

Domex Pole 450

General Product Description

Pole sheet steels with guaranteed magnetic and mechanical properties. Pole sheet steel grades from SSAB possess excellent magnetic, mechanical and processing properties, making them ideal for pole and rim sheets. Applications include electromagnetic components such as rotors and stators – even at high rotational speeds and in strong magnetic fields – as well as pole and rotor rim sheets for hydropower generators.

Domex Pole 450 is delivered as cut to length sheets in thickness from 2.0 to 5.0 mm and width up to 1600 mm with mill edge.

The sheets are available in lengths up to 16 meters. For cut edges the width can be reduced from 35 up to 80 mm.

Mechanical Properties

Thickness (mm)	Yield strength $R_{p0.2}$ (min MPa)	Tensile strength R_m (min MPa)	Elongation A_{80} t < 3 mm (min %)	Elongation A_5 t ≥ 3 mm (min %)
2 - 2.9	450	510	18	
3 - 5	450	510		18

The mechanical properties are valid in both longitudinal and transverse direction.

Testing

The mechanical and magnetic properties are tested in accordance with EN 10265.

Magnetic Properties

Magnetic Flux Density 5 kA/m (min)	Magnetic Flux Density 15 kA/m (min)	Typical Magnetic Flux Density 5 kA/m	Typical Magnetic Flux Density 15 kA/m
1.54	1.79	1.68	1.90

Measurements were carried out with an Epstein frame and in accordance with EN 60404-2/A1

Tolerances

Domex Pole Sheet is supplied with tolerances in accordance with EN 10051. More narrow tolerances are available on request according to SSAB standard.

Delivery Conditions

Thermomechanically rolled.

Surface and edge condition

Domex Pole Sheet is available in as rolled or pickled surface condition with mill or cut edge.

Fabrication and Other Recommendations

Domex Pole Sheet is suitable for laser cutting and punching.

For information concerning fabrication, see SSAB's brochures on www.ssab.com or consult Tech Support, techsupport@ssab.com.

Appropriate health and safety precautions must be taken when cutting, grinding or otherwise working on the product.

Contact Information

www.ssab.com/contact