## TML-5Cst Quick start up Operating Procedure

- 1. Power on the unit by switching to ON (Wait for it to power up).
- 2. Press(touch)"Servo Threading" on the touch screen "welcome screen".



3. Select the thread type, English, Metric, or **Setup\***.



4. Select, as an example, English, then enter the (Threads Per Inch) desired.



5. Select # of thread starts desired, (**Single**, Double, Triple, or Quad).





- 6. Select **Right hand** or Left hand threading; typically RH
- 7. Select "Enter".
- 8. Set up your left & right stop collars as you normally would. See Setup\*
- 9. Make sure that the "Thread Lead Screw half nuts" are fully engaged, & never disengaged during your threading process as per this design.
- 10. Spindle RPM will be displayed in *Black* in safe speed zone.



RPM display will turn to *RED* when out of range, too fast of spindle speed for selected thread pitch. The max range per thread pitch is indicated. Keep ~ 25 rpm below selected pitch Max Red range



11. Retract Speed is set to max but can be slowed via the touch slider bar\*\*



12. Test without tool, read details below, and then start threading operation.

\* **Setup**: In this screen you will see (2) simulated lamps. This is to set the carriage threading stops. Usually the left side stop adjustment is more critical for a shoulder



stop than the right side stop. With your part in the spindle and the tool in place but away from part, and compound angle readied, keep lead screw half nuts disengaged.

Set left stop to approximate position on the stop rod.

Move threading lever to left and notice the left button lamp change state to On. Lead screw half nuts are still not engaged.

Crank carriage to left and when the carriage starts to touch and move the left side stop, look for the lamp to change to *Off* and this is the spot the servo threading will stop when in operation. Adjust left stop collar for proper stopping location on part, especially to a shoulder.

Set right side stop at least  $\frac{1}{2}$ " -  $\frac{3}{4}$ " past thread starting location on part.

## Do not attempt to start threading too close to the part.

\*\* Slider Bar: This slider bar is visible in the threading operation screen and is located immediately under the RPM display. Touching the far right side + symbol will set to max or touch slide square bar to right or left with finger.

This affects only speed in the retract direction.

NOTE: Changing spindle speed during operation can affect the exact stop

location since there is inherent inertia in the carriage with some backlash in the half nuts as well.