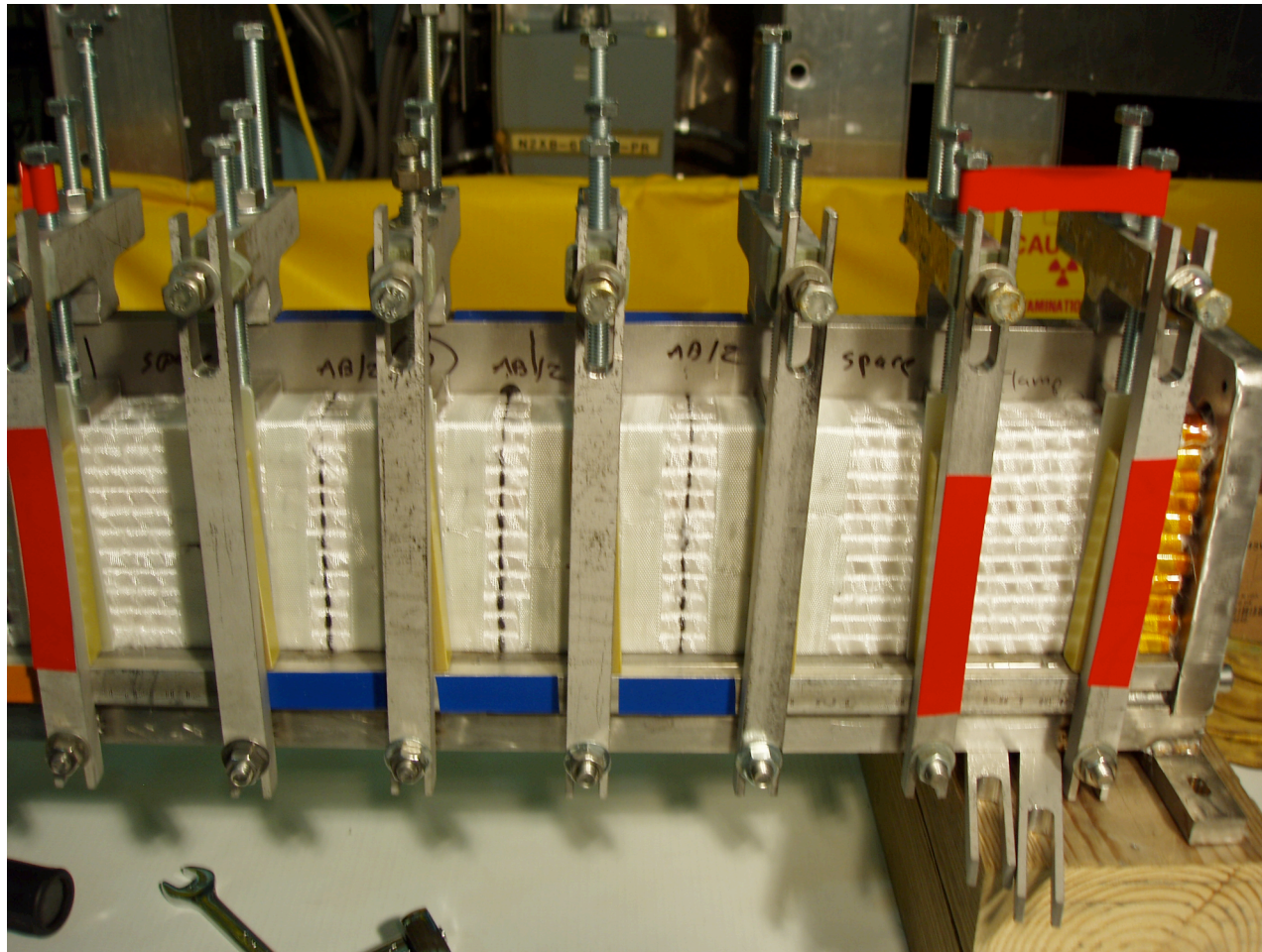
Overview

- Test M. Zarnstorff's concept of lacing the winding pack to stabilize it while clamps are removed
- Straight tee stripped
- Studs installed to hold side clamps
- Conductor re-used in 4 X 11 pattern
- No cladding or ground wrap
- Top clamps torqued to 30 in-lbs when tight
- Tried 3 different lacing patterns using 3/4" wide glass tape-3 sections (regions between clamps) each
- Ends secured with double-sided tape
- Width and height of pack measured with calipers
- Compared lacing with no lacing
- Lacing makes only modest improvement in stability of pack-not adequate

