End mill

Overview

End Mill is useful in a wide range of applications in the automotive, aviation, and mold industries, and available in many different shapes and coatings. It is manufactured using ultrafine material technology, yielding higher quality, lifespan, and performance.

Features

- Provide surface quality, high precision.
- Improve productivity, reduce cutting force.
- Stable machining with optimized rake angle.

Recommended Cutting Conditions

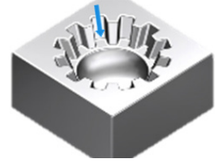
Material Group	Stainless Steel		Hardened Steel		Heat Resistance Super Alloy	
Diameter (mm)	n (RPM)	Feed (mm/min)	n (RPM)	Feed (mm/min)	n (RPM)	Feed (mm/min)
2	5,400	240	4,200	230	2,500	90
4	4,000	250	3,100	270	2,000	95
6	3,200	350	2,500	270	1,250	95
8	2,000	380	2,100	290	1,050	100
10	1,600	400	1,600	300	800	115

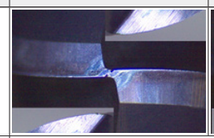
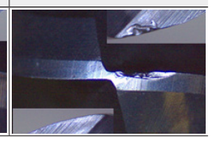
Result of User Test

Test 1. Injection mold, Pre-hardened steel

● **Injection Mold_Bevel gear**

- Workpiece : Pre-hardened steel (HRC45)
- Cutting condition : 8000rpm(vc50m/min), vf1300mm/min, fz0.08mm/tooth, ap0.2mm
- Machining type : ramping, profiling, wet
- Item : NBG20-0690 NM9165

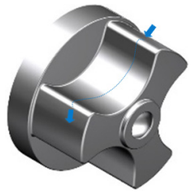


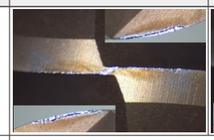
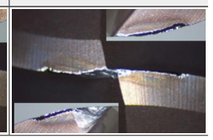
-	NBG 20-0690	Competitor “Y”
Image (10min)		
Tool Life	Nanoloy: 200 passes processing Competitor: 150 passes processing	
Result	Excellent wear resistance and toughness in equal machining	

Test 2. Machinery industry, SKD61

● **Machinery industry_Joint mold core**

- Workpiece : SKD61 (HRC52)
- Cutting condition : 2700rpm(vc17m/min), vf270mm/min, fz0.05mm/tooth, ap0.2mm, ae0.5mm
- Machining type : profiling
- Item : NBH20-0690 NH1125



-	NBH20-0690	Competitor “H”
Image (10min)		
Tool Life	Nanoloy: 2 Hours Competitor: 1.6 Hours	
Result	Wear is more stable than Competitor “H”	