



PRECISELY THE BEST.

Count on thickness precision within the narrowest tolerances

Fact sheet thickness tolerances of hot-rolled strip | Page 1/3 | October 2019

THICKNESS TOLERANCES OF HOT-ROLLED STRIP

At voestalpine, we are setting a new standard in the thickness tolerance of hot-rolled steel strip. State-of-the-art manufacturing lines and innovative measuring and control equipment guarantee hot-rolled strip of the highest quality and within the narrowest thickness tolerances. At voestalpine, we guarantee highest precision in three classes across the entire width and length of the strip.

Count on precise advantages:

- » Guaranteed thickness tolerance values across the entire width and length of the strip
- » Stable processes and efficiency during production
- » Reproducible components with economical production

ULTIMATE Class:

- » up to 1/6 of the standard tolerance
- » for nominal strip thickness ranging between 2.5 and 6.0 mm



ULTIMATE Class

ADVANCED Class:

- » up to 1/4 of the standard tolerance
- » for nominal strip thickness ranging between 2.0 and 20.0 mm



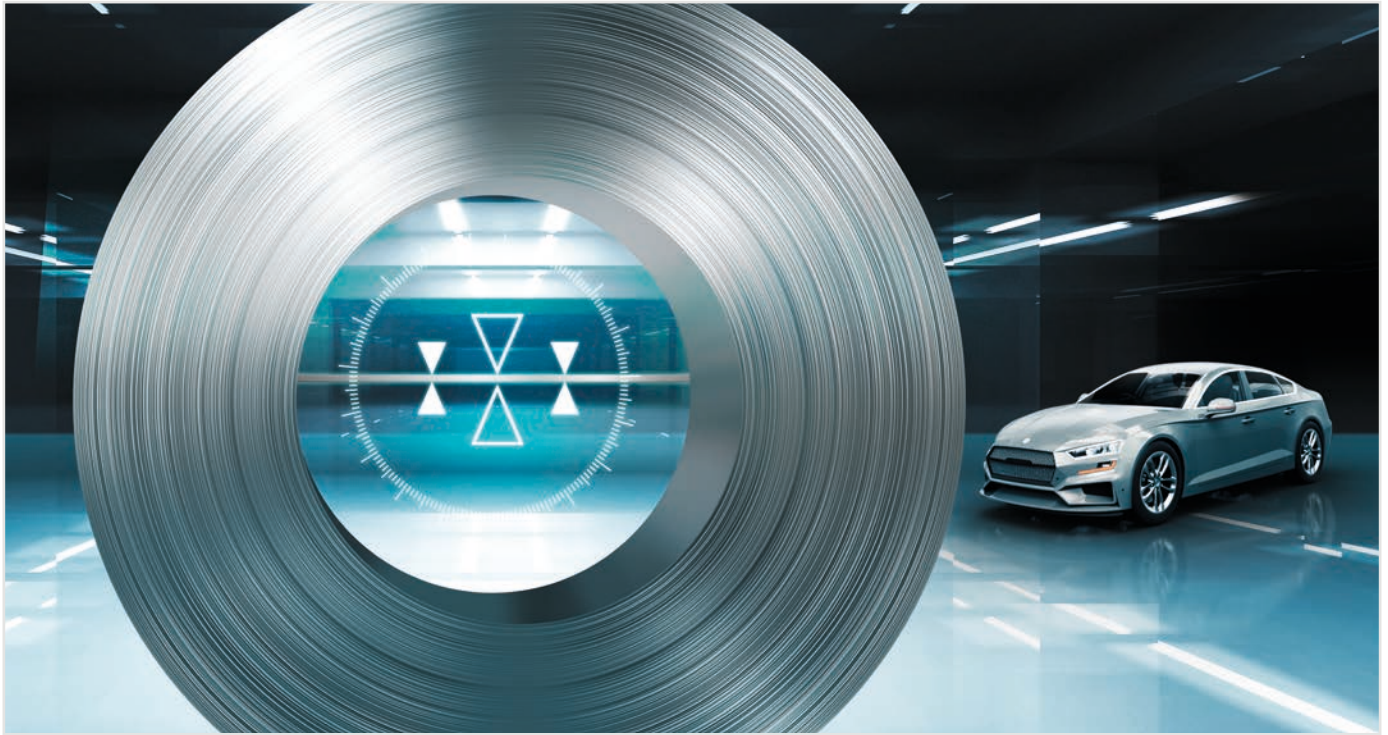
ADVANCED Class

BASIC Class:

