

PROPERTIES AND MOST COMMON APPLICATIONS

Carbon steel of medium resistance.

Induction hardened reaches 50-60 HRC.

Not recommended for welding.

Its most common applications are for agricultural machinery, sleeves, screws and washers.

DIMENSIONS IN STOCK MM.



5 - 100

APPLICABLE STANDARD

EN 10277-2

CHEMICAL COMPOSITION

	C	Mn	Si	P	S	Cr	Mo	Ni	Others
MIN	0,42	0,50							Cr + Mo + Ni Max. 0,63
MAX	0,50	0,80	0,40	0,045	0,045	0,40	0,10	0,40	

HEAT TREATMENTS - APPROXIMATE TEMPERATURES

Annealed °C	Quenched °C	Tempered °C
670-710	830 - 850 water 840 - 860 oil	550-660

MECHANICAL PROPERTIES

Dimensions		Re (N/mm ²)	Rm (N/mm ²)		A (%)
mm.		min.	min.	max.	min.
≥ 5	≤ 10	565	750	1050	5
> 10	≤ 16	500	710	1030	6
> 16	≤ 40	410	650	1000	7
> 40	≤ 63	360	630	900	8
> 63	≤ 100	310	580	850	8

APPROXIMATE EQUIVALENT STANDARDS

EN	DIN	Nº STAND	UNE	STAS	AFNOR	BS	UNI	AISI/SAE	GOST
C45	C45	1.0503	F1140	OLC45q	C45	080M46	C45	1045	45

DELIVERY CONDITIONS

Grade	Profile	Tolerance	Length, mm.	Bundle weight, kg min.
C45		h9 - h10-h11	3000 - 6000	1000 - 2000

CÓDIGO DE COLOR

