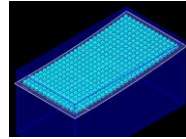
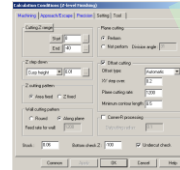


Product : Speaker Grille  
 Work Size : 50mm x 26mm x 30mm  
 CPU : Xeon 3.4GHz  
 Process Time : Total 40 hours



- Preparatory Modeling

approx. 1.5 hours



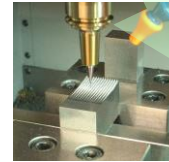
- CAM Condition Setting

approx. 1 hour

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

- CAM Calculation

approx. 22 hours



- Machining

NAK80 (HRC42) machined by HSM  
 approx. 15.5 hours

No.	Process	Cutting Mode	Tool Type (mm)	Step Down (mm)	Step Over (mm)	Last Step Over (mm)	Stock (mm)	Spindle Speed (RPM)	Feed Rate (mm/min.)	Cutting Length (mm)	Actual Machining Time
1	Roughing (1)	Z-level Roughing	D8R0 SQUARE	0.5	5	-	0.03	6,000	1,000	2,198	4min.
2	Roughing (2)	Surface Finishing	D6R3 BALL	-	0.5	-	0.03	12,000	2,000	3,320	4min.
3	Semi Roughing	Z-level Roughing	D0.5R0.1 RADIUS	0.04	0.2	0.05	0.015	30,000	600	194,583	6hr. 32min.
4	Semi Finishing	Flat Part Circumference	D0.5R0.25 BALL	-	0.05	-	0.015	30,000	800	18,057	53min.
5	Finishing (Prongs)	Compound Cutting Along Plane	D0.4R0.2 BALL	-	0.025	-	0	30,000	600	92,104	2hr. 31min.
6	Finishing (Bottom Surface)	Surface Finishing	D0.4R0.2 BALL	-	0.025	-	0	30,000	600	90,795	2hr. 49min.
7	Re-machining	Re-machining	D0.2R0.1 BALL	0.015	0.02	-	0	30,000	400	59,352	2hr. 38min.
<b>Total</b>										<b>460,409</b>	<b>15hr. 31min.</b>