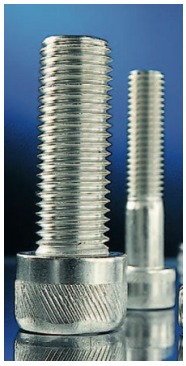
MARCEGAGLIA
FAGERSTA STAINLESS



EN 1.4567

Fagersta **R575.21 / R575.31 / R575.32 / R575.41**
Type: **304Cu**
Werkst. Nr: **1.4567**

EN 1.4567 is an austenitic stainless steel grade. Its austenitic structure combined with added Copper makes the grade very usefull where there are high demands regarding corrosion resistance in combination with very good forming properties. The main usage is for cold heading but it is also used for other applications where there are demands for good corrosion resistance. This grade is non magnetic in annealed condition but will be a bit magnetic in a cold worked condition since a part of the austenite will be transformed into deformation martensite. It is often used for cold heading, springs and bright forming applications.

CHEMICAL COMPOSITION (Nominal) %

	C*	Si	Mn	Cr	Ni	Mo*	N	Cu	PRE
R575.21	0.015	0.40	0.55	17.9	9.70	0.40	0.025	3.5	19
R575.31	0.015	0.40	0.80	17.5	9.10	0.60	0.030*	3.3	19
R575.32	0.015	0.40	1.50	17.4	9.10	0.60	0.025	3.2	19
R575.41	0.015	0.40	1.50	17.2	8.60	0.40	0.030	3.1	19

(PRE = Cr + 3.1 x Mo + 25 x N)

* = max

THERMAL TREATMENT

Annealing temperature	1000 - 1100 °C
	1832 - 2012 °F

PHYSICAL PROPERTIES

Condition: Annealed

Density	7.9 g / cm^3
Moduls of elasticity, E	190 - 200 GPa
Specific heat 0-100°C	480 J / kg°C

MAX. OPERATING TEMPERATURE

Operating temp. in air	800 °C
	1472 °F
Scaling temp. in air	850 °C
	1562 °F

TYPICAL MECHANICAL PROPERTIES

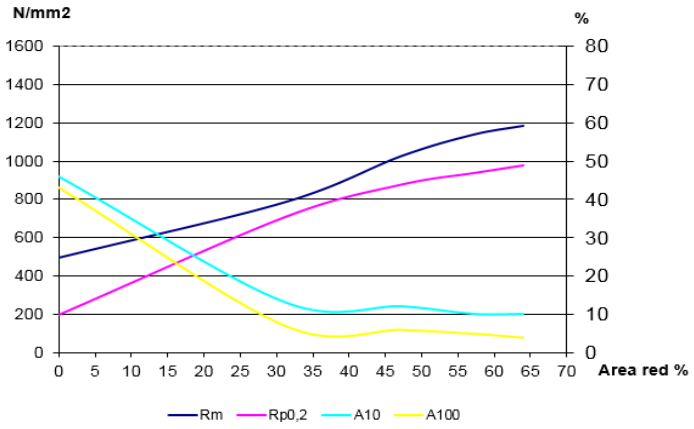
Condition: Annealed or DST-annealed (Direct Solution Treatm.)

Proof strength	**Rp0.2**	min 170 N / mm^2
Tensile strength	**Rm**	450 - 550 N / mm^2
Elongation	**A10**	min 45 %

THERMAL CONDUCTIVITY

20 °C	15.0 W / mK
100 °C	15.5 W / mK
200 °C	17.5 W / mK
400 °C	20.0 W / mK

DEFORMATION GRAPH



THERMAL EXPANSION

Thermal expansion per °C x 10-6 from 20°C to:

100 °C	16.7
200 °C	17.2
300 °C	17.7
400 °C	18.1
500 °C	18.4

RESISTIVITY

20 °C	700 µΩmm
100 °C	750 µΩmm
200 °C	800 µΩmm
300 °C	950 µΩmm