TATA STEEL

TATA

Cold-rolled CP800-GI

Highly bendable roll forming steel

CP800-GI is part of Tata Steel's portfolio of advanced high-strength steels (AHSS). The ferrite-bainite microstructure promotes good bendability and edge ductility making it suitable for cold forming of simple shaped components. Potential applications include seat cross members, roofbows, door and sill reinforcements. The as-delivered high yield strength provides opportunities to improve crash performance or save weight compared to microalloyed steels. CP800-GI comes with a hot dipped galvanised coating making it a cost effective body structure solution compared to electrogalvanised products. Apart from CP800-GI, Tata Steel offers a standard Dual Phase 800 and for heavy deep drawing applications its unique Dual Phase 800 HyperForm®.

Legend

CR = cold-rolled CP = complex phase DP = dual phase GI = hot-dip galvanised UC = uncoated

Mechanical properties

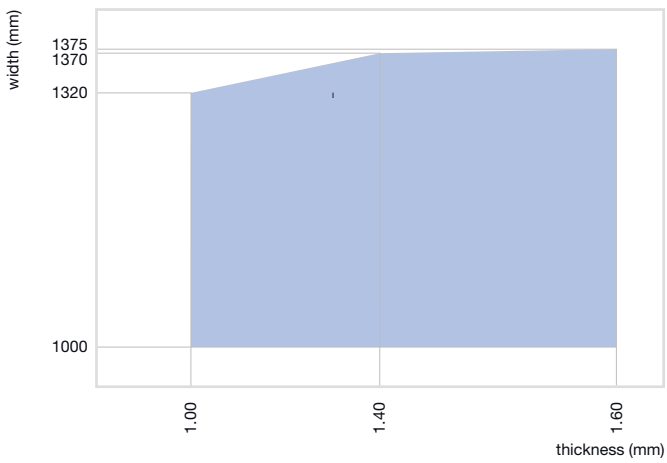
Grade	Yield strength R_{p02} (MPa)	Tensile strength R_m (MPa)	Total elongation A_{80} (%)	BH_2 (MPa)
Typical Tata Steel product properties (L)	670	860	14	42
CR CP800-GI according to CR570Y780T-CP (VDA-239)	570-720	780-920	≥ 10	≥ 30

Chemical composition

	C	Mn	Si	P	S	Al	Cr + Mo
Typical Tata Steel product properties	0.13	2.04	0.25	0.02	0.006	0.035	0.550
CR CP800-GI (guaranteed)	≤ 0.18	≤ 2.50	≤ 1.00	≤ 0.040	≤ 0.010	≤ 0.015-1.0	≤ 1.00

Values provided in mass percentages

Dimensional window of cold-rolled CP800-GI



Please refer to Tata Steel or your local sales representative for dimensions which fall outside of the above matrix.

800 MPa range

CR CP800-GI is part of our 800 MPa product offering

Grade	Formability: Bending / Roll forming	Formability: Deepdrawing	Crash performance/ lightweighting potential
CR DP800-UC	+	+	+
CR DP800-GI	+	+	+
CR DP800-GI HyperForm	+	++	++
CR CP800-GI	++	o	++

o = neutral + = good ++ = excelent

Our material experts are there to support the deployment of CP800-GI in your specific application area. Our online material database Aurora Online provides our customers with comprehensive data sheets and ready to run input decks.

For further information (also for access to Aurora Online):

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