

# Vertical Drift QC Jigs and Straightness Check

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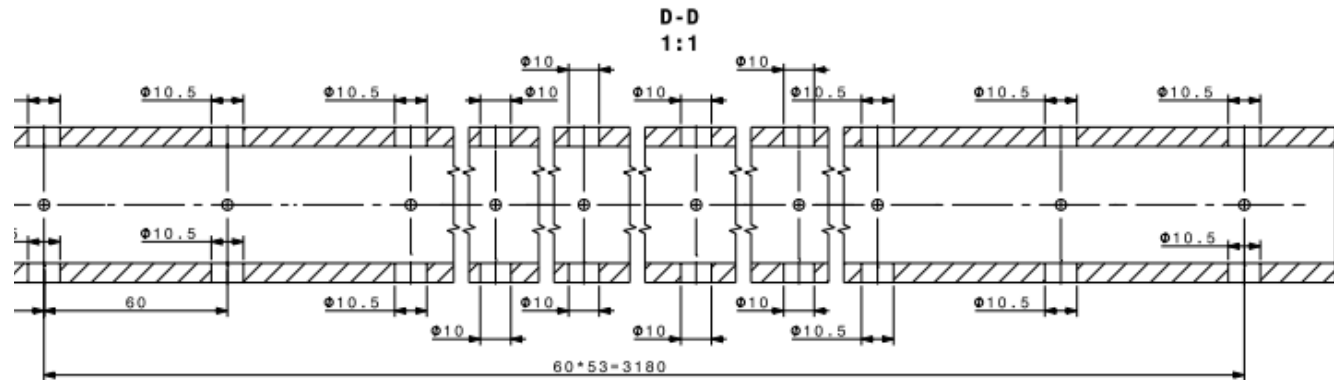
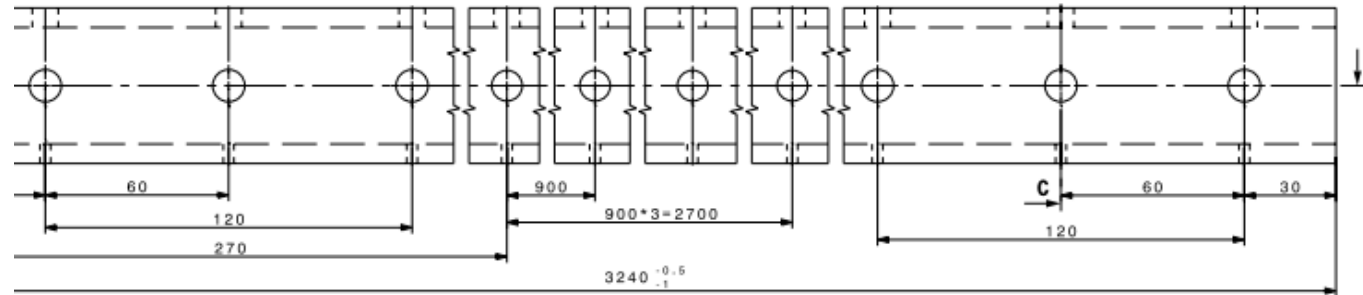
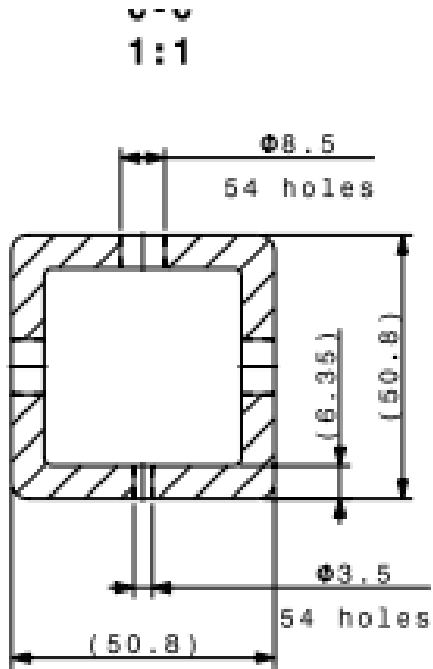
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# Outline

