

# HEAT TREATABLE STEELS AND PRECIPITATION HARDENING STEELS

## Product Description

Highly stressed components for the aircraft and rocket industries. Constructional and tool steel for hot and cold working tools used for long-time service at temperatures up to approx. 450°C (840°F). Machine tools, pressure vessels, gearwheels (nitrided), screws, precision parts, tools for hydrostatic presses, cold extrusion tools, cold heading and embossing tools, plastic moulds, die casting tools for aluminium and zinc alloys, hot pressing tools.

## Properties

- High tensile strength
- High ratio of yield point to tensile strength
- High toughness (also at low temperatures)
- High notch tensile strength
- High fire cracking resistance
- Virtually no dimensional changes during heat treatment
- No decarburization
- No risk of cracking
- Through-hardenability also of large thicknesses
- Good machinability also in the precipitation-hardened condition
- Good cold working properties thanks to low work hardening tendency
- Good weldability
- Easy heat treatment at low temperatures

## Applications

> Other Aerospace Comps.

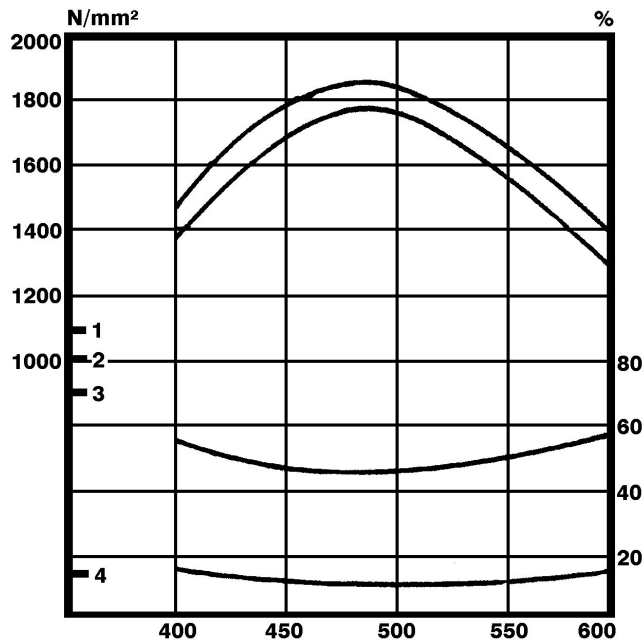
> Turbine and Engine Parts (Aerosp)

## Technical data

Material designation		Standards	
1.6359	SEL	Marage 250	ASTM
K92890	UNS	6512	AMS
X2NiCoMo18-8-5	EN	S162	BS
Maraging 250	Market grade		

## Chemical composition (wt. %)

C	Si	Mn	Mo	Ni	Co	Ti	Al
≤ 0,005	≤ 0,05	≤ 0,05	4.9	18	7.8	0.55	0.13



Auslagerungstemperatur (Haltedauer 3 Stunden) in °C  
Ageing temperature (holding time 3 hours) in °C

For more information see <https://www.voestalpine.com/boehler-edelstahl/de/>

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