

# durostat® 400 CR

# Wear-resistant steel from cold-rolled strip

Thanks to their high hardness values, durostat® steels made by voestalpine can be used wherever abrasive wear requires high resistance.

Cold-rolled durostat® 400 CR is the latest member of the durostat® family. It is available in thicknesses ranging between 1.5 and 2.0 mm and achieves a typical hardness of roughly 400 HV. The use of durostat® significantly extends the service life of components such as excavator buckets, tipping surfaces, conveyor chutes and bulk containers.

## Convincing advantages

- » High wear resistance, low abrasion
- » Low material thickness
- » Low residual stress
- » Excellent weldability
- » Best surface quality



Premium quality with reduced carbon footprint



greentec steel





#### Chemical composition

Ladle analysis in weight percent and carbon equivalent

Steel	C max.	Si max.	Mn max.	P max.	S max.	Al min.	Cr + Mo max.	Ti + Nb max.	Cu max.	B max.	Typical values	
grade											CEV	CET <sup>1)</sup>
durostat® 400 CR	0.23	1.00	2.90	0.05	0.01	0.015	1.00	0.15	0.20	0.005	0.51	0.36

 $<sup>^{1)}</sup>$  Carbon equivalents pursuant to EN 1011-2 apply only to a Mn content up to 1.9% max.

## Mechanical properties

Steel grade	Hardness [HV10] <sup>1)</sup>	Yield strength Rp <sub>0.2</sub>	Typical values  Tensile strength  R <sub>m</sub>	Total elongation A80 [%]	Recommended edge radii <sup>2)</sup> Ri min. at 90° edging Sheet thickness = s
durostat® 400 CR	360 - 440	1050 MPa	1220 MPa	6	3.50 s

<sup>1)</sup> Hardness measurements are conducted pursuant to EN ISO 6507.

#### Finish and delivery condition

The thickness tolerance for thicknesses ranging from 1.5 to 2.0 mm is +/- 0.1 mm. Narrower tolerances are possible upon request. Supplied in pickled, cold-rolled and annealed condition. The surface quality is pursuant to EN 10130, and the material is delivered as surface type A, non-skin-passed. Roughness is not specifically defined. An Ra value of < 1.2  $\mu$ m can be assumed as a result of the cold-rolling process.



<sup>&</sup>lt;sup>2)</sup> Narrower radii are also possible in guided bending operations such as roll forming.



## **Example dimensions**

Maximum width per thickness (trimmed)

	Thickness [mm]								
Steel grade	< 1.50	1.50	1.60	1.70	1.80	2.00			
durostat® 400 CR	upon request	1580	1580	1400	1330	1180			

Additional dimensions upon request.

The maximum sheet length is 6,000 mm. Additional lengths upon request.

## Forms of supply

The following grades are available:

- » Cut sheets
- » Slit steel strip
- » Wide strip



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Cold-rolled-steel strip – greentec steel Edition

Max. carbon footprint 1.97 kg  $\rm CO_2$ e per kg of steel  $^{1)}$ 

<sup>1)</sup> per EN 15804+A2 (EPD methodology) cradle to gate

All products, dimensions and steel grades listed in each voestalpine supply range are available as greentec steel Edition.

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