

CBN-LBSF

Finishing of "Trinity" Model




Work size: 35 x 35 x 20 mm

Milling shape : "Trinity" model

(85 pins with 1 mm dia. on the R130 spherical surface)

Work material : SKD11 (60HRC)

Coolant : Oil mist

Finishing tool : 2-Flute Super Finishing Long Neck Ball End Mill

CBN-LBSF 2006-015 (R0.3 x L1.5)



Machine : ROKU-ROKU SANGYO, LTD Android II

CAD/CAM : C&G SYSTEMS CAM-TOOL

Milling condition

No.	Process	Tool geometry	Series / Size	Spindle Speed (min ⁻¹)	Feed Rate (mm/min)	Finishing allowance (mm)	a _p (mm)	a _e (mm)	Cycle time
1	Roughing 1	6-flute square	HMS φ6 x 13	8,000	1,500	0.1	5.0	0.05	1:13:45
2	Roughing 2	2-flute ball	HSB R0.5 x 1.5	24,000	2,000	0.05	—	—	0:47:18
3	Semi-finishing	6-flute square	HMS φ6 x 13	8,000	830	0.01	1.0	3.0	0:01:06
4	Semi-finishing	2-flute ball	HSB R0.5 x 1.5	24,000	2,000	0.01	—	—	0:46:06
5	Semi-finishing	2-flute ball	HSB R0.5 x 1.5	24,000	2,000	0.01	—	0.05	0:09:15
6	Semi-finishing	2-flute long neck ball	HSLB R0.3 x L1.5	30,000	1,200	0.003	0.05	0.02	0:36:11
7	Finishing	6-flute square	HMS φ6 x 13	8,000	830	0.00	1.0	3.0	0:01:06
8	Finishing	2-flute long neck ball	CBN-LBSF R0.3 x L1.5	60,000	500	0.00	—	0.015	4:08:57
9	Finishing	2-flute long neck ball	CBN-LBSF R0.3 x L1.5	60,000	500	0.00	—	0.015	2:27:44

Total: 10 hr 17 min