切削参数参考表
Recommended Milling Conditions

加工材料 Work Material		硬质合金 Cemented Carbide			
外径 Dia.	角半径 Corner Radius	主轴转速 Spindle Speed	进给速度 Feed	精加工切深量 Depth of Cut for Finishing	
		min^{-1}	mm/min	ap mm	ae mm
0.3	R0.05	50,000	50	0.001	0.005
0.4	R0.05	50,000	100	0.001	0.01
0.5	R0.05	50,000	100	0.001	0.01
	R0.1	50,000	150	0.001	0.015
0.6	R0.05	50,000	100	0.001	0.01
	R0.1	50,000	150	0.001	0.015
0.8	R0.05	50,000	150	0.001	0.015
	R0.1	50,000	200	0.001	0.03
1	R0.05	50,000	150	0.001	0.015
	R0.1	50,000	200	0.001	0.03
备 注 Notes		※1 尽量将刀具的偏摆量抑制到最小，以免因刀具崩损或折断而影响加工精度。 ※2 因为切深量ap极小，建议加工前充分掌握主轴的伸缩量和机床的特性。 ※3 建议使用油冷冷却方式。 ※4 使用油冷冷却方式时，加工时产生的火花及破损有引发起火甚至火灾的危险。请务必采取防火措施。 ※1 Minimal tool runout is required to avoid the tool breakage and to increase the work accuracy. ※2 Due to infinitesimal Depth of Cut (ap), recommend to assess the machine characters, such as expansion of the spindle and others before using the tool. ※3 Water-insoluble fluid is recommended. ※4 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.		

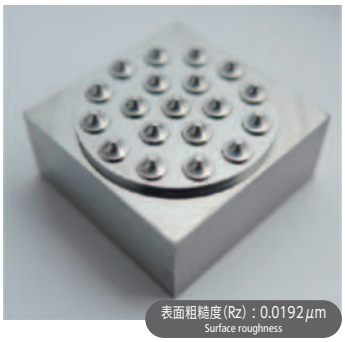
加工案例1 Machining Case 1

・加工材料：硬质合金 92.5HRA
・冷却方式：油冷
・总加工时间：9小时48分钟

Work material : Cemented carbide 92.5HRA
Coolant : Water-insoluble fluid
Total machining time : 9hr 48min

工件尺寸：φ15mm
Work size : φ15mm

加工深度：0.924mm
Machining depth : 0.924mm



加工工序 Process	精加工 Finishing	
	等高线 Contour line milling	扫描线 Scanning line milling
使用刀具 Tool	PCDRS φ0.3×R0.05×0.3	
主轴转速[min^{-1}] Spindle speed	40,000	
进给速度[mm/min] Feed	70	
切深量 ap×ae[mm] Depth of cut	0.002~0.006×0.002	0.001×0.005~0.01
精加工量[mm] Stock allowance	0.002	0.001
加工长度 Cutting length	28m	12m
加工时间 Machining time	6小时23分钟 6hr23min	3小时25分钟 3hr25min