



C10E

Special non-alloy case-hardening steel

(W. NR. 1.1121)

CHEMICAL COMPOSITION: (heat analysis according to the EN ISO 683-3:2022 standard)

	C %	Si %	Mn %	P %	S %	Cr%	Mo%	Ni%	Cu%
FROM	0,07	-	0,30	-	-	-	-	-	-
TO	0,13	0,40	0,60	0,025	0,035	0,40	0,10	0,40	0,30

*MECHANICAL FEATURES: (according to the EN 10277:2018 standard)

Thickness mm	Annealed + drawn (+A+C)	Cold drawn (+C)		
	Hardness HB max.	R _{p0,2} minimum values (MPa)	R _m (MPa)	A ₅ % Minimum values
≥5≤10	225	350	460 - 760	8
>10≤16	216	300	430 - 730	9
>16≤40	207	250	400 - 700	10
>40≤63	190	200	350 - 640	12
>63≤100	172	180	320 - 580	12

* Delivery condition: as rolled

PROPERTIES :

Weldability:

It is a soft carbon-steel, easily cold machinable and weldable without any particular precautions.

Improved machinability:

Upon request it can be supplied with improved machinability with Pb (lead) addition, for example Pb=0,15% ÷ 0,35%

Notes:

CORRESPONDENCE WITH OTHER STANDARDS (purely as an indication):

UNI 7846 C10	DIN 17210 CK10	EN 10084 C10E	AFNOR 35-551 XC10
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