Japan EPD Program by SuMPO

Sustainable Management Promotion Organization 14-8, Uchikanda 1-chome, Chiyoda-ku, Tokyo Japan https://ecoleaf-label.jp/

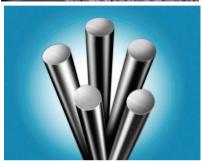
Registration number: JR-BO-24003E-B



Stainless Steel (SUS430)







Functional unit

1 t

System boundary

☐ final products ■ intermediate products

Production Stage

(Raw material supply, Transport, Manufacturing)

Main specifications of the product

Production sites:

Yamaguchi Works, East Nippon Works

Main standards:

JIS(Japanese Industrial Standards)

See Table 8.Remarks for details

Type: Sheet, Strip, Wire rod, Steel bar

Main sizes(unit:mm, t:thickness, φ:diameter):

t=0.1 \sim 9.0, φ=5.5 \sim 60

Company Information

NIPPON STEEL CORPORATION

Stainless Steel Unit Stainless Steel Technology Div.

https://www.nipponsteel.com/

Registration#	JR-BO-24003E-B	
PCR number	PA-187000-BO-03	
PCR name	Stainless steel products	
Publication date	11/25/2024	
Verification date	10/11/2024	
Verification method	Product-by-product	
Verification#	JV-BO-24003	
Expiration date	10/10/2029	
PCR review was conducted by:		
Approval date	2/4/2023	
PCR review panel chair	Ken Yamagishi	
	Sustainable Management Promotion Organization	

Third party verifier*

Naoki Makino

Independent verification of data & declaration in accordance with ISO14025 and ISO21930

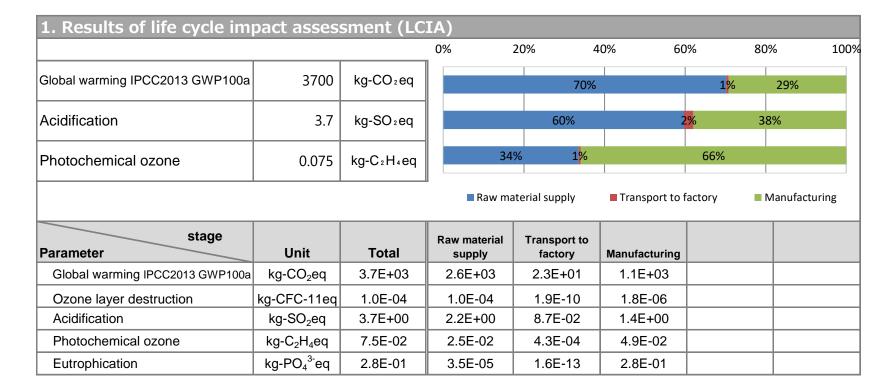
□internal ■external

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^{*}Auditor's name is stated if system certification has been performed.

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2. Life cycle inventory analysis (LCI)		
Parameter		Unit
Non-renewable material resources	2.2E+02	kg
Non-renewable energy	5.0E+04	MJ
Renewable material resources	5.6E+02	kg
Renewable primary energy	1.1E+03	MJ
Consumption of freshwater	1.3E+01	m ³

4. Waste to disposal		
Parameter		Unit
Hazardous waste	0.0E+00	kg
Non-hazardous waste	4.3E+01	kg

Non-hazardous waste	4.3E+01	
*Data derived from LCA and not assigned to the impact categories of LCIA		

3. Material composition		
Material		Unit
С	≦0.12	%
Si	≦0.75	%
Mn	≦ 1.00	%
Р	≦ 0.040	%
S	≦ 0.030	%
Ni	≦ 0.60	%
Cr	≦ 18.00	%
Fe	≧ 79	%

5. Additional explanation

- 1. Scenarios of transport to site follow the PCR. For the inter-factory transportation for intermediate products, distances were measured using mapping software.
- 2. Each item (except iron) in table 3 is the maximum value of all product standards covered by this EPD. The iron content is adjusted by the contents of other components.
- 3. Primary data collected in 2022. The source of the unit power consumption is the average of 10 electric power suppliers of Japan in 2014.
- 4. The calculation results are weighted averages for sheet, bar and wire rod.
- 5. Stainless steel slab and billet for this product are made by Yamaguchi Works.



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6-1. Supplementary environmental information

Each production area has ISO 14001 certificate.

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6-2. Regulated hazardous substances		
Substance	CAS No.	Reference to standards or regulations
Manganese [Mn]	7439-96-5	Industrial Safety and Health Act
Chromium[Cr]	7440-47-3	Industrial Safety and Health Act
Nickel[Ni]	7440-02-0	Industrial Safety and Health Act

7. Assumptions of secondary data used

The IDEA2.1.3 data is used.

8. Remarks

OJIS(Japanese Industrial Standards): JIS G 4303(Stainless steel bars), JIS G 4304(Hot-rolled stainless steel plate, sheet andstrip), JIS G 4305(Cold-rolled stainless steel plate, sheet and strip), JIS G 4308(Stainless steel wire rods)

- · November 2025 : Change to contact details. · April 2025 : Modification based on the change of company name.
- For data quantification, please refer to PCR and Rules on quantification and declaration.
- Comparative assertion is permitted only when Rules on quantification and declaration are satisfied. (Reference URL : https://ecoleaf-label.jp/regulation/)

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