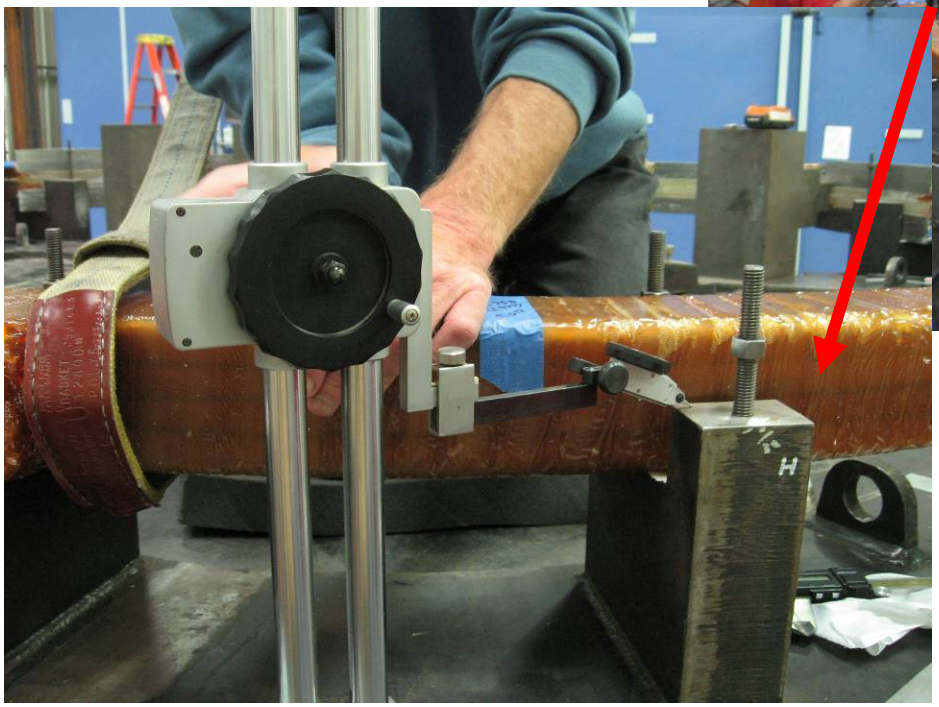
X-Y Geometry Check

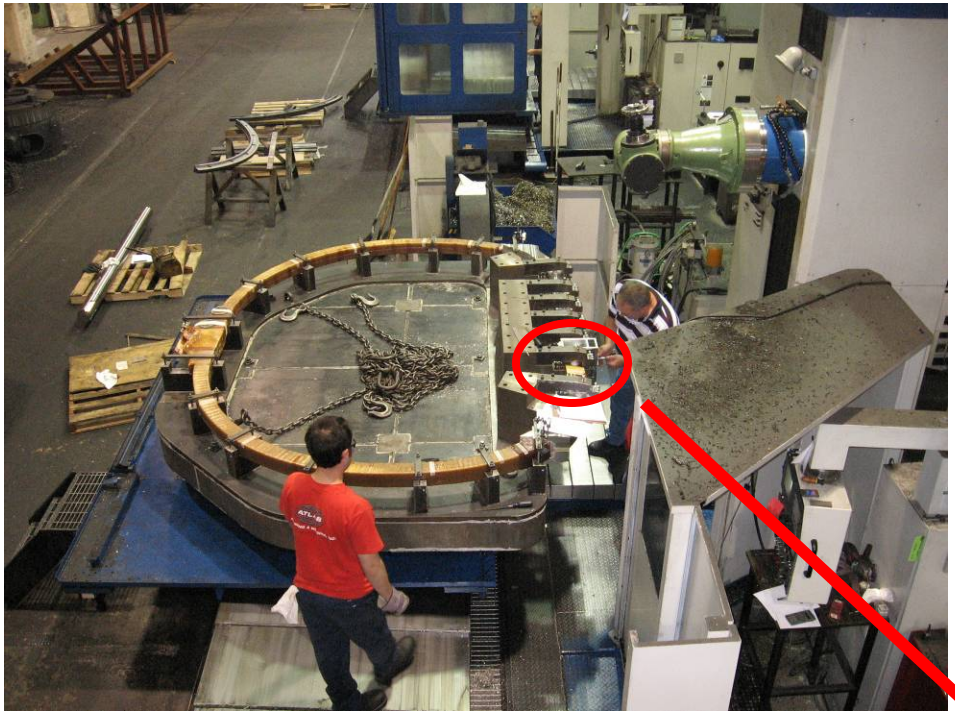
- Solid steel fixture used as template
- Saddles in fixture are precisely machined to within +/-.005 in one setup in a large CNC machine and inspected
- Coil inserted into fixture and gaps measured in saddles to determine location of coil with respect to nominal requirement
- Inspection report provided referencing dimensional requirements from drawing and associated as built tolerance

Planarity Geometry Check

- Height of center line of coil checked against the center plane of the coil and deviations are recorded.

