CLIFFS

INNOVATIVE STEEL SOLUTIONS

BATTERY ELECTRIC VEHICLES

Electrical Steels

Carbon Steels

Stainless Steels

Cleveland-Cliffs steel powers sustainability efforts as Automotive production transitions from internal combustion engine (ICE) vehicles to all vehicles containing a battery as part of the powertrain. For simplicity, we will refer to all such vehicles as battery-electric vehicles (BEVs) in this brochure.

Cleveland-Cliffs is the only North American steel manufacturer capable of supplying all steels needed for BEVs, including a wide variety of Electrical, Carbon and Stainless steels. Our unique capabilities and combined product offerings make us the ideal source for all your steel needs. We are the steel market leader in sales to the automotive industry.

STEEL FOR BATTERY ELECTRIC VEHICLES

ELECTRICAL STEELS

Cleveland-Cliffs' line of MOTOR-MAX®steels are the only automotive-quality High Frequency Non-Oriented Electrical Steels (HF NOES) for traction motors in BEVs being produced in North America. We offer a variety of grades and our products are known for low core loss and excellent energy efficiency at high operating frequencies.

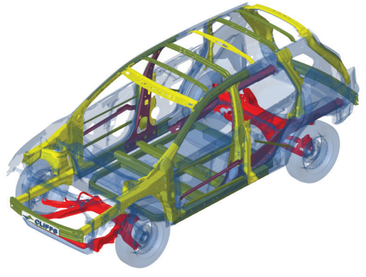
As the United States faces increasing demands on its electrical grid, including from increasing BEV market share, Cleveland-Cliffs is uniquely capable of meeting these infrastructure needs by offering a full variety of Grain-Oriented Electrical Steels (GOES) for use in transformers and generators.

CLIFFS

STEEL FOR BATTERY ELECTRIC VEHICLES

CARBON STEELS

Cleveland-Cliffs produces the widest range of carbon steels on the market, from mild steel grades for outer body panels to advanced high strength steels (AHSS). We offer products to meet a variety of material performance and design needs.

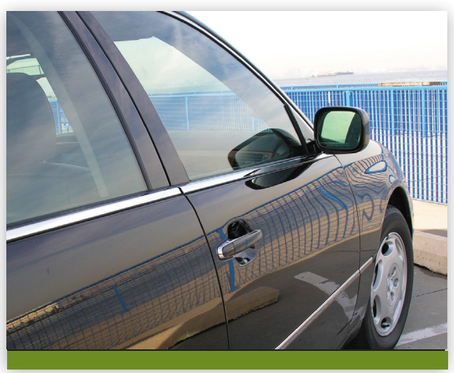


Car model design based on 2020 Nissan Rogue FE Model developed by Center for Collision Safety and Analysis at George Mason University.

	GRADE FAMILY	CLIFFS GRADE FAMILY
	High Strength Low Alloy	HSLA
	Dual Phase / Multi-phase / Complex Phase	DP / MP / ULTRA FORM® AHSS
	Martensite	Martensite
	Press Hardened Steel (PHS)	ULTRALUME® PHS

STAINLESS STEELS

Cleveland-Cliffs produces stainless steels utilized for trim on vehicle exteriors, providing beauty, functionality and corrosion resistance. These components can be stamped or roll formed as desired.



CLIFFS

STEEL FOR BATTERY ELECTRIC VEHICLES

About Cleveland-Cliffs Inc.

Cleveland-Cliffs is the largest flat-rolled steel producer in North America. Founded in 1847 as a mine operator, Cliffs also is the largest manufacturer of iron ore pellets in North America. The Company is vertically integrated from mined raw materials, direct reduced iron, and ferrous scrap to primary steelmaking and downstream finishing, stamping, tooling, and tubing. The Company serves a diverse range of markets due to its comprehensive offering of flat-rolled steel products and is the largest supplier of steel to the automotive industry in North America. The Company is headquartered in Cleveland, Ohio with mining, steel and downstream manufacturing operations located across the United States and in Canada. For more information, visit www.clevelandcliffs.com.

CLIFFS

CLEVELAND-CLIFFS INC.
200 Public Square
Suite 3300
Cleveland, OH 44114-2315
844.STEEL99 | 844.783.3599
clevelandcliffs.com

All information in this brochure is for the purpose of information only. Cleveland-Cliffs reserves the right to change its product range at any time without prior notice.

©2024 Cleveland-Cliffs Inc. All Rights Reserved.

June 2024