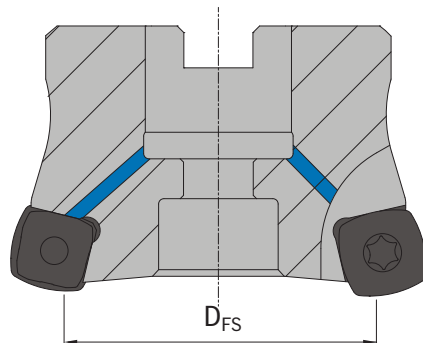
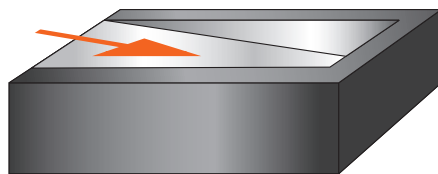


### WIDTH OF CUT FOR FLAT SURFACES



CUTTER DIAMETER	$D_{FS}$
1.250	0.53
1.500	0.78
2.000	1.28
2.500	1.78
3.000	2.28
4.000	3.28
5.000	4.28

### RAMPING



#### FEED RECOMMENDATION

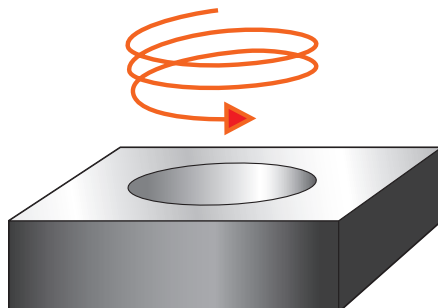
Reduce feed for ramping applications to 75% of normal value.

**EXAMPLE:** If the calculated face milling feed rate is 200 inches/min, reduce the feed rate for ramping to:

$$200 \text{ inches/min} \times 75\% = 150 \text{ inches/min}$$

CUTTER DIAMETER	MAX RAMPING ANGLE
1.250	1.8°
1.500	1.5°
2.000	1.2°
2.500	0.9°
3.000	0.8°
4.000	0.6°
5.000	0.4°

### HELICAL MILLING



#### FEED RECOMMENDATION

Reduce feed for helical milling applications to 30% - 50% of normal value.

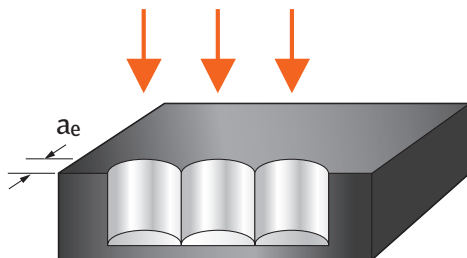
**EXAMPLE:** If the calculated face milling feed rate is 200 inches/min, reduce the feed rate for helical milling to a range of:

$$200 \text{ inches/min} \times 30\% = 60 \text{ inches/min}$$

$$200 \text{ inches/min} \times 50\% = 100 \text{ inches/min}$$

CUTTER DIAMETER	MINIMUM HOLE SIZE	MAXIMUM HOLE SIZE
1.250	1.71	2.42
1.500	2.21	2.92
2.000	3.21	3.92
2.500	4.21	4.92
3.000	5.21	5.92
4.000	7.21	7.92
5.000	9.21	9.92

### PLUNGE MILLING



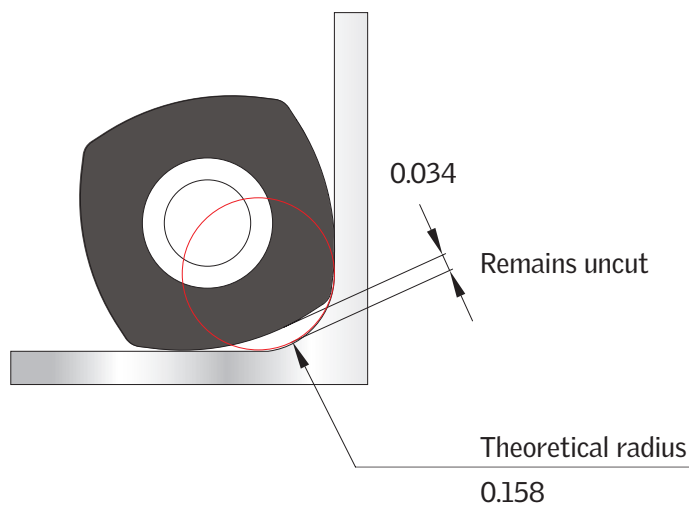
Maximum width of cut  $a_e = 0.330$

#### FEED RECOMMENDATION


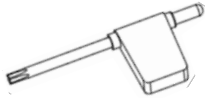
Recommended starting feed per insert  
 $f_z = .006$  (.002-.010)

### PROGRAMMING INFORMATION

CAD/CAM systems require a defined theoretical radius value when programming pocketing applications (cavity machining). The theoretical radius value is noted on the drawing to the right, as well as the approximate amount of material that will remain uncut.



### SPARE PARTS

<b>INSERT SCREW</b> 	<b>WRENCH</b> 
NS521	FWT15