

Endmill for HRSA machining

Super Endmill For HRSA

KORLOY
TECH-NEWS



- Aerospace and generator industries - Endmill for parts such as engines and turbines made into hard-to-cut materials.
- Optimal endmill for Ni Based super alloy HRSA; Inconel718, Hastelloy, Waspaloy and etc.

Endmill for HRSA (Inconel718, Hastelloy, Waspaloy and etc.) machining

Super Endmill For HRSA

HRSA, a material with higher strength at high temperature and corrosion resistance than general alloy, is commonly used for aerospace engine and parts of generator turbine.

HRSA is divided into Ni Based, Ni-Fe Based, and Co Based heat resistant super alloy by elements and Ni Based heat resistant super alloy such as Inconel718, Hastelloy, Waspaloy and etc. is most generally used.

HRSA is a representative of hard-to-cut materials causing short tool life due to work hardening, low thermal conductivity and high-temperature strength.

Low thermal conductivity makes increasing cutting speed impossible due to generating high temperature while machining at the edge.

Maintaining high strength at high temperature and work hardening also cause rapid wear, breakage, and severe damage on the edge of cutting tools.

KORLOY launches Super Endmill, the most effective tool for hard-to-cut material in HRSA machining.

Super Endmill increases machinability and stability in machining due to positive rake angle and irregular flute spacing shape.

In addition, Super Endmill ensures excellent tool life preventing fracture on cutting edge and increasing wear resistance in machining due to high toughness carbide substrate and new coating with high temperature hardness and oxidation resistance.



Increased machining stability

- Irregular flute spacing and helix angle design increase machining stability.
- Unique core design with good chip evacuation and high rigidity

Increased tool life

- Applied high toughness substrate and new coating with good wear resistance and oxidation resistance

Code system

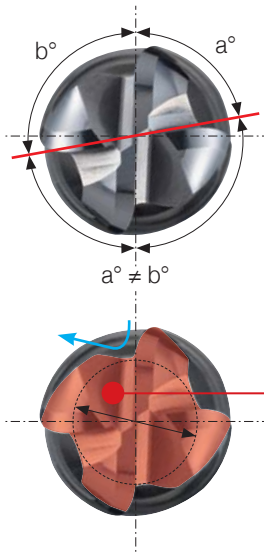
[Shank type]

| | | | | | | | | |
|---------------|--|--|----------------------------|--------------------------------|---|------------------------------|---|-------------------------|
| S | RE | S | 4 | 120 | - | 080 | - | R30 |
| Super Endmill | Type RE: Radius Endmill FE: Flat Endmill | Workpiece S: Super alloy T: Titanium/STS | No. of flute 4: 4 flute | Tool diameter 120: Ø12.0 mm | | Overall length 080: 80 mm | | Corner R R30: 3.0 mm |

Features

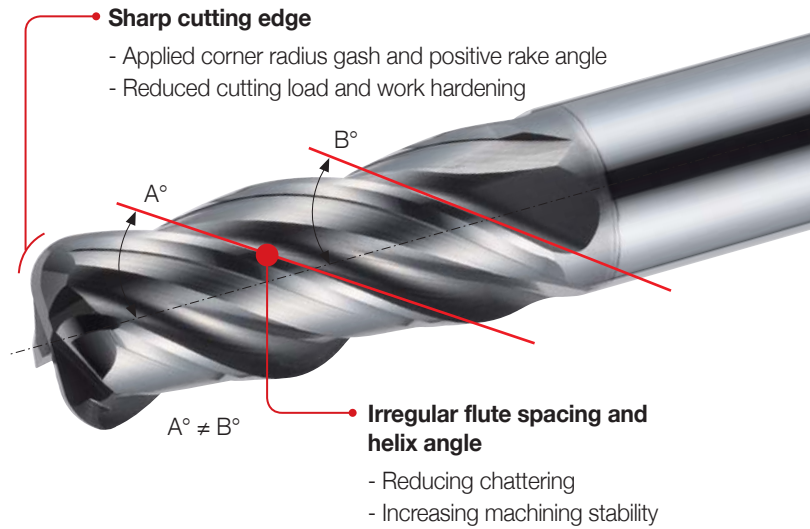
- **Aerospace and generator industries:** Exclusive endmill for HRSA and machining parts of engine and turbine
- **Irregular flute spacing and helix angle design:** Reducing chattering and improving stability in machining
- **High rigidity core web design:** Improving chip evacuation and stability in machining
- **Sharp cutting edge:** Reducing cutting load and work hardening
- **Excellent tool life:** New grade with excellent wear resistance coating and high toughness substrate

