



## High-strength LC steels

### Optimized bending and profiling results

The yield strength and tensile strength ranges of high-strength low-carbon (LC) steels are guaranteed, which results in material stability during further processing. These steels are especially suited to bending and profiling operations, tube and section applications as well as products in the household-appliance and barrel industries.

#### Convincing advantages

- » Guaranteed minimum yield strength/minimum tensile strength
- » Narrow range of parameters
- » Stable process window in highly automated production processes



PREMIUM QUALITY  
WITH REDUCED  
CARBON FOOTPRINT

## Chemical composition

Heat analysis in % by mass

Steel grade	C max.	Mn max.	P max.	S max.
HC180LC	0.08	0.60	0.03	0.03
HC200LC	0.11	0.60	0.03	0.03
HC220LC	0.12	0.60	0.03	0.03

## Mechanical properties: Tensile test

Transverse to rolling direction

Steel grade	Yield strength $R_{p0.2}$ [MPa]	Tensile strength $R_m$ [MPa]	Total elongation $A_{80 \text{ min.}}$ [%]
HC180LC	180 – 270	300 – 390	32
HC200LC	200 – 290	310 – 400	31
HC220LC	220 – 310	320 – 410	30

## Available dimensions

Maximum available widths per thickness

Steel grade	0.4	Thickness [mm] 0.5 – 1.6	1.7 – 3.0
HC180LC	Not available	1600	Not available
HC200LC	1400	1600	1600
HC220LC	1400	1600	Not available

## Surface finish

High-strength LC steels are available according to EN 10130 with A or B surface.

(Note: Surface B is available up to 2 mm in HC200LC).

# OUR PATH TO A GREENER FUTURE

## Premium products in the greentec steel Edition

With greentec steel, voestalpine is pursuing an ambitious step-by-step plan in the long-term decarbonization of steel production. The declared objective is to achieve carbon-neutral production by 2050, and the initial steps have already been taken. Process-optimized production operations already prevent up to 10% of the direct CO<sub>2</sub> emissions at the Linz site. The material and processing properties of the steel are not affected in any way in this production route. Each voestalpine steel strip product is available in premium quality in the greentec steel Edition with a reduced carbon footprint and unique benefits.



Premium quality with reduced carbon footprint

### Cold-rolled steel strip – greentec steel Edition

Max. carbon footprint 2.15 kg CO<sub>2</sub>e per kg of steel <sup>1)</sup>

### Hot-dip galvanized steel strip – greentec steel Edition

Max. carbon footprint 2.30 kg CO<sub>2</sub>e per kg of steel <sup>1)</sup>

### Electrogalvanized steel strip – greentec steel Edition

Max. carbon footprint 2.30 kg CO<sub>2</sub>e per kg of steel <sup>1)</sup>

<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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ONE STEP AHEAD.