

Eco-friendly electric arc furnace steel

すみれす®

SUMI-LESS

“SUMI-LESS” derives its name from the Japanese word “SUMI” (carbon), representing its commitment to a reduced carbon footprint.

The product is an eco-friendly electric arc furnace steel manufactured by Chubu Steel Plate Co., Ltd.

This product is made using a method that enables a significant reduction CO₂ emissions during the steelmaking process compared to conventional products.



CHUBU STEEL PLATE CO., LTD.

1

The environmental performance of “SUMI-LESS”

This is an eco-friendly steel material that significantly reduced CO₂ emissions during manufacturing compared to regular products.

Image of CO₂ emission reduction in the manufacturing process

Regular products

485
(kg-CO₂eq/t)

CO₂ emissions related to electricity use

Non-electricity origin

→

SUMI-LESS

129
(kg-CO₂eq/t)

Applying the environmental value

By applying the electricity of renewable energy, achieving “zero” CO₂ emissions related to electricity use.

CO₂ emissions per ton of product (kg-CO₂eq/t)

Category	A1 Raw material supply	A2 Transport	A3 Manufacturing			Total
			Related to electricity use	Non-electricity origin	Subtotal	
Regular products	255	20	356	129	485	760
SUMI-LESS	255	20	0	129	129	404

CO₂ emissions(CFP) are calculated based on “ISO 14067” and the “Carbon Footprint Guidelines” from the Ministry of Economy, Trade and Industry and the Ministry of the Environment.

“SUMI-LESS” is applicable to all steel plate specifications produced by our company.

The quality and delivery times are the same as regular products.

The price is the regular product price plus a flat rate of JPY 8,000 per ton.

2

“SUMI-LESS” are steel plates made using electricity generated from renewable energy.

By applying the environmental attributes of off-site PPA (derived from renewable energy electricity) to the manufacturing process, we are reducing CO₂ emissions caused by electricity.

Off-site PPA

Under this service, electricity generated at dedicated off-site solar power plants is supplied through the power grid. Chubu Steel Plate uses renewable energy electricity procured from multiple agricultural solar power plants operated by Chubu Electric Power Miraiz.

The several agricultural solar power plants built in the Chubu region of Japan.

→

Chubu Electric Power Miraiz procures and supplies renewable energy electricity generated from solar power.

→

Chubu Steel Plate produces products using purchased renewable energy electricity.

3

“SUMI-LESS” is a product that has been verified by a third-party verification organization.

This product has received a conformity assessment statement from the Nippon Kaiji Kyokai (ClassNK), a third-party certification body, and has undergone validation and verification.



4

We will issue an environmental value certificate for “SUMI-LESS”.

We issue a steel inspection certificate (mill sheet) and an eco-friendly electric arc furnace steel certificate.

① Steel inspection certificate (mill sheet)

We will clearly state on the mill sheet that the product is “SUMI-LESS”.



② Eco-friendly Electric Arc Furnace steel certificate

We provide a description of the calculation method and results of the amount of CO₂ emitted when manufacturing one ton of product (CFP: Carbon Footprint of product), as well as third-party verification of this, to prove its environmental value.



It is our interpretation that the CO₂ emissions stated in this certificate can be used to calculate Scope 3 emissions under the GHG Protocol and your CO₂ emissions from raw material sourcing under Carbon Footprint of product (CFP). This certificate is linked to the steel product listed on the certificate, so it cannot be transferred to another steel product or distributed downstream on its own.