

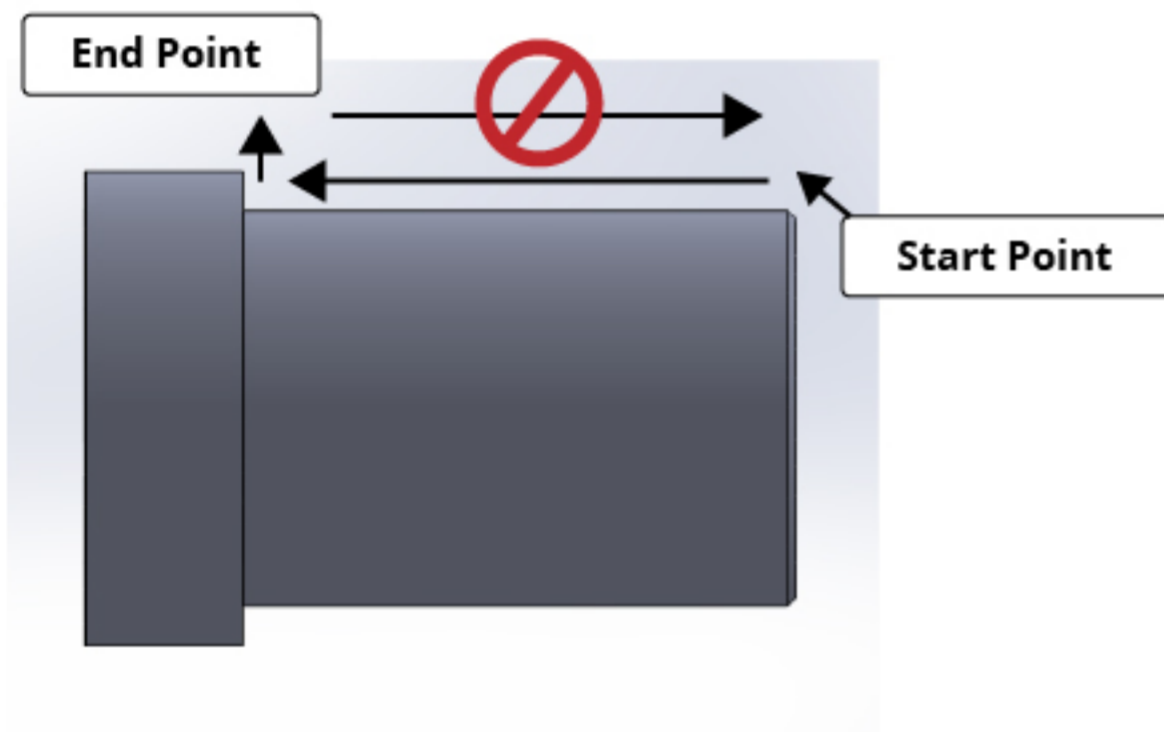
Always program a G01 on the first block (P-block) of your P and Q shape definition. Never program a G00 between the P and Q blocks in a canned cycle.

```
%
O00001
( G71 TYPE 1 PART )
G54
G50 S1800
G97 S739 T101 M03
G00 X3.1 Z0.1
Z0.05
G96 S600
G71 P2 Q3 I0.02 K0.005 D0.08 F0.012
N2 G01 X2.3
Z0.
X2.5 Z-0.1
G00Z-3.5
N3 X3.1
G00 Z0.1 M09
G53 X0 Z0
M30
%
```

G01 on the first block (N2) of the PQ shape definition

G00 between P and Q will cause Rapid motion during the finish pass

Never program the tool to return to the initial start point within the P and Q blocks. The canned cycle will take care of returning to the start point.



Automatic Corner Chamfers using (I+/I-/K+/K-) and Rounding using (R+/R-) cannot be used within the P and Q blocks in a canned cycle. Also, (,C) Chamfering or (,R) Corner Rounding codes cannot be used within the P and Q blocks in a canned cycle. Test your canned cycle and your PQ path definition by changing the G71 to G70. This will allow you to run the finished shape in graphics mode without all the roughing passes. Use Single Block to see each move in detail. Be sure to change back to G71 to restore the rough machining passes in the program.

```
%
O00001
( G71 TYPE 1 PART )
G54
G50 S1800
G97 S739 T101 M03
G00 X3.1 Z0.1
Z0.05
G96 S600
G70 P2 Q3 I0.02 K0.005 D0.08 F0.012
N2 G01 X2.3
Z0.
X2.5 Z-0.1
G01 Z-3.5
N3 X3.1
G00 Z0.1 M09
G53 X0 Z0
M30
%
```

Temporarily change G71 to G70. Run your program in Graphics Mode to troubleshoot issues with finish path or canned cycle roughing.

Do not use the same P and Q numbers to define different shapes in programs with more than one G70, G71, G72 or G73 cycle.