FANUC control

Workpiece carbon steel C45

Cutting data (see page 201)
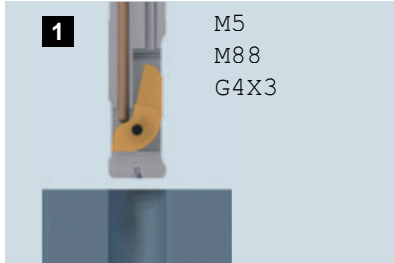$V_c = $ 30 m/min. $\rightarrow$ S = 400 rev./min.
F = 0.05 mm/rev.

Activation speed (see page 202)
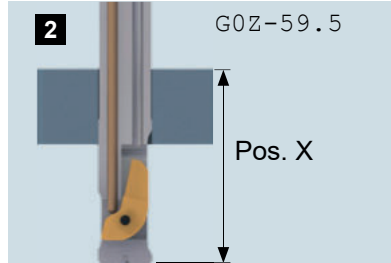Counterbore ratio = 24.0 : 10.5 = 2.28
$\rightarrow$ Activation speed = 2500 rev./min.

1	M5 M88 G4X3

Position the tool above the top material surface, spindle stop, internal coolant ON, 2-5 sec. dwell time for coolant pressure build-up (depending on the pump), the blade retracts.

2	G0Z-59.5

Pos. X

Traverse in rapid feed to position X.
(Position X= 5.0 mm + 30.0 mm + swing length[1] 22.5 mm + safety distance 2.0 mm)

[1] Values for swing length (AL) see page 171 onwards

3	M89 S2500M3 G4X2
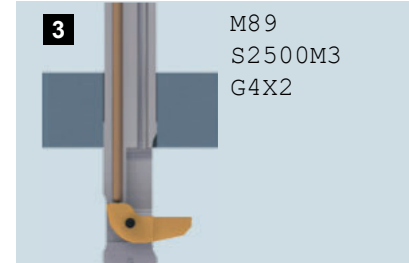
Switch OFF internal coolant, start activation speed[2], 1-2 sec. dwell time (attention to coolant pressure), blade swings out into the working position.
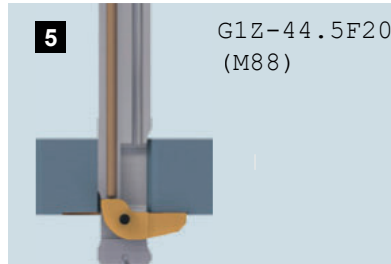
Recommended internal coolant pressure: 20-50 bar

[2] Values for activation speed see page 202

| 4	S400M3 G0Z-45 M8
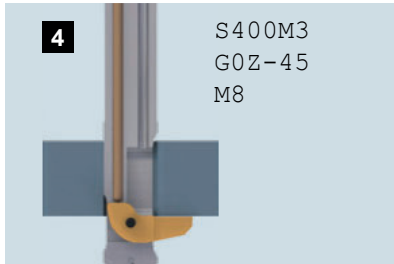
Travel the tool in rapid feed with working speed[3] until approx. 1.0 mm below the rear material surface (attention to burr size, part tolerances). External coolant on.

[3] Cutting data see page 201

| 5	G1Z-44.5F20 (M88)

Start machining in working feed[3]. When full cut is reached (0.25 mm deep) internal coolant ON especially when working with deeper counterbores. Attention to internal coolant pressure particularly when machining soft materials!

6	G1Z-34.15
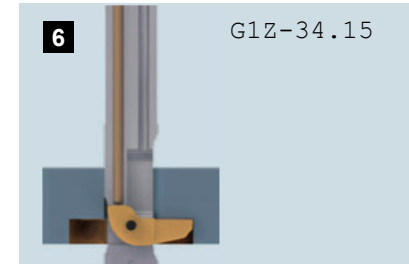
Continue machining to desired counterbore depth.
Cutting free without internal coolant (recommendable!).

7	M89 M9 G0Z-59.5

Pos. X
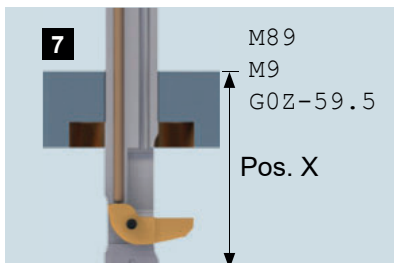
When the counterbore depth is reached, switch OFF internal coolant, in rapid feed back to position X.

8	M5 M88 G4X3
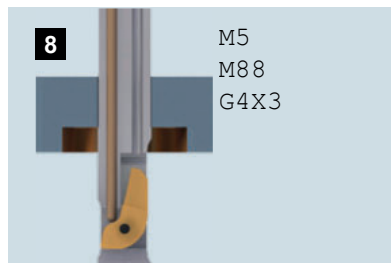
Spindle stop, internal coolant ON, 2-5 sec. dwell time (attention coolant pressure), blade retracts.

Recommended internal coolant pressure: 20-50 bar

9	G0Z2 M89

Now, move out of the workpiece in rapid speed.

BSF