

Ympress® Laser E250C / E250C+N

Strong, consistent and highly formable

Ympress Laser E250C(+N) is a hot-rolled structural steel. It is optimised for efficient laser cutting and post-cut processing. The product combines guaranteed strength with outstanding formability, consistent quality and excellent surface. It replaces conventional construction steel for applications where high strength and good formability are essential. These include building and construction profiles, racking and shelving.

Ympress Laser E250C(+N) offers exceptional flatness, minimised internal stress and high-quality surfaces. Consistent product characteristics ensure fast, reliable automated processing for increased productivity and improved part yield. A clean-cut edge – even at high cutting speeds - allows simple release of cut parts and reduces post-cut work. Suitable also for conventional cutting methods, Ympress Laser E250C(+N) can be easily welded and galvanised.

Relationship with standards

Grade	Relationship with EN10025-2	Thickness range (mm)
Ympress Laser E250C+N (J2)	S235J2C+N	1.5 - 12.7
Ympress Laser E250C+N (J0)	S235J0C+N	12.7 - 20.0
Ympress Laser E250C	S235JRC+AR	1.5 - 20.0

Mechanical properties (transverse to the rolling direction)

	Min. yield strength	Min. - Max. tensile strength	Elongation after fracture A			Min. bend test diameter
			t < 3mm	3mm ≤ t < 5mm	t ≥ 5mm	
	R _{eh} in MPa	R _m in MPa	L ₀ = 80mm (%)	L ₀ = 5.65√S ₀ mm (%)	L ₀ = 5.65√S ₀ mm (%)	
Typical value	285	430	26	34	30	-
Guaranteed	≥ 240	370-490	23	24	24	0.5 t
EN-10025-2 S235J2	235	360-510	17-18-19	24	24	-

t = material thickness in mm

Chemical composition (% by weight)

	C	Si	Mn	P	S	Cu	Al _{tot}	Ceq*	Ceq*
								< 6mm	> 6mm
Guaranteed	≤ 0.17	≤ 0.030	≤ 1.10	≤ 0.025	≤ 0.020	≤ 0.070	≥ 0.015	0.20	0.28
EN 10025-2 S235J2	≤ 0.17	-	≤ 1.40	≤ 0.025	≤ 0.025	≤ 0.550	-	-	-

*Ceq is a typical value

Impact strength

Ympress Laser E250C+N (J2)	≥ 27 J at -20°C
Ympress Laser E250C+N (J0)	≥ 27 J at 0°C
Ympress Laser E250C	≥ 27 J at 20°C

Tolerances on thickness

Ympress Laser products comply to ½ EN 10051:2010. Tighter tolerances are available on request.

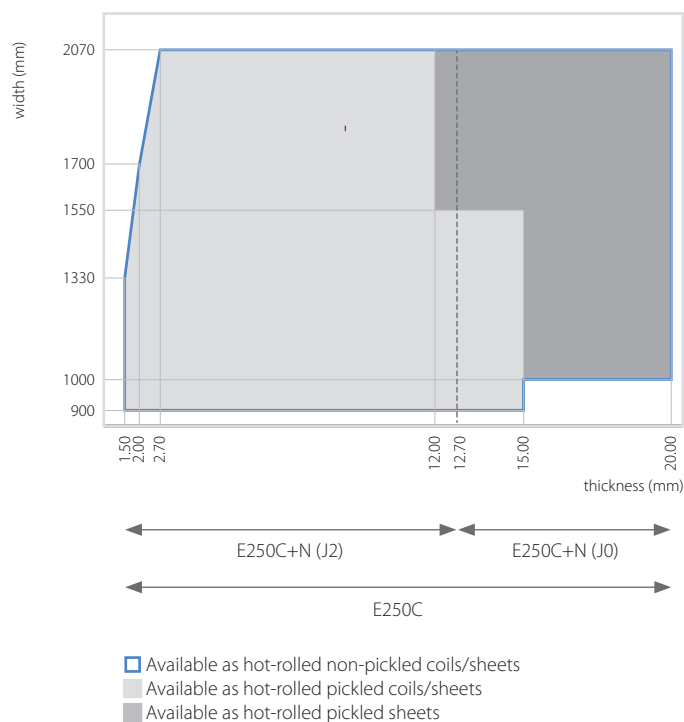
Certification

A 2.2 certificate is issued as standard with Ympress Laser products. Other certificate types are available on request.

Product support

We want you to get the best from Ympress Laser products. Our technical engineers and trained sales staff are always happy to answer your questions on steel selection and application. Our engineers are available to assist you with process and product design optimisation for improved throughput, yield and end product performance.

Available dimensions of Ympress® Laser E250C / E250C(+N)



Ympress® Laser range

Steel grades: E250C(+N), S355MC, S420MC

Thickness range: 1.5 - 20mm (grade specific)
(sheets)

Width range: 900 - 2070mm

Surface condition: Hot rolled dry, pickled and oiled

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