

Plates of S890Q steel grade

Fine-grain structural steel after quenching and tempering

Products description

S890Q – structural high-strength steel with minimum yield strength of 890 MPa supplied in quenched and tempered condition (Q). Plates of S890 steel grade comply with EN 10025-6 standard. It is typically used in structures bearing extreme loads – in the production of mining and heavy construction equipment, crane facilities, offshore drilling rigs and supports for offshore wind mills as well as in the construction of bridges and trestles.

Available dimensions

Plates of S890 steel grade are available with thicknesses of 12-25 mm. Available width of plates is up to 3200 mm, length – up to 12200 mm. Plates are supplied with edges trimmed or flame cut.

Mechanical properties under EN 10025-6

Thickness, mm	Yield strength, min MPa	Tensile strength, MPa	Elongation, min %
≥12 t ≤50	890	940-1100	11

Steel grade	Impact energy KV, min J	
	0	-20
S890Q	40	30

Chemical composition (max %)

According to Metinvest production

C	Si	Mn	P	S	N	B	Cr	Cu	Mo	Nb	Ni	V
0.15-0.18	0.20-0.40	1.00-1.20	0.020	0.005	0.015	0.0010-0.0020	0.50-0.70	0.30-0.50	0.50-0.70	0.015-0.025	0.80-1.00	0.050-0.080

Carbon equivalent

CEV	CET
0.55-0.70	0.36-0.42

$$CEV = C + \frac{Mn}{6} + \frac{Cr+Mo+V}{5} + \frac{Cu+Ni}{15}$$

$$CET = C + \frac{Mn+Mo}{10} + \frac{Cr+Cu}{20} + \frac{Ni}{40}$$

Tolerances

Thickness	According to EN 10029 Class A
Length and width	According to EN 10029
Flatness	According to EN 10029 Class N
Surface properties	According to EN 10163 Class A

Welding

Steels specified in this document possess limited weldability properties since steel behavior before and after welding depends not only on the material, but its dimensions and shapes as well as operating conditions of goods.

General requirements to arc welding of steels specified herein shall be in line with EN 1011-2.

Contacts

Europe

Metinvest Western Europe

Via XII Ottobre, 3
16121 Genova, Italy
Tel.: +39 010 576 29 11
Fax: +39 010 576 29 90
E-mail: trametal@trametal.it

Metinvest South-East Europe

1 Dobrudzha Str., 1000 Sofia, Bulgaria
Tel.: +359 886 007 204
E-mail: office.sofia@promet.bg

GULF countries

Metinvest International Gulf branch office

Jebel Ali Free Zone, building LOB 17,
Floor 3 PO Box 263027, Dubai, UAE
Tel.: 971 4 881 19 40
Fax: +971 4 881 19 57
E-mail: viktor.vukusic@metinvest-international.com

World

Metinvest International

2 Rue Vallin, Geneva
1201, Switzerland
Tel.: +41 22 906 18 28
E-mail: sales@metinvest-international.com