CSA 50W

General Product Description

The Canadian Standards Association (CSA) specification G40.20/G40.21 covers structural quality steel of a number of different product forms. SSAB produces structural quality plates and sheet in accordance with CSA G40.20/G40.21 with specified minimum yield strengths of 38 ksi to 70 ksi. CSA G40.20/G40.21 also specifies different chemistry and mechanical property requirements for American Petroleum Institute(API) plate applications listed in API 620 and 650. CSA 50W is a weldable steel with a specified minimum yield strength of 50 ksi for thicknesses up to 2.5 inch and a specified minimum yield strength of 46 ksi for thicknesses greater than 2.5 inches.

Dimensions

Grade	Product Type	Thickness (Inches)	Width (Inches)	Length (Inches)
50W	Mill Plate	0.188 - 6.00[1)]	60 - 131.9[1)]	120 - 1020[1)]
50W	Temper Leveled Plate [2)]	0.100 - 0.625	48 - 96	72 - 720
	Coil for Conversion To[3)]	0.188 - 0.750	60 - 96[4)]	

[1)]Please inquire for plate thicknesses greater than 3.0 inches and up to 6.0 inches, for plate widths less than 72 inches and greater than 120 inches, and for plate lengths less than 120 inches and greater than 1020 inches.

[2)]SSAB's Cut-To-Length facilities use the temper leveled coil (TLC) process to produce temper leveled plate products. For additional information concerning our temper leveling process, please refer to our SSAB Americas:North AmericanCut-to-Length Operations brochure located under the Downloads section of our Commercial Steels Overview page.

[3)]Coils are excluded from qualification to this specification until they are processed into a finished plate product and all required processing, inspections, and testing are performed. Coils For Conversion To product will be certified to chemistry only. Inquire for physical properties testing. Coils will be subject to availability, so please inquire.

[4)]Please inquire for coil widths less than 72 inches and greater than 96 inches. Slitting capabilities are determined by strength levels and thicknesses, so please inquire all slit coil opportunities.

Mechanical Properties

Tensile testing is performed in the transverse direction.

Grade	Thickness (Inches)	Yield Strength (min ksi)	Tensile Strength[2)] (ksi)	Elongation in 2" [1)] (min %)	Elongation in 8" [1)] (min %)
50W	0.100 - 2.50	50	65 - 95	20	17
50W	2.51 - 6.00	46	65 - 95	20	17

[1)] See elongation requirement adjustment of CSA G40.20-13(Latest Edition).

[2)] Plate applications listed in API 620 and 650 must be inquired to ensure that the tensile strength upper limit is within 20 ksi of the specified minimum.

Tolerances

Tolerances for Mill Plate:

Thickness, width and length tolerances for CSA G40.21 50W plates are in accordance with ASTM A6. ASTM A6 Half-Standard Flatness tolerances are available for plate thicknesses of 3/8 inches to 2.0 inches. Inquire for CSA Restrictive Flatness tolerances and for specific mill flatness capabilities.

Tolerances for Temper Leveled Plate:

Thickness, width and length tolerances for CSA G40.21 50W plates are in accordance with ASTM A6. ASTM A6 Half-Standard Flatness tolerances or better are available for temper leveled plates. Flatness capabilities are determined by the processing line and the minimum yield strength of the material. Inquire for CSA Restrictive Flatness tolerances.

Tolerances for Coils for Conversion To:

Thickness and width tolerances are in accordance with the respective ASTM specifications of A568 for thicknesses of less than 0.230 inches(exclusive), and A635 for thicknesses of 0.230 inches to 1.00 inch, inclusive. Thickness tolerances are in accordance with Table S1.1 found in each of the ASTM specifications of A635 and A568, respective of thickness. Width tolerances are in accordance with Table 6 of ASTM A568 and Table 3 of ASTM A635. Thickness tolerances for nominal gauge orders must be inquired. Flatness tolerances for thicknesses of less than 0.230 inches(exclusive) are guaranteed per ASTM A568 Table 14 when adequate flattening operations are performed.

All tolerances will be confirmed to the customer via SSAB's Order Acknowledgement document.

Contact Information

www.ssab.com/contact