

Technical Information

Table 1. COMPARISON BETWEEN GRADES IN BS EN 10 025 : 1993 AND BS 4360 : 1986

BS EN 10 025 : 1993						BS 4360 : 1986								
GRADE	FORMER GRADE	TENSILE STRENGTH ≥ 3mm ≤ 100mm N/mm ²	MIN YIELD STRENGTH AT 16mm N/mm ²	MAX THK FOR SPECIFIED YIELD N/mm ²	IMPACT ENERGY (J°C)			GRADE	TENSILE STRENGTH ≤ 100mm N/mm ²	MIN YIELD STRENGTH AT 16mm N/mm ²	MAX THK FOR SPECIFIED YIELD N/mm ²	IMPACT ENERGY (J°C)		
					NOMINAL THICKNESS							NOMINAL THICKNESS		
					TEMP °C	≤ 150mm (N1)	> 150mm ≤ 250mm (N1)					TEMP °C	≤ 100mm (N3)	
S185 (N4)	Fe 310-0 (N4)	290/510	185	25	-	-	-	-	-	-	-	-	-	-
S235 (N5)	Fe 360A (N5)	340/470	235	250	-	-	-	40A	340/500	235	150	-	-	-
S235JR (N4)	Fe 360B (N4)	340/470	235	25	+20	27	-	-	-	-	-	-	-	-
S235JRG1 (N4)	Fe 360B(FU) (N4)	340/470	235	25	+20 (N6)	27	-	-	-	-	-	-	-	-
S235JRG2	Fe 360B(FN)	340/470	235	250	+20 (N6)	27	23	40B	340/500	235	150	+20 (N6)	27	-
S235JO	Fe 360C	340/470	235	250	0	27	23	40C	340/500	235	150	0	27	-
S235J2G3	Fe 360D1	340/470	235	250	-20	27	23	40D	340/500	235	150	-20	27	-
S235J2G4	Fe 360D2	340/470	235	250	-20	27	23	40D	340/500	235	150	-20	27	-
S275 (N5)	Fe 430A (N5)	410/560	275	250	-	-	-	43A	430/580	275	150	-	-	-
S275JR	Fe 430B	410/560	275	250	+20 (N6)	27	23	43B	430/580	275	150	+20 (N6)	27	-
S275JO	Fe 430C	410/560	275	250	0	27	23	43C	430/580	275	150	0	27	-
S275J2G3	Fe 430D1	410/560	275	250	-20	27	23	43D	430/580	275	150	-20	27	-
S275J2G4	Fe 430D2	410/560	275	250	-20	27	23	43D	430/580	275	150	-20	27	-
S355 (N5)	Fe 510A (N5)	490/630	355	250	-	-	-	50A	490/640	355	150	-	-	-
S355JR	Fe 510B	490/630	355	250	+20 (N6)	27	23	50B	490/640	355	150	+20 (N6)	27	-
S355JO	Fe 510C	490/630	355	250	0	27	23	50C	490/640	355	150	0	27	-
S355J2G3	Fe 510D1	490/630	355	250	-20	27	23	50D	490/640	355	150	-20	27	-
S355J2G4	Fe 510D2	490/630	355	250	-20	27	23	50D	490/640	355	150	-20	27	-
S355K2G3	Fe 510DD1	490/630	355	250	-20	40	33	50DD	490/640	355	150	-30	27	-
S355K2G4	Fe 510DD2	490/630	355	250	-20	40	33	50DD	490/640	355	150	-30	27	-
E295	Fe 490-2	470/610	295	250	-	-	-	-	-	-	-	-	-	-
E335	Fe 590-2	570/710	335	250	-	-	-	-	-	-	-	-	-	-
E360	Fe 690-2	670/830	360	250	-	-	-	-	-	-	-	-	-	-

NOTES: (N1) For sections up to and including 100mm only.

(N2) For wide flats and sections up to and including 63mm and 100mm respectively.

(N3) For wide flats up to and including 50mm and for sections no limit is stated.

(N4) Only available up to and including 25mm thick.

(N5) The steel grades S235 (Fe 360A), S275 (Fe 430A) and S355 (Fe 510A) appear only in the English Language version (BS EN 10 025) as non-conflicting additions and do not appear in other European versions.

