Techna Check Setup 3200



• NOTE- Anytime you make a change in parameters you have to push the Auto button on TC3200 to save the values in the memory. Otherwise all adjustments will be lost after the unit is powered down.

Setting the Break Limit

- You access the break set up screen by pressing the F1 key on the3200 display.
- The different break modes are: Absolute Peak, Learn Peak and Absolute 3 Step Curve. Learn Peak is used for most applications.
- **ABSOLUTE PEAK MODE-** This will draw the red break line based on the break limit % and place it that percentage above idle power (gray bar on bottom of screen) if the power crosses this line longer than the break delay the unit will fault. The line will not change with a new learn, it is always based off of the idle.
- LEARN PEAK MODE- This will draw the red break line based on the break limit % and place it that percentage above the highest peak of the learned profile, if the power crosses this line longer than the break delay the unit will fault. The line adjusts itself automatically whenever the cut is relearned based off the new highest peak that is learned.
- ABSOLUTE 3 STEP CURVE- This mode works just like Absolute Peak Mode where it bases the line above idle, but it gives you 3 different limits that can be set. These limits are time based for each step using break points 1 & 2 and limit 3 finishes the cycle at that limit %.
- SETTING THE BREAK LIMIT- Start by setting the break limit to be around 20% above the highest point of the profile. This is usually a good starting point and may need to be changed if you are receiving nuisance faults or not catching a broken tool.
- **SETTING THE BREAK DELAY-** This parameter determines the amount of time the power must cross the red line before the unit faults. We recommend leaving it at the minimum, which is 0.01 sec.

Setting the Blunt Limit

- You access the Blunt set up screen by pressing the F2 key on the 3200 display.
- There are 3 different modes to choose from absolute peak, learn peak and learn work. Abs Peak and Learn Peak both function the same as previously described in the break limit section, but draw a yellow line instead of a red line.
- LEARN WORK MODE-This will compare the area under the curve (work %) for the current cut to the area under the curve from the learned cut. If the area of the current cut is more than the blunt limit the unit will fault. The blunt limit must be set to 100 or higher and you must learn the cut before being able to use this mode.
- SETTING THE BLUNT LIMIT- In order to find the value to use for the blunt limit you should learn a good tool. Once the cut is learned if you are using learn work the work value should be 100. If you are using absolute or learn peak you should look to see how high the profile is (Pp%). Now you should put in a dull tool and see what the work value is in learn work mode or how high the profile goes for absolute and learn peak. This will be approximately where to set the limit.

- SETTING THE BLUNT DELAY-This will determine how long the power must cross the yellow line before the unit outputs a fault. This parameter is only used when using absolute and learn peak. No adjustment is necessary for learn work.
- SETTING THE BLUNT COUNTER-This determines how many consecutive times the cut must exceed the blunt limit before the unit will actually output a fault. Usually set it for 3 just in case there is a piece of stock that is a little harder than the others, this helps to prevent nuisance faults.
- Blunt Part On # and Blunt Part Limit- This parameter acts as a part counter. You can enable or disable the blunt part on #. The part limit will be the number of counts it makes before outputting a blunt fault. This number is reset when it is learned or if there is no fault and you press the reset button for that station it will ask you if you want to reset the counter.

Setting Missing Limit

- To access the missing set up screen you push the F3 key on the 3200 display.
- There are 2 different modes Absolute and Learn Work.
- ABSOLUTE MODE- This will draw the blue missing line based on the missing limit and place it that percentage above idle power (gray bar on bottom of screen), if the power **does not** cross the line longer than the missing delay the unit will fault. In other words; this means power needs to cross the blue line for at least the amount of time in the missing delay or the unit will fault. We recommend setting the missing delay to about ½ of the total time that the power crosses the blue line.
- LEARN WORK MODE-This will compare the area under the curve for the current cut to the area under the curve for the learned cut. If the area of the current cut is less than the missing limit the unit will fault. You must learn the cut before being able to use this mode.
- SETTING THE MISSING LIMIT –In absolute mode you should adjust the blue line so that it is around ½ ways up the cut profile. In learn work mode you should make sure you work number stays consistent and then set your limit around 50-70%.
- SETTING THE MISSING DELAY-This determines how long the power must cross the blue line and is only used in mode. If you look in the table to the left of the screen, next to or below the word missing there will be a time displayed, this is how long power crossed the blue line on the previous cut. You will want to set your delay to around 50% of this time. If the power does not cross the blue line for the amount of time set in the missing delay the unit will fault.

Other Adjustments

- **START DELAY**-This is used to delay the start of monitoring; this helpful if the motor is starting after the unit gets its start signal from the machine control and there is a large spike from the motor start that needs to be ignored or some other power fluctuation. If you are doing a tapping application you will normally need to use the start delay.
- **TA Timer** Determines the length of time the unit monitors after monitoring starts. So if your cycle is 5 seconds long and you set the time to 4 sec, it will ignore anything that happens during the last 1 sec. This is the case with individual TA timers as well.
- **P1 MIN AND MAX** This is a zoom. Changing these values will change the way the profile is displayed making it more sensitive. Example- if you set the P1 Max to 75 it makes 75% the new 100% thus amplifying the display and making the profile bigger. P1 min will do the same to the bottom of the scale cutting off a certain %. If these are changed you will need to relearn the cut.
- AVERAGING -Here you can adjust the number of samples the unit takes before it plots the point on the graph. The higher the number the more samples it averages together before plotting it, this is used to smooth out some noise in cutting profiles. You do not want to turn the averaging too high or else you could average out a broken tool. Usually try to keep the averaging set to 3-5 and the P.O. averaging which averages the idle set to 10.
- **NOTE-** In some cases monitoring for one of the break, blunt or missing modes may not be necessary. You can disable a mode by selecting Abs Peak mode and setting the limit to 0.