[SRES4000 (Radius)]



High rigidity core web design

- Improved chip evacuation
- Increased machining stability



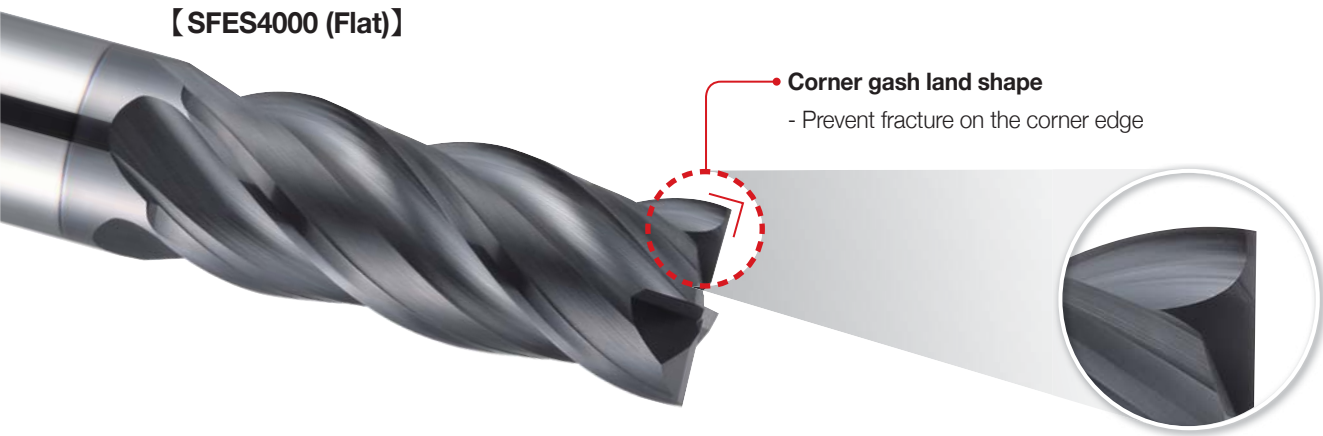
Sharp cutting edge

- Applied corner radius gash and positive rake angle
- Reduced cutting load and work hardening

Irregular flute spacing and helix angle

- Reducing chattering
- Increasing machining stability

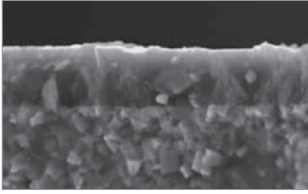
[SFES4000 (Flat)]



Corner gash land shape

- Prevent fracture on the corner edge

Grade features



SL Coating (Super Lubrication Coating)

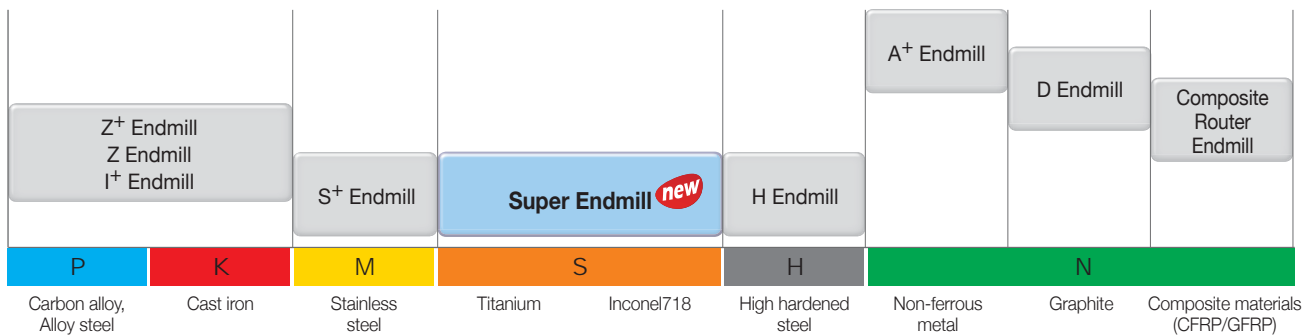
- High lubricative coating and special surface treatment technology
- Surface treatment technology improves welding resistance and machining stability.

