# TATA STEEL



# HR CP800-UC tube High strength and high formability for robust chassis applications

CP800-UC is a complex phase advanced high-strength steel featuring a very fine grained bainitic matrix microstructure combined with a small fraction of ferrite and martensite phases.

Together with a soft tube forming process, these material properties

result in a tube with a strength of at least 760 MPa with excellent formability. HR CP800-UC tube enables the design of relatively complex shaped components requiring high strength and good fatigue performance to be manufactured by a cold forming process.

#### **Mechanical properties**

	R <sub>p</sub> (MPa)	R <sub>m</sub> (MPa)	A (%)	
CP800-UC tube	660-780	≥ 760	≥ 10	

#### Chemical composition

Grade	с	Mn	Si	Р	S	AI	Cr+Mo	Nb+Ti
	Max.	Max.	Max.	Max.	Max.		Max.	Max.
HR660Y760T-CP	0.18	2.20	1.00	0.08	0.015	0.015 - 1.20	1.0	0.25
(VDA 239-100)								
HDT760C	0.18	2.50	1.00	0.08	0.015	0.015 - 1.20	1.0	0.25
(prEN 10338:2009	9)							

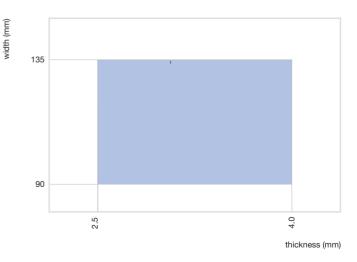
#### **Applications**

CP800-UC tubes are suitable to all parts that require high strength and excellent formability. Typically these can be found in chassis and suspension applications such as rear twist beams.

#### **Dimensional window and tolerances**

CP800-UC tube can be produced in various diameters ranging from 90 to 135mm with a wall thickness of 2.50 to 4.00mm. Dimensional tolerances follow EN 10305-3:2016, tighter tolerances are available on request.

### HR CP800-UC tube



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