

EMA-3020K ϕ 4.0mm End mill Application (S45C)

Motor Spindle

Machine

Tools

Work

Cutting

Coolant

Cutting Condition

EMA-3020K/E3000

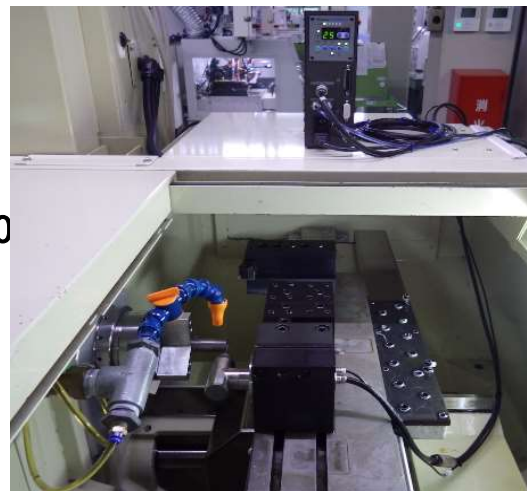
Washino G07

NS TOOL ϕ 4.0 MUGEN-COATING
2-Flute LEAD25 End mill MX225 ϕ 4.0

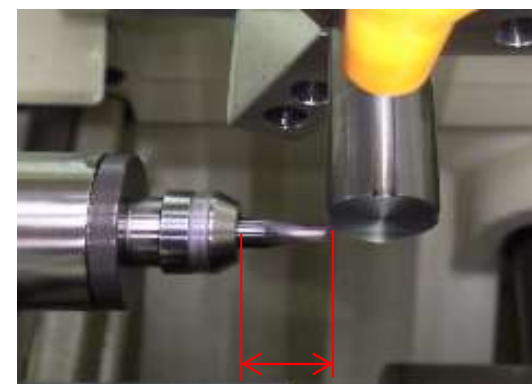
Carbon steel (S45C) ϕ 20

Groove cutting

Non-water-soluble cutting oil



	NS TOOL	NAKANISHI
Cutting Speed [m/min]	50-80	210
Spindle Speed [min ⁻¹]	5,200	16,700
Feed [mm/min]	310	0.5 times → 160
Feed Rate [mm/tooth]	0.025	0.05
Depth of cut Ap × Ae[mm]	4 × 0.8	1 × 4
E3000 Controller load meter	—	2 load meter lighting (Continuous duty operation)



Overhang : 15mm

Processing length 30mm



Wear status at the
cutting edge



Groove processing by
 ϕ 4 end mill