

## DELIVERY CONDITION

As rolled.

## PROPERTIES AND MOST COMMON APPLICATIONS

Carbon steel with a medium tensile strength and a good weldability and tenacity.

Considering its mechanical properties, it is a good substitute for C25 and C35.

Acceptable results in the case hardening of non-critical pieces.

Its most common applications are for bolts, chains, railway shafts, connection rods and metallic structures.

## DIMENSIONS IN STOCK MM.



20-100



30x5 -220-50

## APPLICABLE STANDARD

EN 10025-2

## CHEMICAL COMPOSITION

	C	Mn	Si	P	S	Others
MIN						Cu. Max. 0,55
MAX	0,22	1,60	0,55	0,030	0,030	Al. Min. 0,020

## HEAT TREATMENTS - APPROXIMATE TEMPERATURES

Annealed °C	Quenched °C	Tempered °C
670-700	870 - 890 Water	480-650

## MECHANICAL PROPERTIES

Mechanical properties at room temperature in normalized condition (+N).

Dimensions		Re (N/mm <sup>2</sup> )	Rm (N/mm <sup>2</sup> )		A (%)	KV MIN. (0 ° C)	Guidance hardness
mm.		min.	min.	máx.	min.	J	HB
≥ 3	≤ 16	355	470	630	22	27	146-187
> 16	≤ 40	345	470	630	22	27	146-187
> 40	≤ 63	335	470	630	21	27	146-187
> 63	≤ 80	325	470	630	20	27	146-187
> 80	≤ 100	315	470	630	20	27	146-187
> 100	≤ 150	295	450	600	18	27	143-179
> 150	≤ 200	285	450	600	17	27	143-179
> 200	≤ 250	275	450	600	17	27	143-179
> 250	On request						

## APPROXIMATE EQUIVALENT STANDARDS

EN	DIN	Nº STAND	UNE	STAS	AFNOR	BS	UNI	AISI/SAE	GOST
	ST52-3U	1.0553	AE355C		E36-3	50C	Fe510C	K12000	17Г1С

## COLOUR CODE

