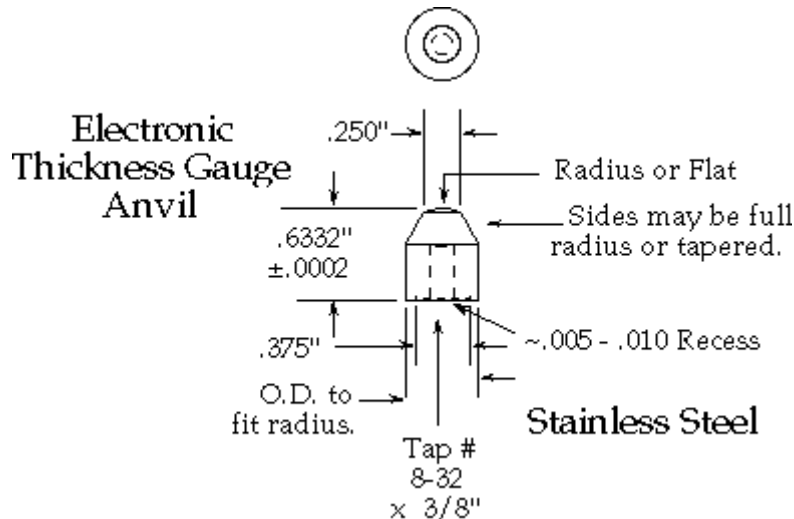


Anvil Height:



Some customers prefer to construct an anvil of a special design to use on their Electronic Thickness Gauge (ET). The instruments will function properly so long as the anvil surface is smooth, clean and stable. The height of the anvil is critical only in the sense that it must match the height of the gauge blocks that are used to calibrate the instrument. This is important so that the calibration takes place in the same range as the measurements to be taken. The sensor crosses a "zero null point" at about $-35 \mu\text{m}$ below the $+000$ point set on the instrument at the factory. If calibration or measurements take place across this "null" point there could be a small error introduced. Anvils that are 0.0015 " ($38 \mu\text{m}$) shorter than the gauge block stack used for the zero reference during calibration will cross the null. To determine the exact anvil height that is best for your instrument you can do the following:

- Assemble the gauge block stack used to set the zero reference for calibration on your ET in the manner called for in the "Calibration Instructions". This should include gauge blocks that total 16mm in height and the tape that is normally used (which could be a variable). I always use "Scotch Magic Tape".
- Set the display to read +000 with the "Zero" knob.
- Remove the gauge blocks.
- Accurately measure the height of your anvil and secure it in place on the anvilbase, tightening the screw the same amount as if it were to remain. There is always a few microns of compression when the screw is tightened. This could be a variable and may depend on how the bottom of the anvil is machined.



141 Traction Street, Greenville, SC 29611

1.833.833.1994

info@createchrehder.com

- Read the difference in height on the display. You can then determine the optimum height for your anvils. I would try to keep them within plus/minus 5 to 8 μm (plus/minus .0002" to .0003") of the optimum.

HINT!

Try to cut the anvils a few tenths (.0002" to .0004") on the long side. Set zero on the instrument with the gauge blocks, then lap the bottom of the anvil on some 400 or 500 grit paper to the proper length. The anvils now provided on the instruments are 0.6328" to 0.6332" in length.

If there is a conflict or problem, please call Createch Rehder Development Co at 1-833-833-1994 or email a.snow@createchrehder.com for further instructions.