Coating application range

◎: Best ○: Very Good △: Good X: Bad

| Workpiece | P | | | K | M | S | | H | N |
|------------|--------------|-------------|--------------------|-----------|-----------------|-------------|----------|---------------------|-------------------|
| | Carbon alloy | Alloy steel | Pre-hardened steel | Cast iron | Stainless steel | Inconel 718 | Titanium | High hardened steel | Non-ferrous metal |
| SL Coating | ◎ | ◎ | ○ | ○ | ◎ | ◎ | ◎ | △ | X |

Tool selection guide



Recommended cutting conditions (SFES4000 Flat, SRES4000 Radius)

| Workpiece | Ni based heat resistant super alloy (Inconel718, 625) | | | | |
|-------------------|---|-------------------------------|---------------------|-------------------------------|---------------------|
| | Cutting conditions | RPM n (min ⁻¹) | Feed vf (mm/min) | RPM n (min ⁻¹) | Feed vf (mm/min) |
| Tool diameter (∅) | | | | | |
| 3 | | 3,800 | 220 | 2,500 | 125 |
| 4 | | 3,000 | 240 | 1,900 | 135 |
| 5 | | 2,450 | 245 | 1,500 | 145 |
| 6 | | 2,100 | 250 | 1,250 | 145 |
| 8 | | 1,600 | 225 | 945 | 155 |
| 10 | | 1,250 | 215 | 760 | 145 |
| 12 | | 1,050 | 210 | 630 | 145 |
| 16 | | 765 | 210 | 475 | 110 |
| 20 | | 635 | 200 | 380 | 110 |

| | | | | |
|-----------------|--|--|--|------------------------------|
| Application tip | | Shouldering depth ap: ≤ 1.5D ae: ≤ 0.05D | | Slotting depth ap: ≤ 0.2D |
| | | | | |

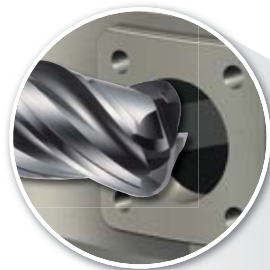
※ Notice

- Please adjust the recommended cutting conditions properly, according to the condition of your machines, the target shapes, and your purpose for machining.
- Please set the machine with high rigidity and check the workpiece clamping.
- Please select proper coolant for workpiece materials and check the pressure and amount of coolant enough for machining.
- In case of chattering, reduce RPM and feed rate by the same ratio.

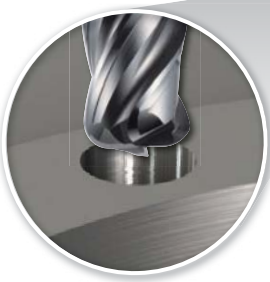
Industries

• **Aerospace and generator industries** - Endmill for parts such as engines and turbines made into hard-to-cut material

Parts of aerospace engine (turbine case)



- Tool: SRES4120-080-R30
- Machining: Circular interpolation



- Tool: SRES4080-075-R05
- Machining: Internal finishing



- Tool: SRES4120-080-R30
- Machining: Circular interpolation

Ni based HRSA (Inconel718)

- **Workpiece** Turbine case (Ni based super heat resisting alloy)
- **Cutting conditions** vc (m/min) = 60, fz (mm/t) = 0.04, ap (mm) = 5, ae (mm) = 0.3, wet (emulsion)
- **Tool** SRES4120-080-R20 (Tool diameter = \varnothing 12 mm, SL Coating)



Super Endmill



Competitor



20% increased chipping resistance

► High quality due to high toughness substrate and improved machining stability

Performance evaluation

Ni based HRSA [Inconel718 (HRC43 - 46)]

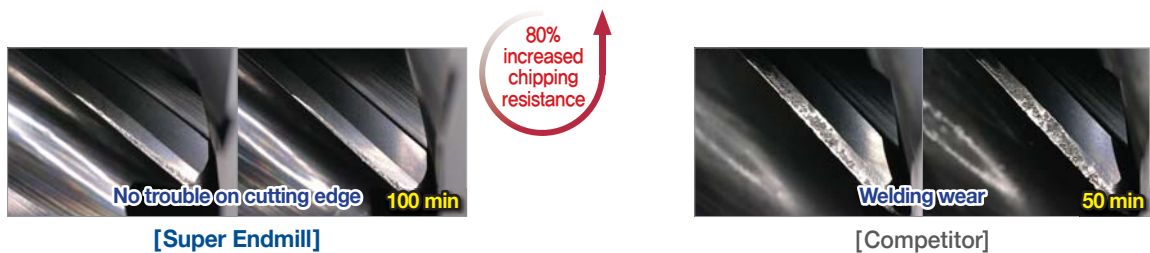
- **Cutting conditions** vc (m/min) = 40, fz (mm/t) = 0.05, ap (mm) = 18, ae (mm) = 0.6, wet (emulsion)
- **Tool** SRES4120-080-R10 (Tool diameter = \varnothing 12 mm, SL Coating)



