

TOOL STEELS

HARDENABLE CORROSION RESISTANT STEEL

Application Segments

Plastic Mould

Cold Work

Formatos disponibles

Productos largos

Descripción

Martensitic chromium steel with high carbon content and molybdenum addition.

Propiedades

- > Dureza y Ductilidad : buena
- > Resistencia al desgaste : muy alta
- > Maquinabilidad : buena
- > Estabilidad dimensional : buena
- > Pulibilidad : buena
- > Resistencia a la corrosión : buena

Aplicaciones

- > Moldeo por inyección
- > Pharmaceutical industry like pill punches and -dies
- > Extrusion screws for plastic processing
- > Foodindustry like extrusion screws, can closing rolls
- > Canales calientes
- > Componentes estándar (moldes, placas, expulsores, punzones)

Datos técnicos

Designación	
1.4125	SEL
X105CrMo17	EN
440C	AISI

Composición Química

C	Si	Mn	Cr	Mo
1,05	0,4	0,4	16,7	0,5

Estado de suministro

recocido

Dureza (HB)	máx. 265
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Tratamiento térmico

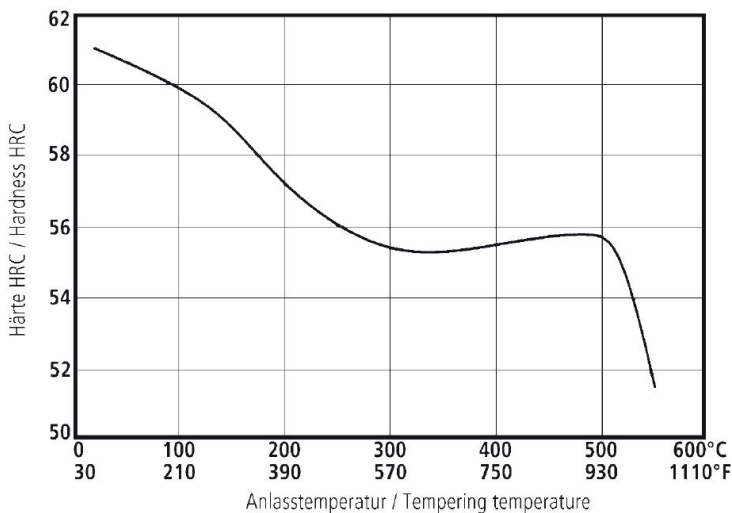
Alivio de tensiones

Temperatura	650 °C	After through heating, keep at temperature for 1 to 2 hours in a neutral atmosphere. Slow furnace cooling
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Temple y revenido

Temperatura	1.000 a 1.050 °C	Holding time after complete soaking, max. 30 minutes / 25 mm cross section
Temperatura	150 a 350 °C	Tempering treatment required after hardening to the desired working hardness - see tempering chart. Tempering of min. 2h after complete soaking. Tempering shall be made immediately after hardening. After each tempering a cooling RT shall be done.

Tempering chart



Hardening temperature: 1030°C / 1886°F
Specimen size: square 20 mm

Hardness up to 58 - 60 HRC

Propiedades físicas

Temperatura (°C)	20
Densidad (kg/dm ³)	7,7
Conductividad térmica (W/(m.K))	15
Calor específico (kJ/kg K)	0,43
Resistencia eléctrica específica (Ohm.mm ² /m)	0,8
Módulo de elasticidad (10 ³ N/mm ²)	215

Expansión térmica

Temperatura (°C)	100	200	300	400	500
Expansión térmica (10 ⁻⁶ m/(m.K))	10,4	10,8	11,2	11,6	11,9

For additional specifications and technical requirements, please contact our regional voestalpine BÖHLER sales companies.

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