

Helical Endmill MECH

Good Chip Evacuation

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Notched insert breaks chips into small pieces



MECH



Competitor A

Workpiece: S42-2 (SS400)
Vc=120 m/min
ap×ae=40mm×10mm
fz=0.12mm/t
MECH032-S32-11-5-4T



A flat-cut flute provides excellent chip evacuation

Notched inserts lower cutting force, reduce chattering and maximize efficiency.

High Efficiency Milling

High efficiency machining with Multi-Edge design

Workpiece: C50 (S50C)
Vc=120m/min (n=1200min⁻¹), ap=40mm,
ae=5-13mm, fz=0.15mm/t

MECH ø32 (4 flute lines)

Improved productivity

374cm³/min
(Vf=720mm/min, ae=13mm)
(Tripled chip evacuation)



Competitor A ø32 (3 flute lines)

108cm³/min
(Vf=540mm/min, ae=5mm)



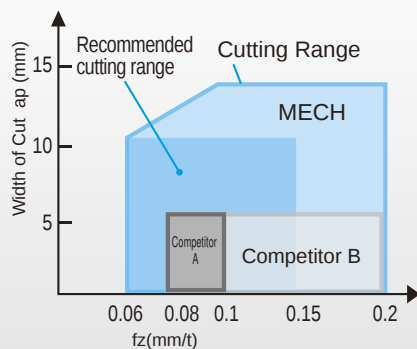
Competitor B ø32 (3 flute lines)

108cm³/min
(Vf=540mm/min, ae=5mm)



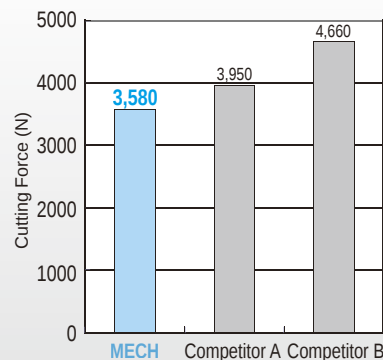
Low Cutting Force

Low Cutting Force due to Notched Inserts



Workpiece Material: C50 (S50C)
Vc=120 m/min
ap×ae=40 mm×5-13 mm
fz=0.06-0.2 mm/t
MECH032-S32-11-5-4T

Cutting Force (principal force)



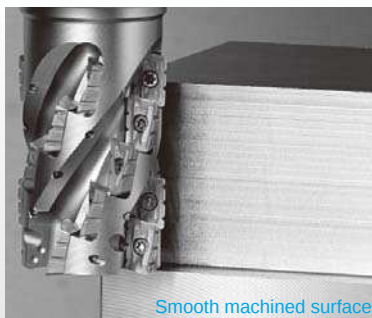
Workpiece Material: C50 (S50C)
Vc=120 m/min
ap×ae=40mm×10 mm
fz=0.1mm/t
MECH032-S32-11-5-4T

(Internal evaluation)

Reduced chattering

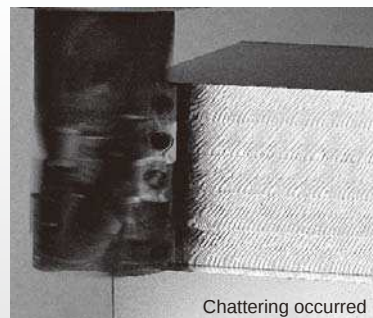
Comparison of surface wall (Lateral surface)

Notched insert lowers and disperses cutting force, and enables high feed rates by reducing Chattering.



Smooth machined surface

MECH



Chattering occurred

Competitor A

Workpiece Material: C50 (S50C)
Vc=120m/min
fz=0.12mm/t
ap×ae=40×7mm

(Internal evaluation)

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Milling