► High quality due to high toughness substrate and improved machining stability

Ni based HRSA [Waspaloy (HRC36 - 38)]

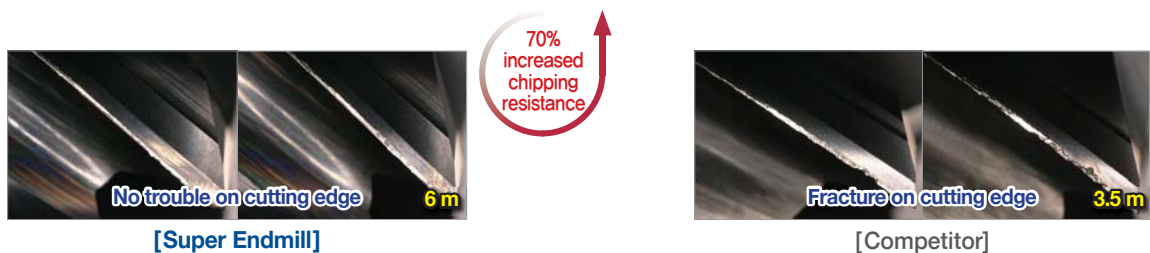
- **Cutting conditions** vc (m/min) = 30, fz (mm/t) = 0.04, ap (mm) = 6, ae (mm) = 18, Trochoidal cutting, wet (soluble)
- **Tool** SRES4120-080-R10 (Tool diameter = \varnothing 12 mm, SL Coating)



► High quality due to high toughness substrate and improved machining stability

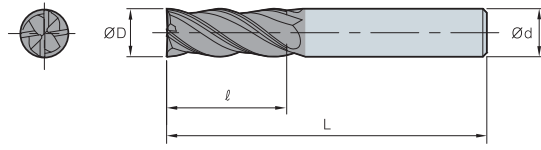
Ni based HRSA [Inconel718 (HRC43 - 46)]

- **Cutting conditions** vc (m/min) = 40, fz (mm/t) = 0.04, ap (mm) = 18, ae (mm) = 0.6, wet (emulsion)
- **Tool** SFES4120-075 (Tool diameter = \varnothing 12 mm, SL Coating)



► High quality due to high toughness substrate and improved machining stability


SFES4000 (Flat)



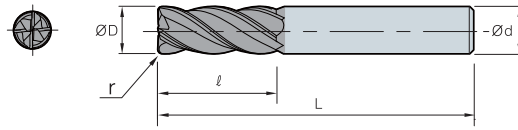
| ØD | Tolerance of diameter |
|------------|-----------------------|
| Ø1 ~ Ø6 | 0.00 ~ -0.015 |
| Ø6.1 ~ Ø20 | 0.00 ~ -0.020 |



(mm)

| Designation | | ØD | Ød | ℓ | L |
|---|----------|----|----|----|-----|
| SFES  | 4030-050 | 3 | 6 | 8 | 50 |
| | 4040-050 | 4 | 6 | 10 | 50 |
| | 4050-060 | 5 | 6 | 15 | 60 |
| | 4060-060 | 6 | 6 | 15 | 60 |
| | 4080-070 | 8 | 8 | 20 | 70 |
| | 4100-075 | 10 | 10 | 25 | 75 |
| | 4120-080 | 12 | 12 | 30 | 80 |
| | 4140-100 | 14 | 14 | 35 | 90 |
| | 4160-100 | 16 | 16 | 42 | 100 |
| | 4200-100 | 20 | 20 | 48 | 100 |

SRES4000 (Radius)



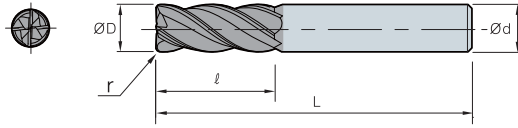
| ØD | Tolerance of diameter |
|------------|-----------------------|
| Ø1 ~ Ø6 | 0.00 ~ -0.015 |
| Ø6.1 ~ Ø20 | 0.00 ~ -0.020 |



