### Feature



• Stable machinability minimizing unexpected chipping from optimal cutting edge design for stainless steel cutting

• High performance in stainless steel series, titanium and nickel cutting from applying new coating with high oxidation resistance and hardness

## S-Star Endmill

Stainless steel is widely used not only in daily life but also in various industries because it has high corrosion resistance and smooth surface. Stainless steel reduces tool life as it has characteristics like high work hardening, high shear resistance and high tendency of chip's welding on a tool. Therefore, it is recommended to use exclusive tools for effective stainless steel machining.

S-Star Endmill dramatically increased wear resistance and welding resistance than

existing tool through applying high toughness substrate and new coating layer with wear resistance, oxidation resistance and high hardness. In addition, the optimal cutting edge minimizes cutting load and chattering for stainless steel cutting and reduces fracture due to unexpected chipping.

KORLOY recommends S-Star Endmill not only for stainless steel cutting but general cuttings with titanium, nickel, Inconel and hard-to-cut materials for your high productivity.

## Advantages



- Good chipping resistance
  Strong cutting edge and high toughness substrate
- Lower cutting load and better chip evacuation
  - Uneven flute spacing and R-type gash shape
  - High rake angle and streamlined chip pocket
- Higher welding resistance and wear resistance
  - AlCrN series coating layer
- Good surface finish
  - Added finishing flute

# ✓ Features



#### Applying high toughness substrate o-

- Chipping resistance and stable cutting from applying high toughness substrate



#### Applying different width and size of AICrN based layer o-

- Alppy multy layer
- Increased lubrication due to containing Cr
- Ensured stability against frictional heat
- Secured wear resistance from thicker coating layer

#### Cutting edge treatment o-

- Improved chipping resistance in the beginning of cutting
- Better wear resistance and stable cutting
- High quality of product from cutting edge treatment stabilization





#### Additional finishing edge o-

- Enhanced surface finish due to increased  $1^{\mbox{\tiny st}}$  0.D grinding roughness
- High quality cutting edge and good welding resistance

#### Uneven flute spacing/R gash

- High chip evacuation through R gash shape
- Stability in shouldering machining