



FLUTING WHEELS



CASE STUDY ENDMILL, 3 FLUTES

WORKPIECE: Endmill, 3 Flutes


DIMENSIONS: .5" Diameter

FLUTE LENGTH: 1.5"

DEPTH OF CUT: .146"

MATERIAL: Carbide with Chip Breaker

MACHINE: SAACKE VW1F

	COMPETITOR WHEEL	
PRODUCT	D320	1V1R 4X.5X1.25 D320
FEED RATE	4 TOTAL PASSES (2.2MM @ 80 MM/MIN AND 1.5MM @ 100 MM/MIN) (APPROX. 40 - 50% SPINDLE LOAD)	2 TOTAL PASSES FULL DOC @ 100 MM/MIN (APPROX. 34% SPINDLE LOAD)
STICK DRESSING	EVERY 4 TOOLS <i>*WHEEL WEAR PRESENT</i>	EVERY 60 TOOLS
Q'= (DOC MM x Feed Rate (VT) in MM/min)/60	4.8	6.0
CYCLE TIME	9:16 (MIN/SEC) (W/ RA UNDER 16)	4:30 (MIN/SEC) (W/ RA UNDER 16)



SUCCESSSES

FEED INCREASED from 80 mm/min to 100 mm/min.

50% REDUCTION in total fluting cycle time.

MINIMAL STICK DRESSING with free cutting wheel.