(mm)

| Designation | ØD | Ød | ℓ | L | r |
|--------------|----|----|----|----|-----|
| SRES | | | | | |
| 4030-055-R02 | 3 | 6 | 8 | 55 | 0.2 |
| 4030-055-R03 | 3 | 6 | 8 | 55 | 0.3 |
| 4030-055-R05 | 3 | 6 | 8 | 55 | 0.5 |
| 4040-055-R02 | 4 | 6 | 10 | 55 | 0.2 |
| 4040-055-R03 | 4 | 6 | 10 | 55 | 0.3 |
| 4040-055-R05 | 4 | 6 | 10 | 55 | 0.5 |
| 4040-070-R02 | 4 | 6 | 10 | 70 | 0.2 |
| 4040-070-R03 | 4 | 6 | 10 | 70 | 0.3 |
| 4040-070-R05 | 4 | 6 | 10 | 70 | 0.5 |
| 4050-055-R02 | 5 | 6 | 15 | 55 | 0.2 |
| 4050-055-R03 | 5 | 6 | 15 | 55 | 0.3 |
| 4050-055-R05 | 5 | 6 | 15 | 55 | 0.5 |
| 4050-090-R02 | 5 | 6 | 15 | 90 | 0.2 |
| 4050-090-R03 | 5 | 6 | 15 | 90 | 0.3 |
| 4050-090-R05 | 5 | 6 | 15 | 90 | 0.5 |
| 4060-060-R03 | 6 | 6 | 15 | 60 | 0.3 |
| 4060-060-R05 | 6 | 6 | 15 | 60 | 0.5 |
| 4060-060-R08 | 6 | 6 | 15 | 60 | 0.8 |
| 4060-060-R10 | 6 | 6 | 15 | 60 | 1.0 |
| 4060-060-R15 | 6 | 6 | 15 | 60 | 1.5 |
| 4060-060-R20 | 6 | 6 | 15 | 60 | 2.0 |
| 4060-090-R03 | 6 | 6 | 15 | 90 | 0.3 |
| 4060-090-R05 | 6 | 6 | 15 | 90 | 0.5 |
| 4060-090-R08 | 6 | 6 | 15 | 90 | 0.8 |
| 4060-090-R10 | 6 | 6 | 15 | 90 | 1.0 |
| 4060-090-R15 | 6 | 6 | 15 | 90 | 1.5 |
| 4060-090-R20 | 6 | 6 | 15 | 90 | 2.0 |

SRES4000 (Radius)



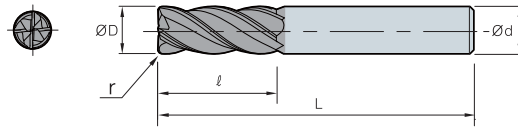
| ØD | Tolerance of diameter |
|------------|-----------------------|
| Ø1 ~ Ø6 | 0.00 ~ -0.015 |
| Ø6.1 ~ Ø20 | 0.00 ~ -0.020 |



(mm)

| Designation | ØD | Ød | ℓ | L | r |
|--------------|----|----|----|-----|-----|
| SRES | | | | | |
| 4080-070-R03 | 8 | 8 | 20 | 70 | 0.3 |
| 4080-070-R05 | 8 | 8 | 20 | 70 | 0.5 |
| 4080-070-R08 | 8 | 8 | 20 | 70 | 0.8 |
| 4080-070-R10 | 8 | 8 | 20 | 70 | 1.0 |
| 4080-070-R15 | 8 | 8 | 20 | 70 | 1.5 |
| 4080-070-R20 | 8 | 8 | 20 | 70 | 2.0 |
| 4080-070-R25 | 8 | 8 | 20 | 70 | 2.5 |
| 4080-070-R30 | 8 | 8 | 20 | 70 | 3.0 |
| 4080-100-R03 | 8 | 8 | 20 | 100 | 0.3 |
| 4080-100-R05 | 8 | 8 | 20 | 100 | 0.5 |
| 4080-100-R08 | 8 | 8 | 20 | 100 | 0.8 |
| 4080-100-R10 | 8 | 8 | 20 | 100 | 1.0 |
| 4080-100-R15 | 8 | 8 | 20 | 100 | 1.5 |
| 4080-100-R20 | 8 | 8 | 20 | 100 | 2.0 |
| 4080-100-R25 | 8 | 8 | 20 | 100 | 2.5 |
| 4080-100-R30 | 8 | 8 | 20 | 100 | 3.0 |
| 4100-075-R03 | 10 | 10 | 25 | 75 | 0.3 |
| 4100-075-R05 | 10 | 10 | 25 | 75 | 0.5 |
| 4100-075-R08 | 10 | 10 | 25 | 75 | 0.8 |
| 4100-075-R10 | 10 | 10 | 25 | 75 | 1.0 |
| 4100-075-R15 | 10 | 10 | 25 | 75 | 1.5 |
| 4100-075-R20 | 10 | 10 | 25 | 75 | 2.0 |
| 4100-075-R25 | 10 | 10 | 25 | 75 | 2.5 |
| 4100-075-R30 | 10 | 10 | 25 | 75 | 3.0 |
| 4100-100-R03 | 10 | 10 | 25 | 100 | 0.3 |
| 4100-100-R05 | 10 | 10 | 25 | 100 | 0.5 |
| 4100-100-R08 | 10 | 10 | 25 | 100 | 0.8 |
| 4100-100-R10 | 10 | 10 | 25 | 100 | 1.0 |
| 4100-100-R15 | 10 | 10 | 25 | 100 | 1.5 |
| 4100-100-R20 | 10 | 10 | 25 | 100 | 2.0 |
| 4100-100-R25 | 10 | 10 | 25 | 100 | 2.5 |
| 4100-100-R30 | 10 | 10 | 25 | 100 | 3.0 |


