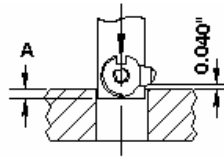
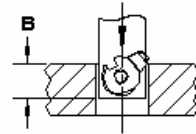


FRONT AND BACK DEBURRING

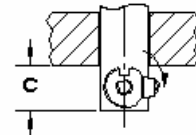
Step 1:
Reference the front of the tool. Rapid Traverse the tool the distance "A" into the bore. This will give the insert 0.040" (1mm) clearance.



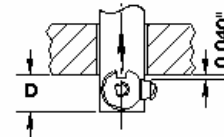
Step 2:
In forward working feed, machine the top surface of the bore by moving the tool to distance "B" into the bore.



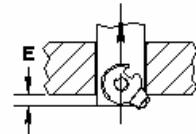
Step 3:
The insert has rotated into the tool body and is finished cutting. Rapid traverse through the bore. The bore surface will not be damaged.



Step 4:
In order for the insert to snap out again, rapid traverse until the tool end is beyond the bottom surface by distance "C".



Step 5:
To reduce cycle time, rapid traverse the tool in reverse feed to position "D" from the bottom of the bore or burr.

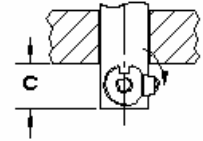


Step 6:
In reverse working feed, machine the bottom surface of the bore by moving the tool to distance "E" from the bottom surface.

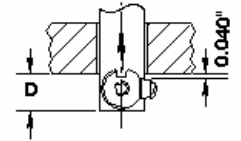
Step 7:
Rapid out.

BACK DEBURRING ONLY

For back deburring only, the COFA tool can rapid through the top of the bore without damage to its surface.

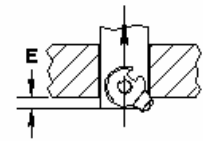


Step 1:
Reference the front of the tool. Rapid traverse the tool through the bore and to the distance "C" from the bottom of the part.



Step 2:
To reduce cycle time, rapid traverse the tool in reverse feed to position "D" from the bottom of the bore or burr.

Step 3:
In reverse working feed, machine the bottom surface of the bore by moving the tool to distance "E" from the bottom surface.



Step 4:
Rapid out.

Feed:	0.006"-0.014" IPR. Depend upon the material and machine rigidity, the feed rate can be increased			
Speed:	Typical Material	bhn	Flat Surface	Uneven Surface
SFM	aluminum	30-180	160-400	120-200
	iron	180	190-260	50-130
	low carbon steel	100-200	190-340	120-160
	med carbon steel	125-250	120-240	90-130
	stainless steel	140-250	60-140	40-90
	cast steel	200	110-240	90-150
	titanium		20-80	20-35
	Nickel alloys	220-310	20-80	15-30

Depth Programming Information:
(see images above)

	COFA4	COFA5	COFA6	COFA8	COFA12
A	2 .079	2.8 .110	1 .039	1.5 .059	3 .118
B	5.5 .217	7 .276	5.5 .217	7 .276	10 .394
C	5.5 .217	6.9 .272	6 .236	8 .315	12 .472
D	5.3 .209	6.4 .252	5 .197	6.5 .256	9 .354
E	1.8 .071	2.2 .087	0.5 .020	0 0	2 .079