

## DELIVERY CONDITION

Annealed.

## PROPERTIES AND MOST COMMON APPLICATIONS

Steel for pieces requiring good hardenability, strength and tenacity.

Advisable for pieces with a core tensile strength of between 90-125 kg/mm<sup>2</sup>, after case hardening and quenching. Its most common applications are for gears, rims, bolts and shafts.

## DIMENSIONS IN STOCK MM.



21-610

## APPLICABLE STANDARD

UNE 36-013-76

## CHEMICAL COMPOSITION

	<b>C</b>	<b>Mn</b>	<b>Si</b>	<b>P</b>	<b>S</b>	<b>Cr</b>	<b>Mo</b>	<b>Ni</b>
MIN	0,17	0,80	0,15			0,80	0,10	0,80
MAX	0,22	1,00	0,40	0,035	0,035	1,20	0,30	1,20

## HEAT TREATMENTS - APPROXIMATE TEMPERATURES

<b>Annealed °C</b>	<b>Quenched °C</b>	<b>Tempered °C</b>
650-680	850 - 890 oil	150-200

## MECHANICAL PROPERTIES

Mechanical properties at room temperature in annealed condition.

Maximum hardness  
207 HB

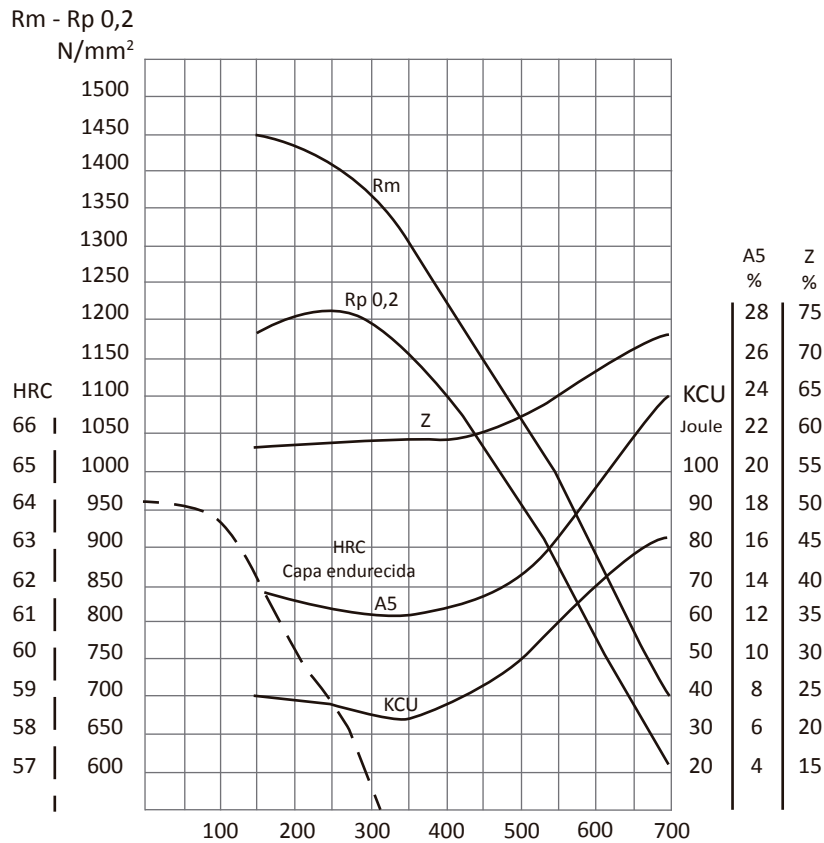
## APPROXIMATE EQUIVALENT STANDARDS

EN	DIN	Nº STAND	UNE	STAS	AFNOR	BS	UNI	AISI/SAE	GOST
			F158Mo		18NCD6		19NCD4		18XGHM

## COLOUR CODE

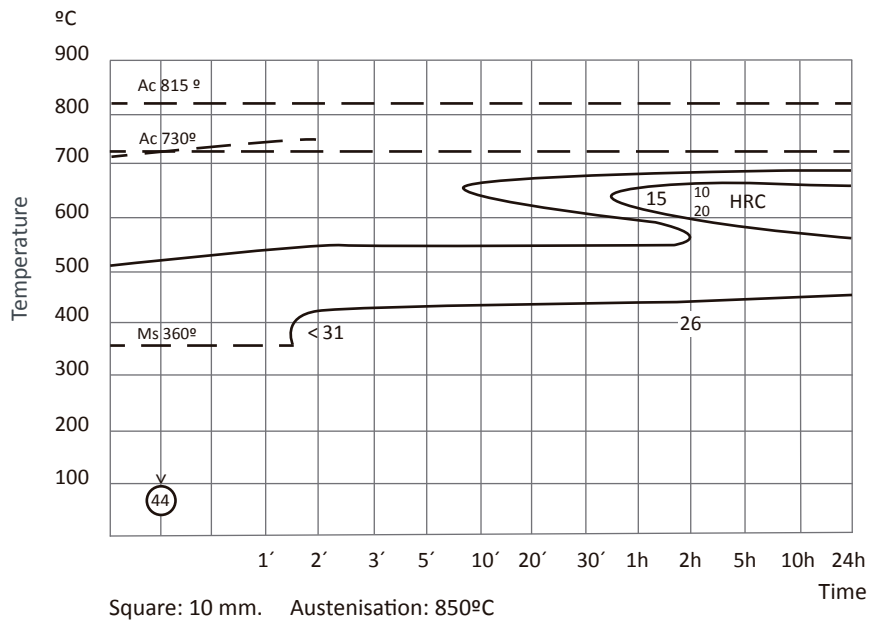


## TEMPERING DIAGRAM



Treatment: in Ø 11 mm Hardness: 850°C oil Tempering for 2 hours

## TTT DIAGRAM



## CCT DIAGRAM

C	Si	Mn	Cr	Ni	Mo	Ac1	Ac	M	Grain Ø
0,19	0,32	0,81	0,75	1,25	0,17	740 °C	825 °C	470 °C	4-8 ASTM

Dimensions of the test  
Ø = 2 L=12.

Pre-heat treatment  
Rec. 650 °C.

Austenisation  
875 °C