SRES4000 (Radius)



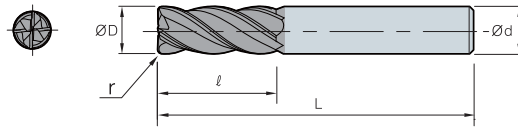
| ØD | Tolerance of diameter |
|------------|-----------------------|
| Ø1 ~ Ø6 | 0.00 ~ -0.015 |
| Ø6.1 ~ Ø20 | 0.00 ~ -0.020 |



(mm)

| Designation | | ØD | Ød | ℓ | L | r |
|---|--------------|----|----|----|-----|-----|
| SRES  | 4120-080-R05 | 12 | 12 | 30 | 80 | 0.5 |
| | 4120-080-R08 | 12 | 12 | 30 | 80 | 0.8 |
| | 4120-080-R10 | 12 | 12 | 30 | 80 | 1.0 |
| | 4120-080-R15 | 12 | 12 | 30 | 80 | 1.5 |
| | 4120-080-R20 | 12 | 12 | 30 | 80 | 2.0 |
| | 4120-080-R25 | 12 | 12 | 30 | 80 | 2.5 |
| | 4120-080-R30 | 12 | 12 | 30 | 80 | 3.0 |
| | 4120-080-R35 | 12 | 12 | 30 | 80 | 3.5 |
| | 4120-080-R40 | 12 | 12 | 30 | 80 | 4.0 |
| | 4120-110-R05 | 12 | 12 | 30 | 110 | 0.5 |
| | 4120-110-R08 | 12 | 12 | 30 | 110 | 0.8 |
| | 4120-110-R10 | 12 | 12 | 30 | 110 | 1.0 |
| | 4120-110-R15 | 12 | 12 | 30 | 110 | 1.5 |
| | 4120-110-R20 | 12 | 12 | 30 | 110 | 2.0 |
| | 4120-110-R25 | 12 | 12 | 30 | 110 | 2.5 |
| | 4120-110-R30 | 12 | 12 | 30 | 110 | 3.0 |
| | 4120-110-R35 | 12 | 12 | 30 | 110 | 3.5 |
| | 4120-110-R40 | 12 | 12 | 30 | 110 | 4.0 |
| | 4140-090-R05 | 14 | 14 | 35 | 90 | 0.5 |
| | 4140-090-R08 | 14 | 14 | 35 | 90 | 0.8 |
| | 4140-090-R10 | 14 | 14 | 35 | 90 | 1.0 |
| | 4140-090-R15 | 14 | 14 | 35 | 90 | 1.5 |
| | 4140-090-R20 | 14 | 14 | 35 | 90 | 2.0 |
| | 4140-090-R30 | 14 | 14 | 35 | 90 | 3.0 |
| | 4140-150-R05 | 14 | 14 | 35 | 150 | 0.5 |
| | 4140-150-R08 | 14 | 14 | 35 | 150 | 0.8 |
| | 4140-150-R10 | 14 | 14 | 35 | 150 | 1.0 |
| | 4140-150-R15 | 14 | 14 | 35 | 150 | 1.5 |
| | 4140-150-R20 | 14 | 14 | 35 | 150 | 2.0 |
| | 4140-150-R30 | 14 | 14 | 35 | 150 | 3.0 |


