

## Mechanical properties and chemical composition

Specification			page	Mechanical properties					Chemical composition						
Standard	Grade	※ Availability		Yield strength (N/mm <sup>2</sup> ) Min or Min/Max	Tensile strength (N/mm <sup>2</sup> ) Min or Min/Max	Yield ratio (%) Max	Elongation <sup>1)</sup> (%) Min	Charpy absorption energy (J) Min	C (%) Max	Si (%) Max	Mn (%) Max	P (%) Max	S (%) Max	N (%) Max	Ceq or Cev <sup>2)</sup> (%) Max
ASTM A500	B	○	9-14	315	400	-	23	-	0.26	-	1.35	0.035	0.035	-	-
	C	○		345	425	-	21	-	0.23	-	1.35	0.035	0.035	-	-
CSA G40.20-04	350W	○	15-18	350	450/620	-	22	-	0.23	0.40	0.50/1.50 (Min/Max)	0.040	0.050	-	-
EN10219	S275J0H	○	19-26	T≤16 275 16<T 265	T<3 430/580 3≤T 410/560	-	20	27(0°C)	0.20	-	1.50	0.040	0.040	0.009	0.40
	S275J2H	○						27(-20°C)	0.20	-	1.50	0.035	0.035	-	0.40
	S355J0H	○		T≤16 355 16<T 345	T<3 510/680 3≤T 470/630	-	20	27(0°C)	0.22	0.55	1.60	0.040	0.040	0.009	0.45
	S355J2H	○						27(-20°C)	0.22	0.55	1.60	0.035	0.035	-	0.45
	S355K2H	△						40(-20°C)							
AS/NZS 1163	C350	○	27-34	350	430	-	B/T≤15 12 15<B/T≤30 14 30<B/T 16	-	0.20	0.45	1.60	0.030	0.030	-	0.43
	C350L0	○						27(0°C)							
	C450	○		450	500	-	B/T≤15 10 15<B/T≤30 12 30<B/T 14	-	0.20	0.45	1.70	0.030	0.030	-	0.43
	C450L0	△						27(0°C)							
JIS G 3466	STKR400	○	35-42	245	400	-	23	-	0.25	-	-	0.040	0.040	-	-
	STKR490	○		325	490	-	23	-	0.18	0.55	1.50	0.040	0.040	-	-
Approved by MLIT of Japan <sup>3)</sup>	BCR295	○	43-46	6≤T<12 295 12≤T≤22 295/445	400/550	12≤T 90	6≤T≤16 23 16<T≤22 27	27(0°C) <sup>4)</sup>	0.20	0.35	1.40	0.030	0.015	0.006	0.36

T : Wall thickness

### Notes:

- 1) Test piece shall be in accordance with each standard.
- 2) EN 10219 : Cev = C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15  
AS/NZS 1163 : Cev = C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15  
BCR 295 : Ceq = C+Mn/6+Si/24+Ni/40+Cr/5+Mo/4+V/14
- 3) The Minister of land, Infrastructure, Transport and Tourism of Japan.
- 4) It shall be applied to wall thickness over 12mm.

### ※ Availability :

- : Available
- △ : Please consult us. (Size and delivery date should be checked before ordering.)

Please consult us if you require other standards and additional requirements.