

# 1.4125 / 1.4125 ESR (X105CrMo17)

## Material Designation

1.4125	DIN
S44004	UNS
440 C	AISI

## Standards

DIN EN 10088-3
ASTM A276/A276M

## Chemical Composition Mass-%

	C	Si	Mn	P	S	Cr	Mo
min.	0,95	-	-	-	-	16,0	0,40
max.	1,20	1,00	1,00	0,040	0,030	18,0	0,75

Customer specific restrictions upon request

## Properties

1.4125 is a high carbon Cr-Mo-alloyed stainless martensitic steel with very good wear resistance due to high hardness compared to other martensitic grades.

Resistance to corrosion is good in non-severe conditions and can be improved by surface polishing.

Available also as ESR-grade (electro-slag remelted quality).

## Delivery Condition

✂ annealed (+A) max. 285 HBW

## Application Area

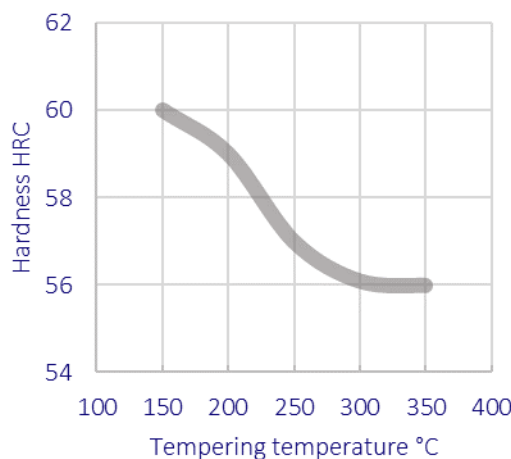
Parts with highest demands on wear resistance in mild corrosive environments.

## Typical Applications

- ✂ Pumps and valve components
- ✂ Bearings
- ✂ Surgical instruments
- ✂ Knives

## Heat Treatment Guideline values acc. to DIN EN 10088-3

	Temperature [°C]	Cooling medium
Annealing (+A)	780 - 840	Furnace, air
Hardening	1010 - 1070	Oil, air
Tempering	See below	



Tempering graph: hardening temperature 1040 °C

## Quality

- ISO 9001
- ISO 14001
- ISO 50001
- Approvals acc. to standards like ABS, BV, DNV ...
- Customer specific approval certificates

## Innovation

- Fully automated ultrasonic testing up to dia. 1000 mm
- CO<sub>2</sub>-reduction by innovative heat treatment solutions

## Flexibility

- Product range from fine wire to forging
- Directly from stock close at hand

## Individuality

- Dimensions
- Tolerances
- Surface qualities
- Delivery conditions

## Your personal contact:

---



---

## BGH Edelstahlwerke GmbH

Am Stahlwerk 1  
01705 Freital  
+49 351 646-0  
www.bgh.de