- » 50 % of the standard tolerance
- » for nominal strip thickness ranging between 2.0 and 20.0 mm



BASIC Class



HIGH CLASS STEEL STRENGTH

The tolerance values indicated in thickness tolerance classes apply to all voestalpine hot-rolled steels, regardless of the strip width and steel strength class (mild steels are rated separately). The reference values for all voestalpine tolerances are those specified in DIN EN 10051:2010.

BASIC Class

Compliance with the narrowest tolerances is the voestalpine standard. The state-of-the-art production facilities of voestalpine make it possible for us to deliver 50% of the values specified in DIN EN 10051:2010 as a standard for all steel grade classes A through D.



























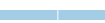


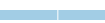







ADVANCED Class

The most modern production technologies and self-learning production systems based on overall statistics make it possible to further narrow our thickness tolerances. Hot-rolled strip made by voestalpine achieves thickness tolerances of up to a quarter of the values set forth in DIN EN 10051:2010. Rely only on the best pre-material for stable processing and increased efficiency in production.

ULTIMATE Class

Should the thickness tolerances not meet your application requirements, voestalpine can even go a step further using intelligent production systems combined with a unique production process. Thickness tolerances of up to one sixth of those set forth in DIN EN 10051:2010 can be achieved by thickness-controlled skin passing. The values achieved, for example, significantly exceed the values set forth in DIN EN 10131:2006 (cold rolled uncoated and zinc or zinc-nickel electrolytically coated low carbon and high yield strength steel flat products for cold forming – Tolerances on dimensions and shape). This makes it possible for the hot-rolled strip of voestalpine to precisely meet your requirements and offers the best conditions for economical and efficient production.





Hot-rolled strip thickness tolerances

Nominal thickness t	Thickness tolerances +/-			
	ULTIMATE Class	ADVANCED Class	BASIC Class	EN 10 051*
t ≤ 2.00		0.08 	0.15 	0.29 
2.00 < t ≤ 2.50		0.08 	0.16 	0.32 
2.50 < t ≤ 3.00	0.06 	0.09 	0.17 	0.34 
3.00 < t ≤ 4.00	0.06 	0.10 	0.18 	0.36 
4.00 < t ≤ 5.00	0.06 	0.11 	0.20 	0.39 
5.00 < t ≤ 6.00	0.06 	0.12 	0.20 	0.41 
6.00 < t ≤ 8.00		0.13 	0.21 	0.43 
8.00 < t ≤ 10.00		0.15 	0.24 	0.48 
10.00 < t ≤ 12.50		0.15 	0.26 	0.52 
12.50 < t ≤ 15.00		0.20 	0.27 	0.56 
15.00 < t ≤ 20.00		0.28 	0.31 	0.63 

*EN 10 051, standard values pursuant to strip and sheet class D with nominal width ranging between 1.500 and 1.800 mm

Dimensions in mm

Thickness tolerances +/- at nominal thickness t 5.00 < t ≤ 6.00 mm

ULTIMATE Class	0.06	
ADVANCED Class	0.12	
BASIC Class	0.20	
EN 10 051*	0.41	

* EN 10 051, standard values pursuant to strip and sheet class D with nominal width ranging between 1500 and 1800 mm

Dimensions in mm

Special thickness tolerances for mild steels

Nominal thickness t	Thickness tolerances width +/-							
	t ≤ 2.00	2.00 < t ≤ 2.50	2.50 < t ≤ 3.00	3.00 < t ≤ 4.00	4.00 < t ≤ 5.00	5.00 < t ≤ 6.00	6.00 < t ≤ 8.00	8.00 < t ≤ 11.00
Mild steel	0.09	0.09	0.10	0.10	0.10	0.11	0.13	0.16

Dimensions in mm

The ULTIMATE class is not enough for you? Please do not hesitate to contact us.

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