

Category based on Yield Strength and Tensile Strength	CVN Temp		ASTM	API 5L	API 2W / 2H	EN 10225 Seamless Hollow Sections	EN 10025-2	EN 10025-3 (Normalized)	EN 10025-4 (TMCP)	ABS / BV / LR	DNV	GL
	°C	°F										
Yield Strength: ≥ 235 N/mm ² or MPa ≥ 36 ksi Tensile Strength: ≥ 360 N/mm ² or MPa ≥ 52 ksi	None	None	A36 A53, A106 Gr. B	L245 / Gr. B (PSL 1) L290 / X42 (PSL 1)								
	+ 20 °C	68 °F					S235 JR				Gr. A	NV A
	0 °C	32 °F		L245 / Gr. B (PSL 2) L290 / Gr. B (PSL 2)			S235 J0			Gr. B	NV B	Gr. B
	- 20 °C	- 4 °F					S235 J2			Gr. D	NV D	Gr. D
	- 40 °C	- 40 °F	A333 Gr. 6							Gr. E	NV E	Gr. E
Yield Strength: ≥ 275 N/mm ² or MPa ≥ 40 ksi Tensile Strength: ≥ 430 N/mm ² or MPa ≥ 62 ksi	None	None		L320 / X46 (PSL 1)								
	+ 20 °C	68 °F					S275 JR					
	0 °C	32 °F		L320 / X46 (PSL 2)			S275 J0					
	- 20 °C	- 4 °F					S275 J2	S275 N	S275 M			
	- 40 °C	- 40 °F			Gr. 42 (2H only)							
	- 50 °C	- 58 °F					S275 NL	S275 ML				
Yield Strength: ≥ 355 N/mm ² or MPa ≥ 50 ksi Tensile Strength: ≥ 460 N/mm ² or MPa ≥ 67 ksi	None	None	A572 Gr. 50	L360 / X52 (PSL 1)								
	+ 20 °C	68 °F					S355 JR					
	0 °C	32 °F		L360 / X52 (PSL 2)			S355 J0			AH 36	NV A36	A36
	- 20 °C	- 4 °F								DH 36	NV D36	D36
	- 40 °C	- 40 °F			Gr. 50	S355G14 + N / Q S355G15 + N / Q				EH 36	NV E36	E36
	- 50 °C	- 58 °F						S355 NL	S355 ML			
	- 60 °C	- 76 °F								NV F36	F36	
Yield Strength: ≥ 420 N/mm ² or MPa ≥ 60 ksi Tensile Strength: ≥ 520 N/mm ² or MPa ≥ 75 ksi	None	None	A572 Gr. 60	L415 / X60 (PSL 1)								
	0 °C	32 °F		L415 / X60 (PSL 2)						AH 40	NV A40	A40
	- 20 °C	- 4 °F						S420 N	S420 M	DH 40	NV D40	D40
	- 40 °C	- 40 °F			Gr. 60 (2W only)	S420G6 + Q				EH 40	NV E40	E40
	- 50 °C	- 58 °F						S420 NL	S420 ML			
	- 60 °C	- 76 °F							FH 40	NV F40	F40	
Yield Strength: ≥ 450 N/mm ² or MPa ≥ 65 ksi Tensile Strength: ≥ 550 N/mm ² or MPa ≥ 80 ksi	None	None		L450 / X65 (PSL 1)								
	0 °C	32 °F		L450 / X65 (PSL 2)			S450 J0					
	- 20 °C	- 4 °F						S460 N	S460 M			
	- 40 °C	- 40 °F				S460G6 + Q						
	- 50 °C	- 58 °F					S460 NL	S460 ML				

* The above chart is for comparison reference purposes only. User to use at own discretion.