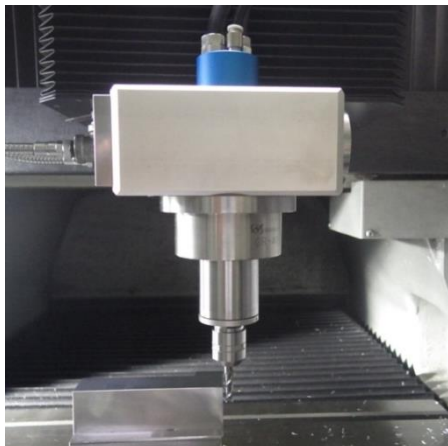
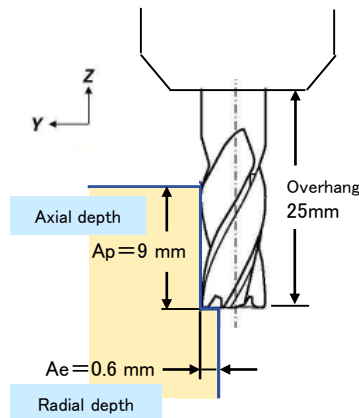


BMS-4040—RGD $\phi 6$ End milling application (A5052)



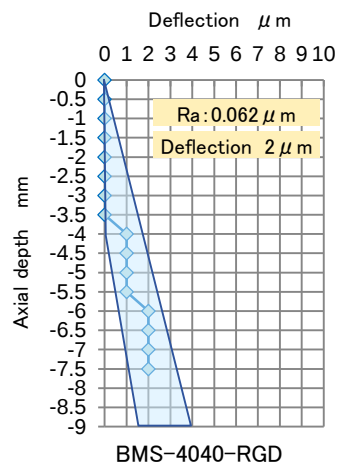
BMS-4040-RGD mounted on machining center



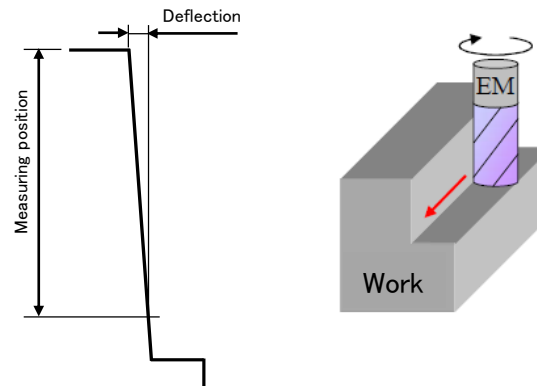
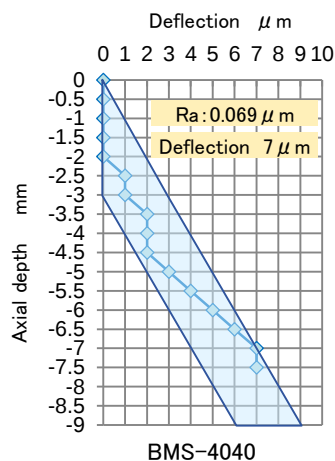
Milling condition

Machine	Machining center Sodick MC430L
Tool	2-Flute $\phi 6$ end mill NS Tool AL3D-2
Work	Alluminum alloy (A5052) H100 × W40 × T60
Coolant	Oil mist
Condition	Rotation speed : 40,000min ⁻¹ Feed : 1,600mm/min Axial depth : $A_p = 9$ mm Radial depth : $A_e = 0.6$ mm

Improved rigidity of BMS-4040-RGD can perform high quality milling even though the tool overhang is long.



Pic. 6 Deflection quantity during milling



Pic.7 Illustration of deflection during milling

BMS-4040—RGD $\phi 4$ End milling application (A5052)

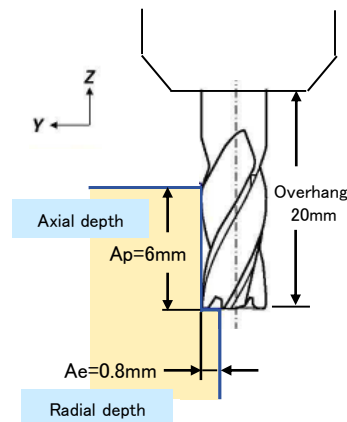
Tool : 2-Flute $\phi 4$ end mill (NS Tool AL3D-2)

Work : Aluminum alloy A5052 (L100 × W40 × T50)

Machine : Machining center (Sodick MC430L)

Coolant : Oil mist

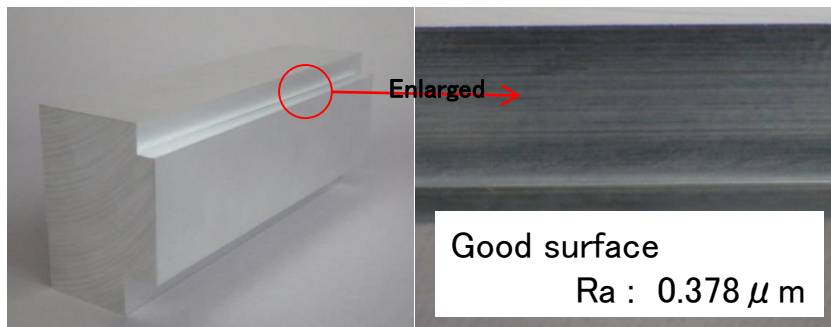
	NS Tool	Nakanishi
Rotation speed [min^{-1}]	20,000 $\xrightarrow{2 \text{ times}}$	40,000
Feed [mm/min]	1,000 $\xrightarrow{2 \text{ times}}$	2,000
Depth $A_p \times A_e$ [mm]	6×0.8	6×0.8



Pic.8 Milling condition

The load meter indicates 2 green LED.(Continuous milling is possible.)

The feed is regulated by the rotation speed to become a ratio as a spindle speed table. The milling efficiency is improved by 2 times rotation speed and feed. The finishing surface is good.



Pic.9 Finishing surface of high speed milling