

<b>Quality</b>	<b>11SMnPb37</b>
According to standard	<b>EN 10087: 2000</b>
Number	<b>1.0737</b>

## Chemical composition

C%	Si%	Mn%	P%	S%	Pb%	Deviations allowed for analysis product
max	max		max			
0,14 ± 0.02	0,05 + 0.01	1,00-1,50 ± 0.06	0,11 + 0.02	0,34-0,40 ± 0.04	0,20-0,35 +0.03 -0.02	

## Temperature °C

Hot-forming	Natural state	Soft annealing	Carburizing	Hardening on carburized surface	Stress-relieving
1250-950	(HB 180 max)	680 air			
Normalizing	Direct hardening	Direct hardening	Stress-relieving	Pre-heating welding	Stress-relieving after welding
900 air	880 water	890 oil or polymer	150-200 furnace cooling	not recommended	

## Mechanical properties

Hot-rolled natural forming condition EN 10087: 2000						Hot-rolled quenched and tempered			
Testing at room temperature (longitudinal)									
size mm		R	HB			R	Rp 0.2	A%	HB
from	to	N/mm <sup>2</sup>	for information			N/mm <sup>2</sup>	N/mm <sup>2</sup> min	min	
5	10	380-570	112-169			Not suitable for heat treatment			
10	16	380-570	112-169						
16	40	380-570	112-169						
40	63	370-570	109-169						
63	100	360-520	107-154						

Cold-drawn +C EN 10277-3: 2008						Hot-rolled <b>peeled-reeled</b> +SH			
Values valid also for +C+SL						Values valid also for +SH+SL			
size mm		Testing at room temperature (longitudinal)				Testing at room temperature (longitudinal)			
over	to	R <sup>a)</sup>	Rp 0.2 <sup>a)</sup>	A%	HB	R	Rp 0.2	A%	HB
		N/mm <sup>2</sup>	N/mm <sup>2</sup> min	min	for inform.	N/mm <sup>2</sup>	N/mm <sup>2</sup> min	min	
5 <sup>b)</sup>	10	510-810	440	6	154-243				
10	16	490-760	410	7	149-226				
16	40	460-710	375	8	139-218	380-570			112-169
40	63	400-650	305	9	119-200	370-570			112-169
63	100	360-630	245	9	104-192	360-520			107-154

<sup>a)</sup> for flats and special sections, yield point can be - 10% and tensile strength can be ± 10%

<sup>b)</sup> for thickness < 5 mm, mechanical properties should be agreed before order placement

EUROPE EN	ITALY UNI	CHINA GB	GERMANY DIN	FRANCE AFNOR	U.K. B.S.	RUSSIA GOST	USA AISI/SAE
11SMnPb37	CF 9SMnPb36		9SMnPb36	S300Pb			12L14