

- CAD Data Translation

approx. 1 min.

- CAM Condition Setting

approx. 1 hour



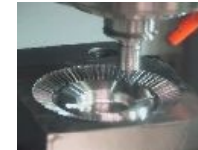
- CAM Calculation

4 hr. 58 min.

Z-level Rough Cutting	D6 R3	0.1
Z-level Finishing	D2 R1	0.06
Scanning-line Area	D2 R1	0.06
Re-machining	D1 R0.5	0.04

- Machining

HIPM31 (HRC60) machined by HSM
approx. 21 hours



Product : Insulator
 Stock Size : 100mm x 100mm x 30mm
 Cutting Tool : NS TOOL CO., LTD.
 CPU : Xeon 3.4GHz
 Process Time : approx. 27 hours

Process	Cutting Mode	Tool Type (mm)	Step Over (mm)	Step Down (mm)	Rmax (μm)	Stock (mm)	Spindle S. (r.p.m)	Feed Rate (mm/min)	Length of Cut (mm)	Machining Time
Rough	Z-Level Roughing	3R BALL	1.5	0.25	-	0.05	12,000	1,200	63,701	56min.
1R-Semi_Rough-1	ZLR + Optimization	1R BALL	0.3	0.085	-	0.025	20,000	1,440	99,504	1hr. 12min.
1R-Semi_Rough-2	ZLR + Optimization	1R BALL	0.3	0.085	-	0.025	20,000	1,440	56,831	46min.
1R-Semi_Finsh	Z-Level Finishing	1R BALL	-	-	2.5	0.025	20,000	1,600	88,889	1hr. 06min.
0.6R-Semi_Rough-1	ZLR + Optimization	0.6R BALL	0.3	0.04	-	0.02	30,000	1,200	95,504	1hr. 36min.
0.6R-Semi_Rough-2	ZLR + Optimization	0.6R BALL	0.3	0.04	-	0.02	30,000	1,200	96,417	1hr. 36min.
0.6R-Semi_Rough-3	ZLR + Optimization	0.6R BALL	0.3	0.04	-	0.02	30,000	1,200	92,486	1hr. 32min.
0.6R-Semi_Rough-4	ZLR + Optimization	0.6R BALL	0.3	0.04	-	0.02	30,000	1,200	96,448	1hr. 37min.
0.6R-Semi_Finish-1	Z-Level Finishing	0.6R BALL	-	-	2	0.02	30,000	1,440	25,428	26min.
0.5R-Semi_Finish-2	Z-Level Finishing	0.5RB (CBN)	-	-	2	0.015	30,000	1,440	304,126	3hr. 27min.
0.5R-Finish-1	Z-Level Finishing	0.5RB (CBN)	-	-	1	0	30,000	1,440	484,886	5hr. 42min.
0.5R-Finish-2	Z-Level Finishing	0.5RB (CBN)	-	-	1	0	30,000	1,440	42,520	31min.
3R-Finish	ZLF + Scanning	3R BALL	-	-	1	0	10,600	1,440	13,228	29min.
Total									1,559,968	20hr. 56min.