

RQT 701[®] Data Sheet

RQT 701[®] is a quench and tempered structural steel, combining high strength with excellent forming and welding performance.

Chemical composition

Thickness* (mm)		C (%)	Si (%)	Mn (%)	S (%)	P (%)	Cr (%)	Mo (%)	Nb (%)	V (%)	Ni (%)	Cu (%)	B (%)
8 ≤ t ≤ 130	max.	0.20	0.50	1.60	0.010	0.025	1.00	0.70	0.060	0.08	1.50	0.40	0.004

* Other gauges available by agreement.

RQT 701[®] is offered with the following CEV:

Thickness (mm)	Maximum ladle CEV* (%)
8 ≤ t ≤ 30	0.43
30 < t ≤ 40	0.53
40 < t ≤ 100	0.57
100 < t ≤ 130	0.61

* Other maximum CEV available by agreement.

Mechanical properties

Thickness (mm)	Minimum yield strength (MPa)	Tensile strength (MPa)	Minimum elongation on 50mm gauge length (%)	Minimum average impact energy*	Minimum individual impact energy*
8 ≤ t ≤ 70	690	790 - 930	18	27 J @ -45 °C	20 J @ -45 °C
70 < t ≤ 130	630	690 - 930	18	27 J @ -45 °C	20 J @ -45 °C

* Longitudinal Charpy V notch, transverse available by agreement

Testing in accordance with BS EN ISO 6892, BS EN 10045

For plate thicknesses below 12.5mm reduced section Charpy test pieces are used with proportionate reduction of energy values.

Dimensions

RQT 701® is available in thicknesses 8mm to 130mm. Width and length availability is given in table 4 of the Plate products range of sizes brochure.

Tolerances

The manufacturing tolerances for RQT 701® are in compliance with EN10029:1991.

Surface quality of RQT 701® is compliant with EN10163:2004 class A subclass 1.

Other tolerances are available by agreement.

Fabrication and Welding

RQT 701® can be readily processed following the guidelines available in the RQT Fabrication guide.

Further Information

For any queries regarding product application, metallurgy or mechanical properties please contact our Technical Advisory Service +44 (0) 1724 402106 or email: plates.technical@corusgroup.com

All other enquiries may be directed to your account team, or contact us using the details below.

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