



C15E

Special non-alloy case-hardening steel

(W. NR. 1.1141)

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

	C %	Si %	Mn %	P %	S %	Cr%	Mo%	Ni%	Cu%
FROM	0,12	-	0,30	-	-	-	-	-	-
TO	0,18	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	238	380	500 - 800	7
>10≤16	231	340	480 - 780	8
>16≤40	216	280	430 - 730	9
>40≤63	198	240	380 - 670	11
>63≤100	178	215	340 - 600	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 C15	DIN 17210 CK15	EN 10084 C15E	AFNOR 35-551 XC12
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