

	11SMnPb37 High machinability steel not destined to heat treatment	(W. NR. 1.0737)
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CHEMICAL COMPOSITION: (heat analysis according to the EN ISO 683-4:2018 standard)

	C %	Si %	Mn %	P %	S %	Pb %
FROM	-	-	1,00	-	0,34	0,20
TO	0,14	0,05	1,50	0,11	0,40	0,35

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

Thickness mm	rolled + peeled rolled (+SH)		Cold drawn (+C)		
	HB hardness max.	Rm (MPa)	Rp _{0,2} minimum values (MPa)	Rm (MPa)	A ₅ % minimum values
≥5≤10			440	510 - 810	6
>10≤16			410	490 - 760	7
>16≤40	169	380 - 570	375	460 - 710	8
>40≤63	169	370 - 570	305	400 - 650	9
>63≤100	154	360 - 520	245	360 - 630	9

* Delivery condition: as rolled

PROPERTIES:

Machinability:

This steel grade is marked by a good machinability on machine tools and by an easy fragmentation of chips.

In order to further improve its machinability, this steel grade can be supplied upon request with Te (tellurium) and Bi (bismuth) addition.

Weldability:

Due to the high sulphur and phosphorus content free-cutting steels not destined to heat treatment are not generally recommended for welding.

Notes:

CORRESPONDENCE WITH OTHER STANDARDS (purely as an indication) :

UNI 4838 CF 9 SMnPb 36	DIN 1651 9SMnPb36	AFNOR 35-561 S 300 Pb	EN 10277-3:2008 11SMnPb37	EN 10087 11SMnPb37
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