

This page is mainly introduced the SUS 303Cu Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of SUS 303Cu, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Special Steel SUS 303Cu

SUS 303Cu Standard Number:

ITEM	Standard Number	Descriptions
1	G 4303 (2005)	Stainless steel bars
2	G 4308 (2007)	Stainless steel wire rods
3	G 4309 (1999)	Stainless steel wires
4	G 4318 (2007)	Cold finished stainless steel bars

SUS 303Cu Chemical composition (mass fraction) (wt.%)

Chemical		Min.(%)		Max.(%)					
C				0.15					
Si				1.00					
Mn				2.00					
P				0.15					
S		0.10							
Cr		17.0		19.0					
Ni		6.00		10.0					
Cu		2.50		4.00					
Se		0.10							
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

Austenitic stainless steel; B (bars) can be suffixed to the symbol of the grade; Round bars, square bars, hexagonal bars and flat bars, hereafter generically referred to as "bars".

SUS 303Cu Physical Properties

Tensile strength	115-234	σ_b /MPa
Yield Strength	23	$\sigma_{0.2} \geq$ /MPa
Elongation	65	$\delta_5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	Akv \geq /J
HBS	123-321	-
HRC	30	-

SUS 303Cu Mechanical Properties

Tensile strength	231-231	σ_b /MPa
Yield Strength	154	$\sigma_{0.2} \geq$ /MPa
Elongation	56	$\delta_5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	Akv \geq /J
HBS	235-268	-
HRC	30	-

SUS 303Cu Heat Treatment Regime

Annealing	Quenching	Tempering	Normalizing	Q & T
√	√	√	√	√

SUS 303Cu Range of products

Product type	Products	Dimension	Processes	Deliver Status
Plates / Sheets	Plates / Sheets	0.08-200mm(T)*W*L	Forging, hot rolling and cold rolling	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Steel Bar	Round Bar, Flat Bar, Square Bar	Φ8-1200mm*L	Forging, hot rolling and cold rolling, Cast	Black, Rough Turning, Shot Blasting,
Coil / Strip	Steel Coil /Steel Strip	0.03-16.0x1200mm	Cold-Rolled & Hot-Rolled	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Pipes / Tubes	Seamless Pipes/Tubes, Welded Pipes/Tubes	OD:6-219mm x WT:0.5-20.0mm	Hot extrusion, Cold Drawn, Welded	Annealed, Solution and Aging, Q+T, ACID-WASHED

