USING THE CONTROLLER TO MEASURE A PART:

I've been there and I'm betting many of you machinists have too. How do you measure a part while it’s still in the machine? You cannot take it out or you'll lose your location, resulting in the part being out of concentricity, parallel, true position, or worse... scrapping the part out all together. Here's a simple technique that is applicable to CNC mills as well as CNC lathes. Using your indicator (I always use one that reads in tenths), attach it to the front of the turret in the lathe or the spindle of the mill. Position the indicator up to one of the linear surfaces you want to measure... ID or OD. Zero out your indicator and write down the Z value displayed on the controller. Now, jog the indicator to the 2nd position you want to know the Z value... writing the value beneath the first. Subtracting one from the other, you'll find the value between the two. Simple, yet effective.