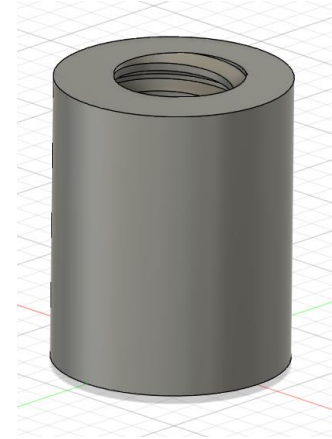
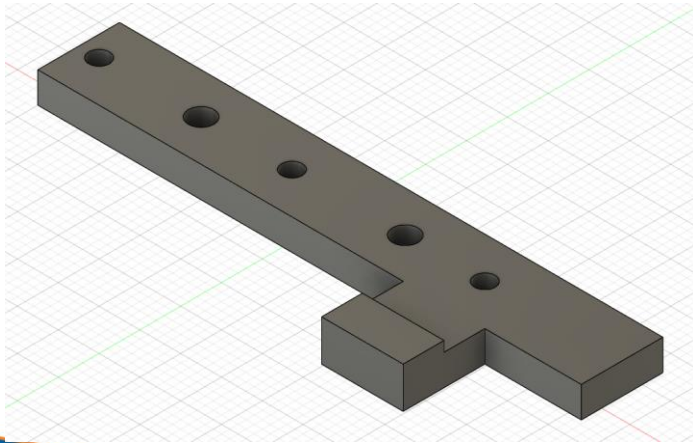
- Design of Vertical Drift QC jigs
- How to use VD QC jigs
- Design of table for straightness check
- How to perform straightness check

# Design of the VD QC Jigs



# Design of the VD QC Jigs

- Three components: Base Plate, Bolt, Cap
- Caps check hole size and the base plate and bolt check position
- Holes on base plate are slightly larger than the bolt to allow for 0.0025in of movement



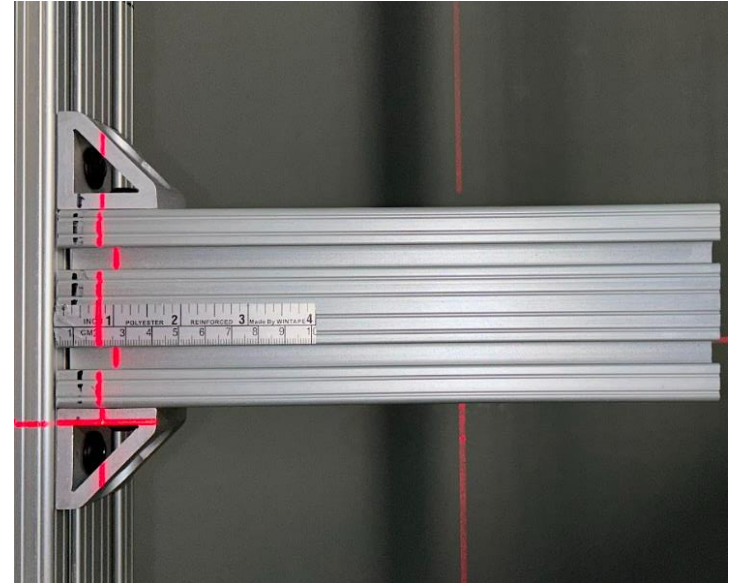
# How to Use the VD QC Jigs

- Assemble jig with correct caps for whatever holes being measured
- Do not over tighten the caps, the bolt should wiggle slightly
- Insert the jig into the holes on the box beam
- Jig should fit in without a ton of force and sit flush, if not the beam should be hand checked



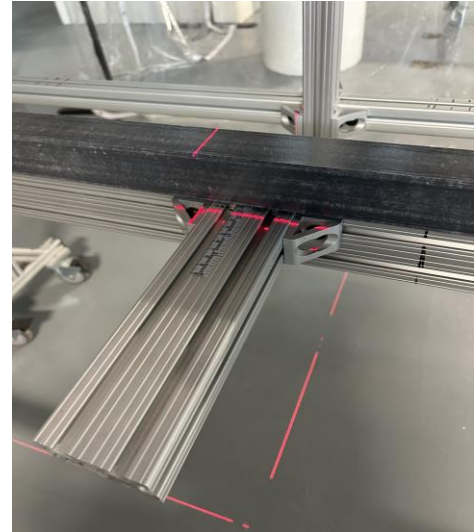
# Design of Straightness Check Table

- Table was built using pieces of the HD assembly table and an old QC table
- Utilizes the 80/20 beam that is the length of an I-beam, a laser level, and an adhesive tape measure



# How to Use the Straightness Check Table

- Beam is slotted into fixed end and the adjustable stop is used to secure the beam
- The maximum deviation can then be measured using the adjustable side piece that has the ruler (must be less than 1cm)



# Questions?