Fadal Rigid Tapping Cycles

Rigid tapping uses a feedback signal from the spindle system and synchronizes the spindle motion with the Z axis motion. This allows for consistent threads, precise control for blind holes, and many other benefits.

Note: When rigid tapping, use the low range for spindle speeds of 750 RPM and below, and use the high range for spindle speeds of 751 RPM and above.

Example: S750.1 (.1 for low range)   S1500.2 (.2 is for high range)

The following example is for a 10 X 32 Tap at 1500 RPM:

Format 1:

Formula for Q value is 1.0 / TPI   (1.0/32 = 0.0312)

N1 G0 G90 S1500.2 M5

N2 H1 Z.5

N3 X0 Y0 G84.1 Z-.5 F1500.2 Q0.0312

N4 X1. Y1.

N5 G80

Format 2:

Formula for F value is RPM / TPI   (1500/32 = 46.87)

N1 G0 G90 S1500.2 M5

N2 H1 Z.5

N3 X0 Y0 G84.1 Z-.5 S1500.2 F46.87

N4 X1. Y1.

N5 G80

If you have further questions, please contact our helpful tech support department at support@fadalcnc.com or 208-855-9426.