

Grades, properties and nearest equivalents

The tables below show the grade, properties and Nearest equivalent grades from earlier standards.

Table 1

EN 10025 : part 2 : 2004 Non-alloy structural steels

Comparison between grades in EN 10025 : part 2 : 2004 and nearest equivalent versions in EN 10025 : 1993 and BS 4360 : 1990						
EN 10025 : part 2 : 2004					EN 10025 : 1993	BS 4360 : 1990
Grade	Yield (ReH) min	Tensile (Rm)	Charpy V-notch longitudinal		Grade	Grade
	Strength t = 16mm (MPa)		Temp (C)	Energy (J) t = 16mm		
S185	185	290/510	-	-	S185	-
.. ¹	235	360/510	-	-	S235	40A
S235JR ²			20	27	S235JRG/G2	40B
S235J0			0	27	S235J0	40C
S235J2			-20	27	S235J2GS3/G4	40D
.. ¹	275	410/560	-	-	S275	43A
S275JR ²			20	27	S275JR	43B
S275J0			0	27	S275J0	43C
S275J2			-20	27	S275J2G3/G4	43D
.. ¹	355	470/630	-	-	S355	50A
S355JR ²			20	27	S355JR	50B
S355J0			0	27	S355J0	50C
S355J2			-20	27	S355J2GS3/G4	50D
S355K2			-20	40	S355K2G3/G4	50DD
E295	295	470/610	-	-	E295	-
S335	335	570/710	-	-	S335	-
E360	360	650/830	-	-	E360	-

1 MPa = 1 N/mm²

Notes

1 For all products to be compliant with the EU Construction Products Directive (CPD 89/106/EC) the material must offer a guaranteed minimum Impact performance. This has resulted in the removal of this grade from the standard, and the lowest grade now offered is the JR version for each Yield strength variation.

2 Verification of the specified impact value is only carried out when agreed at the time of the enquiry and order.