TATA STEEL



Valast® 400

Abrasion-resistant steel for long-lasting performance

Developed for construction, mining, and agricultural applications, the abrasion-resistant Valast 400 steel sheet offers excellent surface quality and the potential to reduce shot blasting and pre-painting requirements.

Valast 400 steel sheet withstands harsh wear and tear while maintaining long-term quality. User benefits include extended operational life and reduced maintenance costs.

Typical applications of hard-wearing Valast 400 include tipper and dump truck bodies, asphalt pavers, crushing and screening equipment, concrete mixer trucks, and refuse trucks.

Tata Steel's hot-rolled Valast 400 also enables the production of lighter, more fuel-efficient vehicles or improved payloads by allowing reduced steel thickness. A low CET value ensures this product is suitable for all conventional welding methods.

Chemical composition

Valast 400	С	Mn	P	S	Si	Al _{sol}	Nb	V	Ti	Мо	В
Guaranteed	≤ 0.190	≤ 1.100	≤ 0.020	≤ 0.005	≤ 0.100	≥ 0.015	≤ 0.060	≤ 0.100	≤ 0.060	≤ 0.250	≤ 0.005

All values are in weight%

Mechanical properties

Valast 400	Hardness*	Yield strength**	Tensile strength**	Elongation**	
	HBW	R _{p0.2} (MPa)	R _m (MPa)	A_5	
Guaranteed	370-430				
Typical value	400	1100	1300	10	

^{*} Brinell hardness (HBW) according to EN ISO 6506-1, on a milled surface 0.3 – 1 mm below surface. At least one test specimen per heat and 40 tons

Bending radius*

Direction					
	< 8 mm	≥ 8 mm			
Longitudinal	3t**	4t			
Transverse	3.5t**	4.5t			

^{*} Minimum radius at bending over 90°; transverse = bend line parallel to rolling direction

Impact strength

Direction	Temperature	Guaranteed	Typical
Longitudinal	-40°C	≥ 34 J/cm ² *	90 J/cm ²
	-20°C		120 J/cm ²
Transverse	-40°C		50 J/cm ²
	-20°C	≥ 50 J/cm ² *	75 J/cm ²

^{*} Guaranteed values of 27J/40J apply to full-size 10 x 10 mm test specimens

Tolerances

Thickness

Complies with ½ EN 10051.

Length, width, shape and flatness

Complies with EN 10051. Tighter tolerances available on request.

Weldability

We invested in a research and development programme to ensure a low CET (< 0.30) in Valast 400 steel, making it suitable for all conventional welding methods.

CEV max	CET max	PCM max
0.42	0.30	0.27

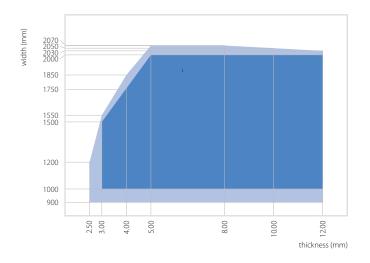
Surface

As a hot-rolled strip product, Valast offers superior surface quality compared to reversing mill plate in 'as rolled' condition.

^{**} Mechanical properties are tested in longitudinal direction

^{**} Please contact us for tighter tolerances

Available dimensions of Valast® 400



Available
Please contact us for availability

Please contact us for other dimensions For outlier dimensions minimum order quantities may apply

Product support

Our proactive Customer Technical Services team is available to help you optimise your processes and maximise performance with tailored advice and hands-on support. Backed by deep steel expertise and in-depth application knowledge, we'll work with you to boost efficiency, reduce waste, and get the best out of Valast 400. Please contact us with any enquiries about material No. 1.8715.

Further information

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