SRES4000 (Radius)



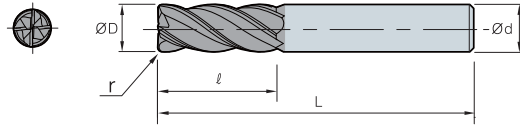
| ØD | Tolerance of diameter |
|------------|-----------------------|
| Ø1 ~ Ø6 | 0.00 ~ -0.015 |
| Ø6.1 ~ Ø20 | 0.00 ~ -0.020 |



(mm)

| Designation | ØD | Ød | l | L | r | |
|---|--------------|----|----|-----|-----|-----|
| SRES  | 4160-100-R05 | 16 | 16 | 42 | 100 | 0.5 |
| | 4160-100-R08 | 16 | 16 | 42 | 100 | 0.8 |
| | 4160-100-R10 | 16 | 16 | 42 | 100 | 1.0 |
| | 4160-100-R15 | 16 | 16 | 42 | 100 | 1.5 |
| | 4160-100-R20 | 16 | 16 | 42 | 100 | 2.0 |
| | 4160-100-R25 | 16 | 16 | 42 | 100 | 2.5 |
| | 4160-100-R30 | 16 | 16 | 42 | 100 | 3.0 |
| | 4160-100-R35 | 16 | 16 | 42 | 100 | 3.5 |
| | 4160-100-R40 | 16 | 16 | 42 | 100 | 4.0 |
| | 4160-100-R50 | 16 | 16 | 42 | 100 | 5.0 |
| | 4160-100-R60 | 16 | 16 | 42 | 100 | 6.0 |
| | 4160-150-R05 | 16 | 16 | 42 | 150 | 0.5 |
| | 4160-150-R08 | 16 | 16 | 42 | 150 | 0.8 |
| | 4160-150-R10 | 16 | 16 | 42 | 150 | 1.0 |
| | 4160-150-R15 | 16 | 16 | 42 | 150 | 1.5 |
| | 4160-150-R20 | 16 | 16 | 42 | 150 | 2.0 |
| | 4160-150-R25 | 16 | 16 | 42 | 150 | 2.5 |
| | 4160-150-R30 | 16 | 16 | 42 | 150 | 3.0 |
| | 4160-150-R35 | 16 | 16 | 42 | 150 | 3.5 |
| | 4160-150-R40 | 16 | 16 | 42 | 150 | 4.0 |
| | 4160-150-R50 | 16 | 16 | 42 | 150 | 5.0 |
| | 4160-150-R60 | 16 | 16 | 42 | 150 | 6.0 |
| | 4180-100-R05 | 18 | 20 | 45 | 100 | 0.5 |
| | 4180-100-R08 | 18 | 20 | 45 | 100 | 0.8 |
| | 4180-100-R10 | 18 | 20 | 45 | 100 | 1.0 |
| | 4180-100-R15 | 18 | 20 | 45 | 100 | 1.5 |
| | 4180-100-R20 | 18 | 20 | 45 | 100 | 2.0 |
| | 4180-100-R30 | 18 | 20 | 45 | 100 | 3.0 |
| | 4180-150-R05 | 18 | 20 | 45 | 150 | 0.5 |
| | 4180-150-R08 | 18 | 20 | 45 | 150 | 0.8 |
| 4180-150-R10 | 18 | 20 | 45 | 150 | 1.0 | |
| 4180-150-R15 | 18 | 20 | 45 | 150 | 1.5 | |
| 4180-150-R20 | 18 | 20 | 45 | 150 | 2.0 | |
| 4180-150-R30 | 18 | 20 | 45 | 150 | 3.0 | |


SRES4000 (Radius)



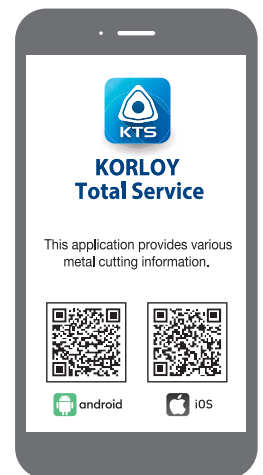
| ØD | Tolerance of diameter |
|------------|-----------------------|
| Ø1 ~ Ø6 | 0.00 ~ -0.015 |
| Ø6.1 ~ Ø20 | 0.00 ~ -0.020 |



