Application Data Sheet



Fluting with Blasogrind HC5

A01-010

Deep creep grinding: 4 Flutes of a carbide endmill where ground in one pass varying the feed from piece to piece for testing the lubrication and cooling capacity of the coolant oil used. Under standard production conditions (Feed from 70 to 100 mm/Min) as well as under extreme grinding conditions (up to 150 mm/Min) the coolant was performant. With the given pressure of the coolant unit (6 bar) the limits of a possible grinding process were reached at a Feed of 150 mm/Min.







1. Cycletime for Production

Workpiece:	
Endmill Ø20, Cutti	ngLength 40 mm, Z4, Flutedepth 4.5 mm
Material CARBIDE	

Operations		0		
	4 Flutes	4 Flutes	4 Flutes	4 Flutes
Feed [mm/Min]	80	100	130	150
Power [kW]	6	7	8	9
Cutting feed [m/s]	18	18	18	18
Used wheels	1	11	1	1
tot. Grinding time [s]	166	135	107	95

2. Used Grinding Wheels

1 1A1 Ø125 Tyrolit Startec HP

3. Machine and Software Requirements

Machines:

5axes CNC grinder: GEMINI DMR 15kW

Coolant: Blasogrind HC5

Control:

Fanuc 310i

Software: Quinto 5

Accessories:

Responsable engineer:

OP, 13.12.10

www.schneeberger.ch

J. SCHNEEBERGER Maschinen AG 4914 Roggwil Switzerland Subsidiaries in: France, Deutschland, Italia, United States, UK, China