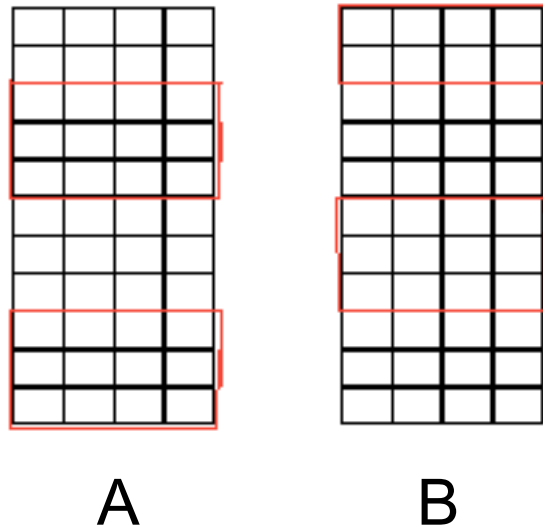
Straight Tee



Straight tee-close up

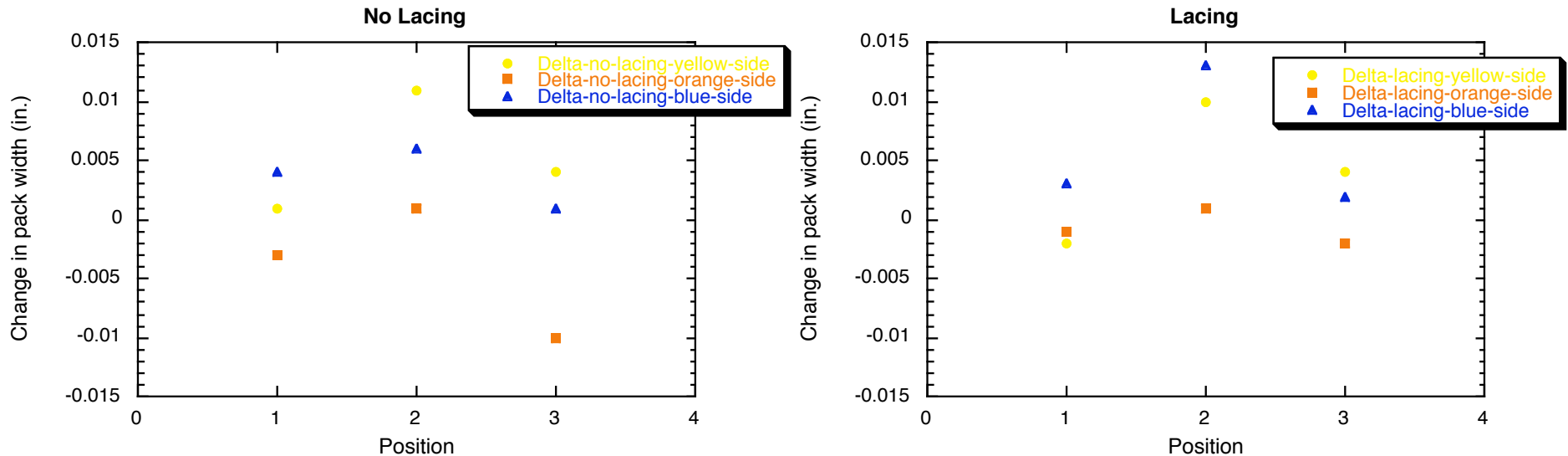


Lacing Patterns



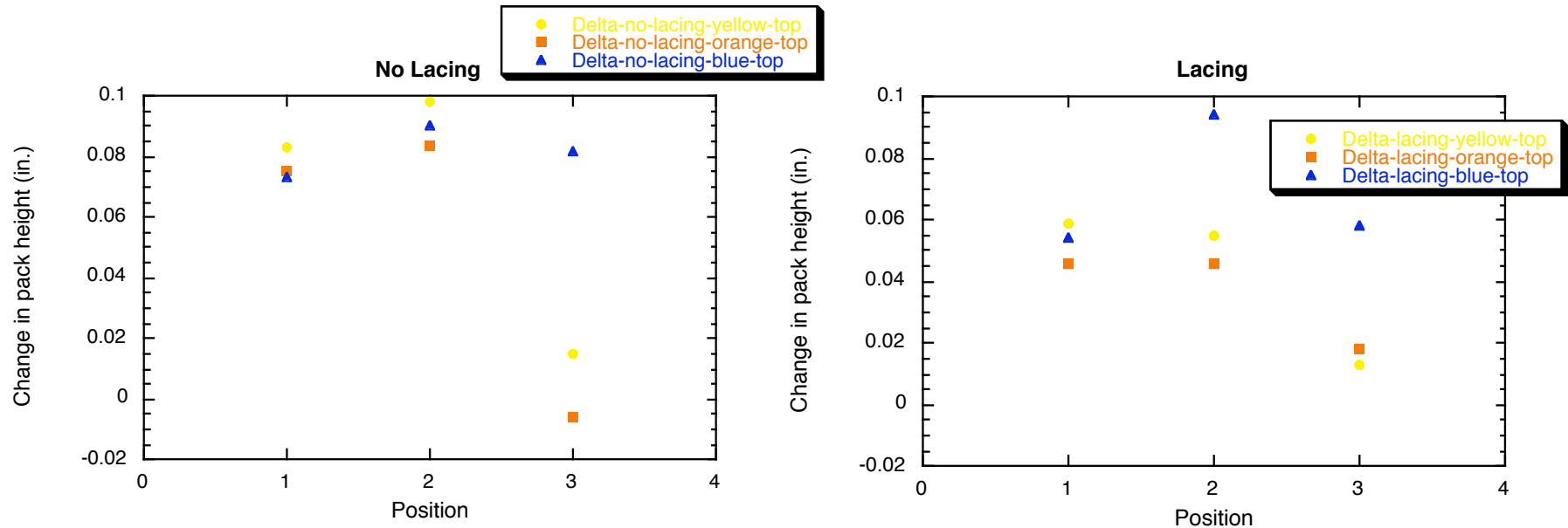
- Yellow: all around only on each side of clamp
- Orange: A on one side of clamp, B on other side; all around on top of both
- Blue: both A and B each each side of clamp; all around on top of both

Change in pack width



- No-lacing measurements made before lacing ends attached
- Change in width similar in both cases
- Change in width not large in either case

Change in pack height



- No-lacing measurements made before lacing ends attached
- Change in height large in both cases
- Lacing makes only modest improvement

Summary of average changes

Width

	Yellow	Orange	Blue
No lacing	0.005	-0.004	0.004
Lacing	0.004	-0.001	0.006

Height

	Yellow	Orange	Blue
No lacing	0.065	0.051	0.082
Lacing	0.042	0.037	0.069

Units: inches

- Another observation: successive unclamping/clamping cycles yielded same width and height measurements within a few thousandths of an inch (measurement error).