

U. S. Steel Canada Bar Products



U. S. Steel Canada
A Subsidiary of United States Steel

A Track Record of Excellence

The U. S. Steel Canada Bar Division has been supplying hot rolled steel bar products to the North American marketplace since 1913. It has a proven track record of excellence and a commitment to continuous improvement which has allowed it to become a leading bar supplier to the critical automotive bar market.

Facilities

U. S. Steel Canada's #1 Bar Mill is a modern computer controlled facility designed to produce both hot rolled bar coils and cut bar lengths. To ensure facilities continue to meet the ever-changing quality requirements of our customers, upgrades continue to be made to the steelmaking and rolling operations. Over the past five years, U. S. Steel Canada has commissioned a new state-of-the-art bloom reheat furnace, combined with an updated automated control package and new six-axis in-line laser size gauge for the bar mill. Most recently, new in-line surface quality monitoring equipment has been installed on the rolling mill to further enhance surface quality. U. S. Steel Canada also offers a wide range of technical support to its customer base, and our metallurgists are routinely involved in joint research and development activities with customers. On-site laboratory facilities are fully equipped to allow for full metallographic investigations, machinability assessment, heat treatment studies, and specialized mechanical testing.

Markets Served

U. S. Steel Canada's special bar quality (SBQ) bar products are supplied for a wide variety of applications. The automotive market includes critical components such as helical springs, stabilizer and torsion bars, steering and engine components, axles, and other shafts. Bars are also supplied to the manufacturing sector for cold heading, cold drawing, and forging.

Available Grades

U. S. Steel Canada offers a wide range of steel grades, including carbon grades (1000, 1100, 1200, and 1500 series), and alloy grades (5100, 9200 and micro-alloyed grades such as SteIR MM).

Available Product Sizes

PRODUCT TYPE	SIZE RANGE		COIL / BUNDLE SIZE LIMITS
	MIN.	MAX	
ROUND COILS	0.555"	1.281"	3,000–4,000 lbs 1360–1815 kg
	14.097 mm	32.537 mm	
HEXAGON COILS	0.625"	1.125"	54" OD, 40" ID* 1372 mm OD, 1016 mm ID*
	15.875 mm	42.850 mm	
ROUND STRAIGHTS	0.579"	2.437"	UP TO 10,000 lbs UP TO 4536 kg
	14.707mm	61.900 mm	
HEXAGON STRAIGHTS	0.625"	1.687"	10–40 ft LONG 3–12 m IN LENGTH
	15.875mm	42.850 mm	

* OD = OUTER DIAMETER, ID = INNER DIAMETER
STANDARD SAE SPECIFICATION TOLERANCES ARE AVAILABLE.

POST-ROLLING PROCESSES

Hamilton Works provides valued-added processes through qualified external processors. These post-rolling processes include:

- **Heat Treating:**
Spherodize, Lamellar and Structural Annealing, Normalizing
- **Straightening:**
Special Straightness Tolerances for Bar Straights – e.g. 1/8" (3.175 mm) in 5 ft (1525 mm)
- **Testing:**
Eddy Current and Ultrasonic
- **Other:**
Special Shearing, Surface Treatment, Saw Cutting



U. S. Steel Canada's BAR PRODUCTS FOR THE AUTOMOTIVE INDUSTRY

U. S. Steel Canada's large presence in the automotive industry is reflective of the people and especially the high priority placed on quality. All bar products supplied use bloom cast billets using Basic Oxygen Furnace (BOF) steelmaking combined with a world class 18-stand rolling facility, all of which are ISO/TS 16949:2002 and ISO 14001:2004 certified. In recognition of this, U. S. Steel Canada has earned many awards from its automotive base.



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