

	1.4301	1.4305	1.4308 (precision casting)
German Material No.	304	303	CF-8
AISI Standard	EN 10088-1; -2; -3	EN 10088-1; -2; -3	EN 10283
DIN-No.	X 5 CrNi 18-10	X 8 CrNiS 18-9	GX 5 CrNi 19-10
Short Name			
Components %	C ≤ 0,07 % Si ≤ 1,0 % Mn ≤ 2,0 % P ≤ 0,045 % S ≤ 0,030 % Cr 17,0 ÷ 19,5 % Ni 8,0 ÷ 10,5 %	C ≤ 0,10 % Si ≤ 1,0 % Mn ≤ 2,0 % P ≤ 0,045 % S ≤ 0,15 ÷ 0,35 % Cr 17,0 ÷ 19,0 % Ni 8,0 ÷ 10,0 %	C ≤ 0,07 % Si ≤ 1,50 % Mn ≤ 1,5 % P ≤ 0,040 % S ≤ 0,03 % Cr 18,0 ÷ 20,0 % Ni 8,0 ÷ 11,0 %
Minimum Tensile Strength Rm N/mm²	500 ÷ 700	500 ÷ 700	440 ÷ 640
Yield Strength Rp_{0.2} N/mm²	≥ 190	≥ 190	≥ 175
Dilatibility	medium	very good	medium
Forging Property	good	poor	–
Suitability for Welding	excellent	poor	good
Special Characteristics	antimagnetic structure suitable for low temperatures, can be used up to + 700° C	antimagnetic structure	antimagnetic, austenitic structure
Corrosion Resistance	good Resistant to corrosion in the natural environment: water, country and city atmospheres without significant chloride or acid concentrations, in food areas and in agricultural food areas	medium Due to the sulphur content reservations in environments which contain acids and chlorides	good Corrosion resistant Material is to a large extent comparable with 1.4301
Main areas of application	Food industry agriculture chemical industry vehicle construction construction industry machine construction decorative puposes (kitchen fittings)	Vehicle construction electronics decorative purposes (kitchen fittings)	Food industry Beverage industry Packing industry Armatures Pumps Mixers

The characteristics described should be treated as guidelines only. No guarantee is made.
The exact conditions of use have to be taken into account individually.

German Material No. AISI Standard DIN-No. Short Name	1.4310 301 EN 10088-1; -2; -3 X 10 CrNi 18-8	1.4404 Sintered material 316 LHC (Sint C40) X 2 CrNiMo 17-12-2	1.4567 304 Cu EN 10088-1; -3 X 3 CrNiCu 18-9-4
Components %	C ≤ 0,05 ÷ 0,15% Si ≤ 2,0 % Mn ≤ 2,0 % P ≤ 0,045 % S ≤ 0,015 % Cr 16,0 ÷ 19,0 % Mo ≤ 0,8 % Ni 6,0 ÷ 9,5 %	C ≤ 0,08 % Si ≤ 0,9 % Mn ≤ 0,1 % Mo ≤ 2,0 ÷ 4,0 % Cr 16,0 ÷ 19,0 % Ni 10,0 ÷ 14,0 %	C ≤ 0,04 % Si ≤ 1,0 % Mn ≤ 2,0 % P ≤ 0,045 % S ≤ 0,03 % Cr 17,0 ÷ 19,0 % Ni 8,5 ÷ 10,5 %
Minimum Tensile Strength Rm N/mm²	500 ÷ 750	330	450 ÷ 650
Yield Strength Rp_{0,2} N/mm²	≥ 195	≥ 250	≥ 175
Dilatibility	poor	–	excellent
Forging Property	good	–	good
Suitability for Welding	good	–	very good
Special Characteristics	austenitic structure	antimagnetic structure	antimagnetic structure suitable for low temperatures
Corrosion Resistance	good Corrosion resistant in a natural environment; water, rural, urban and industrial atmosphere	medium By virtue of its coarser porosity the corrosion resistance is in general reduced as compared with Stainless Steels. Reservations especially in acid and salty environment	very good Resistant to corrosion in the natural environment: water, country and city atmospheres without significant chloride or acid concentrations, in food areas and in agricultural food areas
Main areas of application	Springs for temperatures up to 300 °C Tools (knives) Sheet metal for vehicles automotive industry Chemical and food industry	Chemical, cellulose and paper industry, Paint, oil, soap and textile industry Dairies Breweries	Food industry agriculture chemical industry machine construction navigation electronics decorative purposes (kitchen fittings)

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