(N6) Verification of the specified impact value is only carried out when agreed at time of enquiry and order. (*Other sizes & lengths not stipulated in the table above may be made available upon request)

Technical Information (Continued)

Table 2. LIST OF FORMER NATIONAL DESIGNATIONS (For information)

A listing of former national designations which are superseded by the grades in European Standard EN 10 025, the U.K. (and official English Language) version of which has been published by BSI as BS EN 10 025.

EN 10 025 : 1993 Designation		Former EN 10 025 : 1990 Designation	Equivalent former designations in									
Steel Name	Steel Number		Germany	France	United Kingdom	Spain	Italy	Belgium	Sweden	Portugal	Austria	Norway
S185	1.0035	Fe 310-0	St 33	A 33		A 310-0	Fe 320	A 320	13 00-00	Fe 310-0	St 320	
S235JR	1.0037	Fe 360 B	St 37-2	E 24-2			Fe 360 B	AE 235-B	13 11-00	Fe 360-B		NS 12 120
S235 JR G1	1.0036	Fe 360 B(FU)	Ust 37-2			AE 235 B-FU					USt 360 B	NS 12 122
S235JR G2	1.0038	Fe 360 B(FN)	RSt 37-2		40 B	AE 235 B-FU			13 12-00		RSt 360 B	NS 12 123
S235JO	1.0114	Fe 360 C	St 37-3 U	E 24-3	40 C	AE 235 C	Fe 360 C	AE 235-C			St 360 C	NS 12 124
S235J2G3	1.0116	Fe 360 D1	St 37-3 N	E 24-4	40 D	AE 235 D	Fe 360 D	AE 235-D		Fe 350-D	St 360 D	NS 12 124
S235J2G4	1.0117	Fe 360 D2		E 24-4	40 D	AE 235 D	Fe 360 D	AE 235-D		Fe 360-D	St 360 D	NS 12 124
S275JR	1.0044	Fe 430 B	St 44-2	E 28-2	43 B	AE 275 B	Fe 430 B	AE 255-B	14 12-00	Fe 430-B	St 430 B	NS 12 142
S275JO	1.0143	Fe 430 C	St 44-3 U	E 28-3	43 C	AE 275 C	Fe 430 C	AE 255-C		Fe 430-C	St 430 C	NS 12 143
S275J2G3	1.0144	Fe 430 D1	St 44-3 N	E 28-4	43 D	AE 275 D	Fe 430 D	AE 255-D	14 14-00	Fe 430-D	St 430 D	NS 12 143
S275J2G4	1.0145	Fe 430 D2		E 28-4	43 D	AE 275 D	Fe 430 D	AE 255-D	14 14-01	Fe 430-D	St 430 D	NS 12 143
S 355JR	1.0045	Fe 510 B		E 36-2	50 B	AE 355 B	Fe 510 B	AE 355-B		Fe 510-B		
S 355JO	1.0553	F3 510 C	St 52-3 U	E 36-3	50 C	AE 355 C	Fe 510 C	AE 355-C		Fe 510-C	St 510 C	NS 12 153
S355J2G3	1.0570	Fe 510 D1	St 52-3 N		50 D	AE 355 D	Fe 510 D	AE 355-D		Fe 510-D	St 510 D	NS 12 153
S355J2G4	1.0577	Fe 510 D2			50 D	AE 355 D	Fe 510 D	AE 355-D		Fe 510-D	St 510 D	NS 12 153
S355K2G3	1.0595	Fe 510 DD1		E 36-4	50 DD			AE 355-DD		Fe 510-DD		
S355K2G4	1.0596	Fe 510 DD2		E 36-4	50 DD			AE 355-DD		Fe 510-DD		
E295	1.0050	Fe 490-2	St 50-2	A 50-2		A 490	Fe 480	A 490-2	15 50-00 15 50-01	Fe 490-2	St 490	
E335	1.0060	Fe 590-2	St 60-2	A 60-2		A 590	Fe 580	A 590-2	16 50-00 16 50-01	Fe 590-2	St 590	
E360	1.0070	Fe 690-2	St 70-2	A 70-2		A 690	Fe 650	A 690-2	16 55-00 16 55-01	Fe 690-2	St 690	