

# 16MnCr5

## DELIVERY CONDITION

Annealed .

## PROPERTIES AND MOST COMMON APPLICATIONS

Steel for small section case hardened pieces, requiring a hard surface and a tough core (core hardness between 85 kg/mm<sup>2</sup> and 115 kg/m<sup>2</sup>). It is weldable. Its most common applications are for the manufacturing of pinions, gear shafts and shafts.

## DIMENSIONS IN STOCK MM.



200-470

## APPLICABLE STANDARD

EN 10084

## CHEMICAL COMPOSITION

	C	Mn	Si	P	S	Cr
MIN	0,14	1,00				0,80
MAX	0,19	1,30	0,40	0,025	0,035	1,10

## HEAT TREATMENTS - APPROXIMATE TEMPERATURES

Annealed °C	Quenched °C	Tempered °C
670-700	860 - 900 Oil	150-200

## MECHANICAL PROPERTIES

Mechanical properties at room temperature in annealed condition.

Maximun hardness  
207 HB

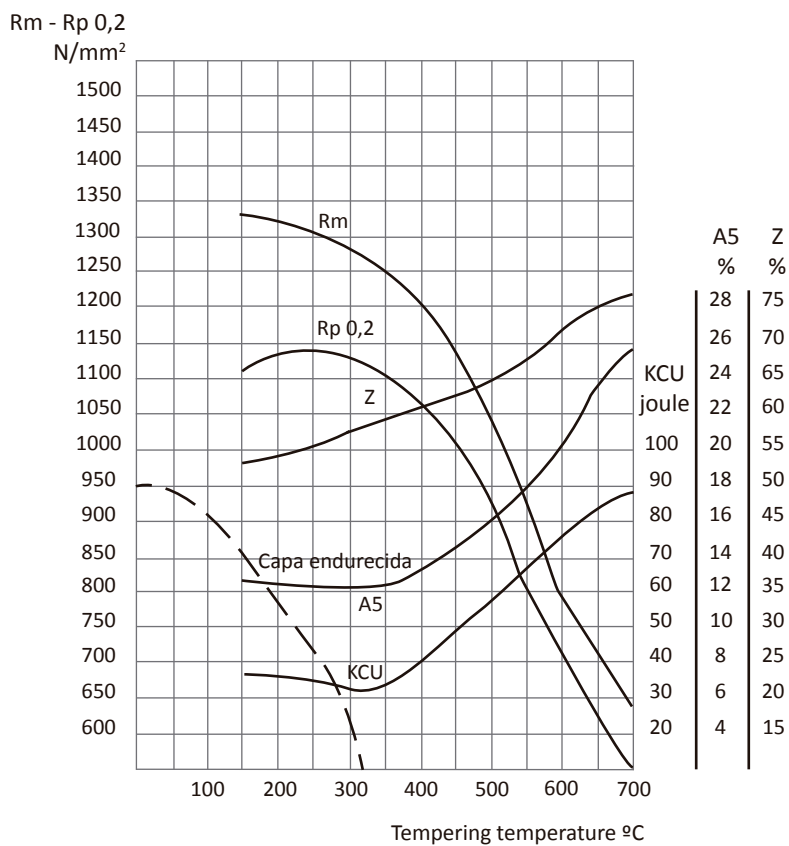
## APPROXIMATE EQUIVALENT STANDARDS

EN	DIN	Nº STAND	UNE	STAS	AFNOR	BS	UNI	AISI/SAE	GOST
16MnCr5	16MnCr5	1.7131	F1516		16MC5	527M17	16MnCr5	5117	18XГ

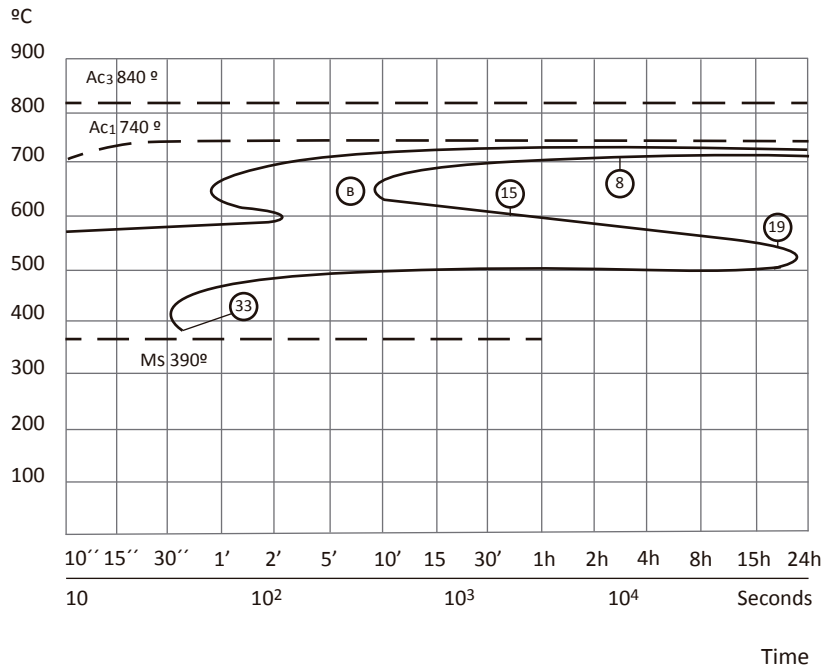
## COLOUR CODE



## TEMPERING DIAGRAM



## TTT DIAGRAM



Test block:  $\varnothing$  8      Austenisation: 870°C per 1/2 hour