

	20MnCrS5 Special alloy case-hardening steel	(W. NR. 1.7149)
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CHEMICAL COMPOSITION: (heat analysis according to the EN ISO 683-3:2022 standard)

	C %	Si %	Mn %	P %	S %	Cr %	Cu%
FROM	0,17	-	1,10	-	0,020	1,00	-
TO	0,22	0,40	1,40	0,025	0,040	1,30	0,40

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

Thickness mm	Soft annealed* + peeled rolled (+A +SH)	Soft annealed* + cold drawn (+A+C)
	Hardness HB Maximum values	Hardness HB Maximum values
≥5≤10	-	270
>10≤16	-	260
>16≤40	217	255
>40≤63	217	250
>63≤100	217	250

* Delivery condition: subjected to a softening treatment according to the maximum required hardness.

PROPERTIES :

Weldability:

It is a MnCr-alloy steel, easily hot machinable and weldable.

Hardenability:

It has got a quite good hardenability and therefore it can show good core properties till a thickness of about 40 mm.

Notes :

Correspondence with other standards (purely as an indication) :

UNI 7846 20MnCr5	EN 10084 20MnCrS5	DIN 17210 20MnCrS5	EN 10277-4:2008 20MnCrS5	AFNOR 35-551 20MC5
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