

Austenitic free-cutting stainless steel

ASK-3000T

ASK-3000T is a free-cutting stainless steel that maintains high corrosion resistance while significantly improving machinability by adding sulfur and tellurium to the SUS304 base.

SUS 304
type

Compliant with the Food
Sanitation Act (Japan)

**High
Corrosion
Resistance**

It has corrosion resistance equivalent to SUS304 and can be used in environments prone to rust.

**ASK-3000T
Product
Features**

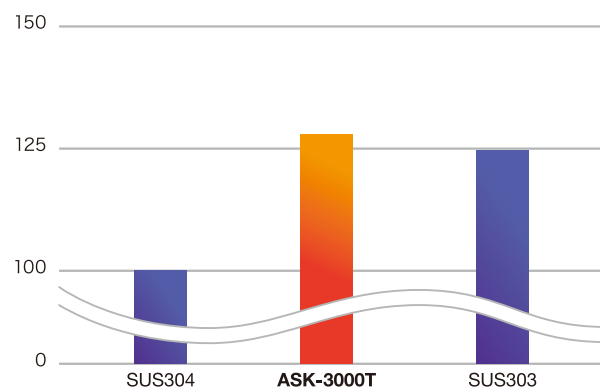
It does not contain lead as a free-cutting element and fully complies with the RoHS directive and REACH regulations.

The magnetic permeability is less likely to deteriorate during cold working.

Machinability

It offers machinability superior to SUS303, enabling machining that is difficult with SUS304.

◇ Machinability Index



Cutting conditions

- ① Test material : $\phi 10.00$
- ② Cutting tool : VP15TF(Mitsubishi)
- ③ Depth of cut : 1.0mm
- ④ Feed rate : 0.01mm/rev
- ⑤ Cutting speed : 150m/min

※The machinability index is compared to the cutting resistance value of SUS304, which is set as 100. A
※Higher index indicates better machinability.

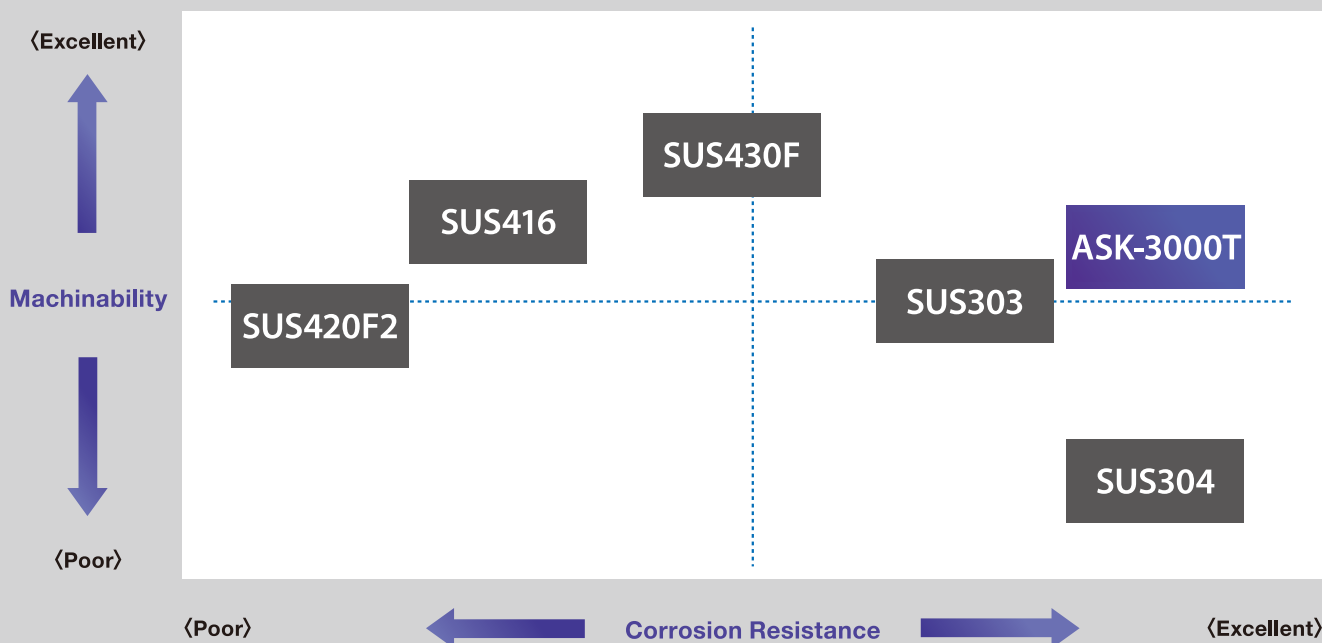
◇ Chemical Composition / Physical Properties

C	Si	Mn	P	S	Ni	Cr	Mo	Te
≤0.08	≤1.00	≤1.25	≤0.10	0.08-0.12	11.00-12.00	18.00-20.00	≤0.30	0.01-0.07

(wt%)

Basic Mass g/cm ³	Young's Modulus KN/mm ²	Poisson's ratio	Linear Expansion Coefficient(average) 10 ⁻⁶ ·°C	Thermal Conductivity W/m·°C	Specific Heat Capacity J/g·°C	Electrical Resistivity Ωm×10 ⁻⁸	Magnetic Permeability μ
Normal temp.	Normal temp.	Normal temp.	0-100°C	20-100°C	0-100°C	Normal temp.	Normal temp.
7.9	193	0.29	17.3	16.3	0.50	72	<1.05

◇ Machinability and Corrosion Resistance



◇ Salt Spray Test

ASK-3000T



SUS304



Test conditions
(JIS Z 2371)

- ① Salt solution: 5% NaCl
- ② Temperature: 35±2°C
- ③ Test duration: 96h
- ④ Sample length: L=120mm

