



1.4542/AISI 630


CONFIDENTIAL

CHEMICAL COMPOSITION [% weight]

C	Si	Mn	P	S	Cr	Ni	Mo	Cu	Nb
0.07 max	0.70 max	1.50 max	0.040 max	0.030 max	15-17	3-5	0.60 max	3-5	5xC-0.45

CHARACTERISTICS AND AREAS OF APPLICATION

Chrome, Nickel, Copper precipitation hardening stainless steel. It is used for highly stressed parts operating in corrosive environments in both the chemical and motor industries in general. Example: valves for the oil industry, turbine valves, tie rods, propeller shafts, turbine blades, gears, nuts and bolts, springs, cables for seawater support.

INDICATIVE MECHANICAL PROPERTIES

[ACCORDING TO EN10088-3 AT HARDENED STATE - ROOM TEMPERATURE]

Metallurgical condition	Rm [N/mm ²]	Rp 0.2 [N/mm ²]	A5 [%] min	Indic. hardness [HB] max
Annealed	≤ 1200	-	-	360

WELDABILITY

Superior compared to martensitic grades. Heating is not necessary yet post-welding heat treatment should be carried out to obtain the same basic mechanical properties in the cast zone too.

CORROSION RESISTANCE

Similar to 1.4307, when aged at temperatures above 550°C has good resistance even in marine and sulphydric environments. Do not use in the solubilised state.

HEAT TREATMENT

ANNEALING

> 1040°C acqua/air

AGING

> 480°-620°C (1-4 hours)

ANNEALING FOR IMPROVED PROCESSING

> 760°-620°C (2-4 hours)

[*] The information on this sheet is of a general nature and reflects the contents of the technical regulations. For any specific request or clarification, please contact Eure inox Quality Department.