



## Pole sheets

### **Thermomechanically rolled steels with guaranteed magnetic properties**

Hot-rolled pole sheet steels are manufactured exclusively in the integrated metallurgical facility of voestalpine Stahl. The most modern manufacturing technologies, continuous quality control systems and intensive research and development at the production site guarantee optimized product quality.

Standard grades are pursuant to Euronorm EN 10265:1995 (corresponding to IEC 404-8-5). Special voestalpine grades are also supplied.

The steel can be heat-treated and/or stress-relief-annealed between 530 and 580 °C. Should heat treatment above 580 °C be necessary, please contact our quality control department.

#### **Convincing advantages**

- » Best laser cutting and punching properties
- » Minimal inherent stress
- » Efficient laser cutting based on micro-scale surface with best insulation
- » Narrowest flatness, shape and dimensional tolerances
- » Minimum deviation in thickness across sheet width
- » Excellent magnetic properties
- » Homogeneous mechanical properties



### Mechanical and magnetic properties: Tensile test/magnetic polarization

Standard grades pursuant to EN 10265:1995, corresponding to IEC 404-8-5 and ultra-high-strength special voestalpine grades

Steel grade	Test direction	0.2 % yield strength $R_{p0.2}$ min. [MPa]	Tensile strength $R_m$ min. [MPa]	Elongation min. [%]		Magnetic polarization Minimum value at <sup>1)</sup>	
				$A_{80}$	$A_5$	5000 A/m J50 [T]	15000 A/m J150 [T]
<b>Standard grades pursuant to EN 10265:1995, corresponding to IEC 404-8-5</b>							
250-TG-180	transverse	250	350	22	26	1.60	1.80
300-TG-180	transverse	300	400	20	24	1.60	1.80
350-TG-179	transverse	350	450	18	22	1.55	1.79
400-TG-179	transverse	400	500	16	19	1.55	1.79
450-TG-179	transverse	450	550	14	17	1.54	1.79
500-TG-179	transverse	500	600	12	14	1.53	1.79
550-TG-178	transverse	550	650	12	14	1.52	1.78
600-TG-178	transverse	600	700	10	12	1.50	1.78
650-TG-178	transverse	650	750	10	12	1.48	1.78
700-TG-178	transverse	700	800	10	12	1.46	1.78
<b>Special voestalpine grades <sup>2)</sup></b>							
750-VA-175	longitudinal + transverse	750	800	10	12	1.46	1.75

Measurement of fracture elongation  $A_{80}$  for thicknesses < 3 mm  
 $A_5$  for thicknesses  $\geq$  3 mm

<sup>1)</sup> DC (Direct current)

<sup>2)</sup> Additional high-strength and ultra-high-strength steel grades upon request.

## Example dimensions

Maximum width per thickness

Steel grade	Dicke [mm]							
	2.00	2.50	3.00	3.50	4.00	5.00	6.00	12.00
<b>Standard grades pursuant to EN 10265:1995, corresponding to IEC 404-8-5</b>								
250-TG-180	1620	1620	1620	1620	1620	1620	1620	1620
300-TG-180	1620	1620	1620	1620	1620	1620	1620	1620
350-TG-179	1500	1620	1620	1620	1620	1620	1620	1620
400-TG-179	1350	1620	1620	1620	1620	1620	1620	1620
450-TG-179	1350	1620	1620	1620	1620	1620	1620	1620
500-TG-179	1280	1480	1620	1620	1620	1620	1620	1620
550-TG-178	1280	1480	1620	1620	1620	1620	1620	1620
600-TG-178	1280	1480	1620	1620	1620	1620	1620	1620
650-TG-178	1250	1380	1510	1620	1620	1620	1620	1620
700-TG-178	1250	1380	1510	1620	1620	1620	1620	1620
<b>special voestalpine grades</b>								
750-VA-175	1250	1380	1510	1620	1620	1620	1620	-

Available only as cut sheets with trimmed or mill edge.  
Additional dimensions upon request.

## Carbon footprint greentec steel product

greentec steel product	Maximum carbon footprint [kg CO <sub>2</sub> e/kg steel] <sup>1)</sup>
Hot-rolled steel strip	2.1

<sup>1)</sup> The carbon footprint is calculated pursuant to worldsteel CML 2001-2016 (system expansion) on a cradle-to-gate basis.

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

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