METALLURGICA VENETA
ACCIAI SPECIALI

Certified Company

11SMn30

Quality	**11SMn30**
According to standards	**EN 10087: 2000**
Number	**1.0715**

Chemical composition

C% max	**Si%** max	**Mn%**	**P%** max	**S%**	**Pb%**	Deviations allowed for analysis product
0,14	0,05	0,90-1,30	0,11	0,27-0,33		
± 0.02	+ 0.01	± 0.04	+ 0.02	± 0.03		

Temperature °C

Hot-forming	**Natural state**	**Soft annealing**	**Carburizing**	**Hardening on carburized surface**	**Stress-relieving**
1250-950	(HB 180 max)	680 air	(880-950)	(770-810)	(180-200)

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

Testing at room temperature (longitudinal)

size mm from	to	**R** N/mm²	***HB*** *for information*
5	10	380-570	*112-169*
10	16	380-570	*112-169*
16	40	380-570	*112-169*
40	63	370-570	*109-169*
63	100	360-520	*107-154*

Hot-rolled quenched and tempered

R N/mm²	**Rp** 0.2 N/mm² min	**A**% min	**HB**
Not suitable for heat treatment			

Cold-drawn +C EN 10277-3: 2008

Values valid also for +C+SL

Testing at room temperature (longitudinal)

size mm over	to	**R** [a] N/mm²	**Rp** 0.2 [a] N/mm² min	**A**% min	***HB*** *for inform.*
5 [b]	10	510-810	440	6	*154-243*
10	16	490-760	410	7	*149-226*
16	40	460-710	375	8	*139-218*
40	63	400-650	305	9	*119-200*
63	100	360-630	245	9	*104-192*

Hot-rolled Peeled-Reeled +SH

Values valid also for +SH+SL

Testing at room temperature (longitudinal)

R N/mm²	**Rp** 0.2 N/mm² min	**A**% min	**HB**
380-570			112-169
370-570			112-169
360-520			107-154

[a] for flats and special sections, yield point can be – 10% and tensile strength can be ± 10%

[b] 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
11SMn30	CF 9SMn28		9SMn28	S250	230M07		1214