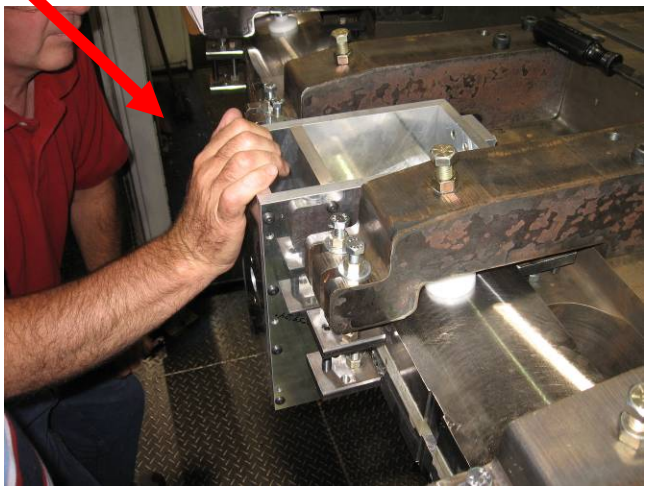


Wedge Geometry Check

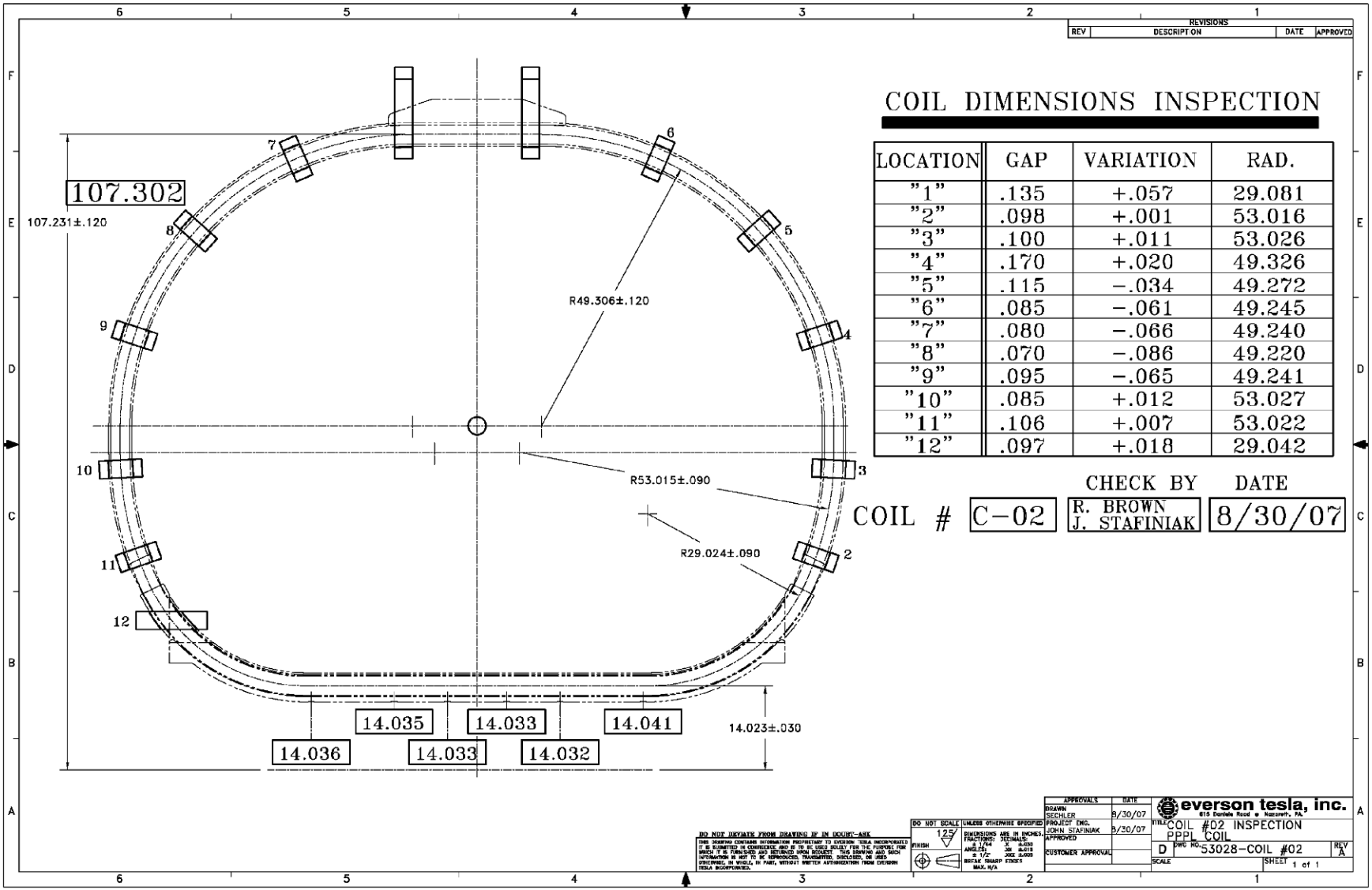


- A precisely machined wedge template is used to inspect the wedge angle as well as the location of coil with respect to the intersecting axis formed by the angle

- The remaining coil geometry is located with respect to the axis described by the intersecting wedge planes by referencing back to an inspected point on the fixture
- The true position tolerance with respect to flatness and planarity of the wedge cut is inspected using a probe on the CNC machine



Dimensional Inspection Report Example TF#2



Verification for Coil #1

- PPPL verified Everson tooling and measurement techniques on TF Coil#1 on location at Everson