

	<b>38SMn28</b> High machinability steel for direct hardening	(W. NR. 1.0760)
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**CHEMICAL COMPOSITION:** (heat analysis according to the EN ISO 683-4:2018 standard)

	C %	Si %	Mn %	P %	S %
FROM	0,35	-	1,20	-	0,24
TO	0,40	0,40	1,50	0,06	0,33

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

Thickness mm	rolled + peeled rolled (+SH)		Cold drawn (+C)		
	HB hardness max.	Rm (MPa)	Rp <sub>0,2</sub> minimum values (MPa)	Rm (MPa)	A <sub>5</sub> % minimum values
≥5≤10			550	700 - 960	6
>10≤16			500	660 - 960	6
>16≤40	213	560 - 730	420	610 - 900	7
>40≤63	213	560 - 730	400	600 - 840	7
>63≤100	204	550 - 700	350	580 - 820	8

\* Delivery condition: as rolled

**PROPERTIES:**

### Machinability

This steel grade generally shows a quite good machinability on machine tools; machinability decreases with the increase of carbon, silicon and manganese content.

### Weldability

Due to the high sulphur and phosphorus content free-cutting steels for direct hardening are not recommended for welding.

### Notes

**CORRESPONDENCE WITH OTHER STANDARDS** ( purely as an indication ) :

<b>UNI 4838</b> /	<b>AFNOR 35-562</b> /	<b>EN 10087</b> 38SMn28	<b>EN 10277-3:2008</b> 38SMn28
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