(mm)

| Designation | | ØD | Ød | ℓ | L | r |
|---|--------------|----|----|----|-----|-----|
| SRES  | 4200-100-R05 | 20 | 20 | 48 | 100 | 0.5 |
| | 4200-100-R10 | 20 | 20 | 48 | 100 | 1.0 |
| | 4200-100-R15 | 20 | 20 | 48 | 100 | 1.5 |
| | 4200-100-R20 | 20 | 20 | 48 | 100 | 2.0 |
| | 4200-100-R25 | 20 | 20 | 48 | 100 | 2.5 |
| | 4200-100-R30 | 20 | 20 | 48 | 100 | 3.0 |
| | 4200-100-R35 | 20 | 20 | 48 | 100 | 3.5 |
| | 4200-100-R40 | 20 | 20 | 48 | 100 | 4.0 |
| | 4200-100-R50 | 20 | 20 | 48 | 100 | 5.0 |
| | 4200-100-R60 | 20 | 20 | 48 | 100 | 6.0 |
| | 4200-150-R05 | 20 | 20 | 48 | 150 | 0.5 |
| | 4200-150-R10 | 20 | 20 | 48 | 150 | 1.0 |
| | 4200-150-R15 | 20 | 20 | 48 | 150 | 1.5 |
| | 4200-150-R20 | 20 | 20 | 48 | 150 | 2.0 |
| | 4200-150-R25 | 20 | 20 | 48 | 150 | 2.5 |
| | 4200-150-R30 | 20 | 20 | 48 | 150 | 3.0 |
| | 4200-150-R35 | 20 | 20 | 48 | 150 | 3.5 |
| | 4200-150-R40 | 20 | 20 | 48 | 150 | 4.0 |
| | 4200-150-R50 | 20 | 20 | 48 | 150 | 5.0 |
| | 4200-150-R60 | 20 | 20 | 48 | 150 | 6.0 |

www.korloy.com



Holystar B/D, 1350, Nambusunhwan-ro, Geumcheon-gu, Seoul, 08536, Korea
Tel : +82-2-522-3181 Fax : +82-2-522-3184, +82-2-3474-4744 Web : www.korloy.com E-mail : sales.khq@korloy.com

KORLOY AMERICA

620 Maple Avenue, Torrance, CA 90503, USA
Tel : +1-310-782-3800 Toll Free : +1-888-711-0001 Fax : +1-310-782-3885
E-mail : sales.kai@korloy.com

KORLOY INDIA

Plot No. 415, Sector 8, IMT Manesar, Gurgaon 122051, Haryana, India
Tel : +91-124-4391790 Fax : +91-124-4050032
E-mail : sales.kip@korloy.com

KORLOY TURKEY

Orucreis Mah. Vadi Cad. No: 108 Istanbul Ticaret Sarayi
Kat 5 No: 318 Giyimkent Sitesi-Esenler/Istanbul, Turkey
Tel : +90-212-438-5197 E-mail : sales.ktl@korloy.com

KORLOY RUSSIA

Krasivy Dom office No. 305, Bld. 5, Novovladykinskiy proezd 8, 127106,
Moscow, Russia
Tel : +7-495-280-1458 Fax : +7-495-280-1459 E-mail : sales.krc@korloy.com

KORLOY FACTORY QINGDAO

Ground Dongjing Road 56(B) District Free Trade Zone. Qingdao, China
Tel : +86-532-86959880 Fax : +86-532-86760651
E-mail : pro.kfq@korloy.com

KORLOY EUROPE

Gablonzer Str. 25-27, 61440 Oberursel, Germany
Tel : +49-6171-277-83-0 Fax : +49-6171-277-83-59
E-mail : sales.keg@korloy.com

KORLOY BRASIL

Av. Aruana 280, conj.12, WLC, Alphaville, Barueri,
CEP06460-010, SP, Brasil
Tel : +55-11-4193-3810 E-mail : sales.kbl@korloy.com

KORLOY CHILE

Av. Providencia 1650, Office 1009, 7500027
Providencia-Santiago, Chile
Tel : +56-229-295-490 E-mail : sales.kcs@korloy.com

KORLOY MEXICO

Queretaro, Mexico
E-mail : sales.kml@korloy.com

KORLOY FACTORY INDIA

Plot No. 415, Sector 8, IMT Manesar, Gurgaon 122051, Haryana, India
Tel : +91-124-4391790 Fax : +91-124-4050032
E-mail : pro.kim@korloy.com