

加工材料 Work Material		高硬度钢·高速钢 Hardened Steels·High Speed Tool Steels (~70HRC)					硬质合金 Cemented Carbide (~92.5HRA)				
R球头半径 Radius	颈长 Under Neck Length	余量 Stock	切深量 Depth of Cut		主轴转速 Spindle Speed	进给速度 Feed	余量 Stock	切深量 Depth of Cut		主轴转速 Spindle Speed	进给速度 Feed
		mm	$\Delta p$ mm	$\Delta e$ mm	$\text{min}^{-1}$	mm/min	mm	$\Delta p$ mm	$\Delta e$ mm	$\text{min}^{-1}$	mm/min
0.05	0.15	0.001	0.001	0.001	40,000	50	0.001	0.001	0.001	40,000	50
	0.25	0.001	0.001	0.001	40,000	25	0.001	0.001	0.001	40,000	25
0.075	0.23	0.001	0.001	0.001	40,000	100	0.001	0.001	0.001	40,000	100
	0.38	0.001	0.001	0.001	40,000	50	0.001	0.001	0.001	40,000	50
0.1	0.5	0.001	0.001	0.001	40,000	100	0.001	0.001	0.001	40,000	100
0.2	1	0.002	0.002	0.002	40,000	200	0.002	0.001	0.002	40,000	150
0.3	1.5	0.003	0.003	0.003	40,000	400	0.002	0.002	0.002	40,000	200
0.5	2.5	0.005	0.005	0.005	40,000	500	0.003	0.003	0.003	40,000	300
0.75	3.8	0.005	0.005	0.005	40,000	600	0.004	0.004	0.004	40,000	400
1	5	0.005	0.005	0.005	40,000	800	0.005	0.005	0.005	40,000	500
1.5	7.5	0.005	0.006	0.006	30,000	800	0.005	0.005	0.005	30,000	500
2	10	0.005	0.007	0.007	22,000	800	0.005	0.006	0.006	20,000	500
3	15	0.005	0.009	0.009	16,000	800	0.005	0.007	0.007	12,000	500
备注 Notes		<p>※1 切深量的<math>\Delta p</math>表示轴向切深量，<math>\Delta e</math>表示径向切深量。          ※2 切深量为最大值。请根据机床刚性或要求精度进行调整。          ※3 预加工（中精加工）时请注意精加工余量相对于加工面需保持均匀。          ※4 请注意所注入的冷却液必须到达加工点，避免导致加工时的润滑性、排除性降低。          ※5 R角、沟槽等负载大的加工部位，请特别注意参数设定和刀路轨迹等。          ※6 建议使用油冷冷却方式。          ※7 使用切削油时，请采取防火措施以免发生火花引起火灾等发生。</p> <p>※1 <math>\Delta p</math>: Axial Depth of Cut, <math>\Delta e</math>: Radial Depth of Cut.          ※2 Described Depth of Cut is max value. Adjust it depending on machine rigidity, main spindle rigidity, and required precision.          ※3 Obtain uniform stock amount on the cutting surface in the pre-stage cutting (semi-finishing).          ※4 In order to perform lubricity and chip flow well, coolant must be always reached cutting points.          ※5 Careful set up for milling condition and tool path are required especially when operate with high cutting load such as corner area and slotting.          ※6 Water-insoluble fluid is recommended.          ※7 Using water-insoluble fluid could lead to fires due to sparks generated during machining or heat caused by breakage. Ensure that you take proper fire-prevention measures.</p>									



高镜面性可反射NS TOOL的商标  
Mirror surface that also reflects the NS TOOL logo



加工材料：HAP40 (64HRC)

Work Material

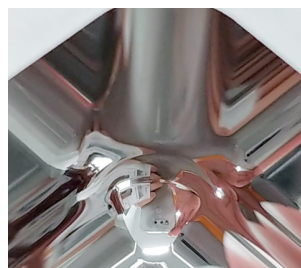
工件尺寸：50 × 25 mm (加工深度 15 mm)

Work size

Machining depth

冷却方式：油冷（精加工）

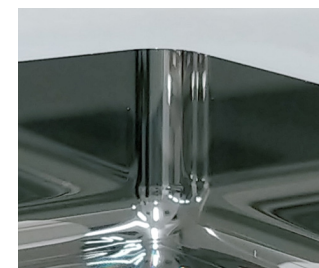
Coolant: Water-insoluble fluid (Finishing)



使用刀具 PCDRB R3×颈长15  
Tool Under Neck length

$n$  : 16,000  $\text{min}^{-1}$ ,  $v_f$  : 700 mm/min  
 $a_p \times a_e$  : 0.009 × 0.009 mm

粗糙度 侧面 Ra 0.004  $\mu\text{m}$   
Surface Roughness Side  
底面 Ra 0.023  $\mu\text{m}$   
Bottom



使用刀具 PCDRB R1.5×颈长7.5  
Tool Under Neck length

$n$  : 25,000  $\text{min}^{-1}$ ,  $v_f$  : 700 mm/min  
 $a_p \times a_e$  : 0.006 × 0.006 mm

粗糙度 侧面 Ra 0.006  $\mu\text{m}$   
Surface Roughness Side  
底面 Ra 0.046  $\mu\text{m}$   
Bottom