## New product introduction

# HFS type

### End mill for finishing of hard materials

(4,5,6,7HFSS) (4,5,6,7,8HFSM)

MEGACOAT is applied

with Corner land

HFS cross section

FES cross section

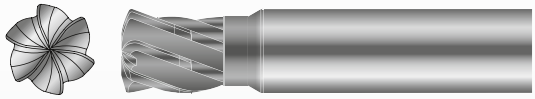
### For finishing of hard materials

- End mill for hard materials that achieves longer tool life and stable machining.
- Applicable for hard materials up to 67HRC.
- Achieves high feed rate machining for cutting of hard materials.
- Compared to the FES type, the core diameter was increased by 30%, for higher rigidity.
  Negative rake angle and stronger cutting edge design with corner land.

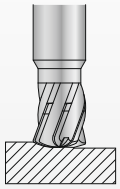
➔ L25, L26

# PDR type

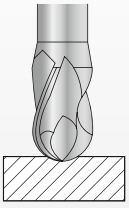
### High efficiency radius end mill for hard materials



(6PDRS)



PDR type



General Purpose Ball-Nosed End Mill

### For high efficiency machining of hard materials

- Improved productivity with 6 edge design and high feed rate.
- Special corner-R shape with the large contact area on the bottom surface achieves large machining allowance and high efficiency machining.
- Applicable for hard materials up to 67HRC.

➔ L32

# DEK type, DER type

### End mill for high feed rate machining of difficult-to-cut materials

(5DEKM, 5DERM)

### For high efficiency machining of difficult-to-cut materials

- Achieves high feed rate machining with 5 edge design
- Achieves high efficiency machining for difficult-to-cut materials, such as stainless steel and heat-resistant alloys.
- Applicable for slotting with a cutting depth up to 0.8D.
- Unequally partitioned flute design prevents vibration and reduces cutting force.
- Able to accommodate work from roughing to finishing with a single tool.

➔ L37

# NES type

### End mill for finishing of aluminum & non-ferrous materials

with wiper edge (3NESM)

### For finishing of aluminum

- A wiper is attached at the lower edge for improving bottom surface finish.
- Chattering is controlled with cutting edge slots at varied intervals, and finishing of lateral surfaces is improved.
- A special core shape facilitates improved chip evacuation, while assuring rigidity.
- Able to accommodate work from roughing to finishing with a single tool.

➔ L39