

SUS303 is a high free-machining austenitic stainless steel in which machinability is improved by adding sulphur to Type 304. While Sulphur addition boosts machining efficiency, it decreases corrosion resistance and slightly lowers toughness. Although the corrosion resistance of grade 303 stainless steel is lower than that of 304, its toughness remains excellent, as with other austenitic grades.

MECHANICAL PROPERTIES

Hardness	90 HRB Max
Tensile strength	705 N/mm ²
Yield strength	525 N/mm ²
Elongation	40% Min
Reduction of Area	59%

CHEMICAL COMPOSITION

C	0.15% Max
Si	1.0% Max
Mn	3.0% Max
P	0.2% Max
S	0.15% Min
Ni	8.0 – 10.0%
Cr	17.0 – 19.0%

APPLICATIONS

Nuts and bolts
Screws Gears

Aircraft fittings
Bushings
Shafts