

Ympress® Laser E355C+N

Strong, consistent and highly formable

Ympress Laser E355C+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 E355C+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 E355C+N can be easily welded and galvanised.

Relationship with standards

Grade	Relationship with EN 10025-2	Thickness range (mm)
Ympress Laser E355C+N	S355J2C+N	2.0 - 15.0

Mechanical properties (transverse to the rolling direction)

	Min. yield strength		Min. - max. tensile strength		Min. elongation after fracture A		Min. bend test diameter at 90° **
	R_{eH} (MPa)	R_m (MPa)			$L_0 = 80$ mm (%)	$L_0 = 5.65\sqrt{S_0}$ mm (%)	
	≤ 16 mm	t < 3 mm	t ≥ 3 mm		t < 3 mm	t ≥ 3 mm	mm
Typical value	420	550	550		23	26	-
Guaranteed	355	510-680	470-630		16	20	3t
EN 10025-2 S355J2+N	355	510-680	470-630		14-15-16*	20	-

* For the different thickness range below 3 mm

** ≤90° bend angle, measured in all directions

Chemical composition

	C	Mn	P	S	Si	Al _{tot}	Cu	Ceq*
Guaranteed	≤ 0.20	≤ 1.60	≤ 0.025	≤ 0.005	≤ 0.030	≥ 0.015	≤ 0.550	0.42
EN 10025-2 S355J2+N	≤ 0.20	≤ 1.60	≤ 0.025	≤ 0.025	≤ 0.550	-	≤ 0.550	-

All values are in weight%

*Ceq is a typical value

Impact strength

Ympress Laser E355C+N	≥ 27 J at -20°C
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Tolerances on thickness

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

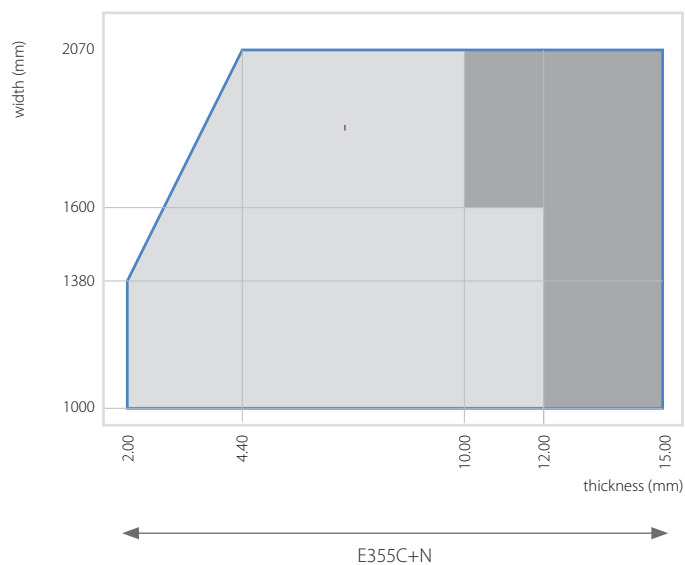
Certification

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 E355C+N



- Available as hot-rolled non-pickled coils/sheets
- Available as hot-rolled pickled coils/sheets
- Available as hot-rolled pickled sheets

Ympress® Laser range

Steel grades: E250C+N, E355C+N, S355MC, S420MC

Thickness range: 2.0 - 20mm (grade specific)
(sheets)

Width range: 900 - 2070mm

Surface condition: Hot rolled dry, pickled and oiled

Further information

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www.tatasteel.com

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Scan for the latest product information

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