



YAMATO STEEL Co., Ltd.

I-Beams

**Functional unit**

1t

System boundary final products intermediate products

Production Stage and optional supplementary information

Main specifications of the product

Production sites : Head office (Himeji)

Mainstandards :

SS400,SS490,SM400A.B,SM490A.B,
SM490YA.YB,SM520B,SN400A.B,SN490B

Main sizes(unit:mm,t:thickness)

H150(t8.5)× B 125(t14)~

H600(t16)×B190(t35)

Company Information

YAMATO STEEL Co., Ltd.

<http://www.yamatokogyo.co.jp/steel/>

| | |
|---------------------|---------------------------------|
| Registration# | JR-AJ-20002C-A |
| PCR number | PA-180000-AJ-03 |
| PCR name | Steel products for construction |
| Publication date | 8/23/2020 |
| Verification date | 7/31/2020 |
| Verification method | Product-by-product |
| Verification# | JV-AJ-20002 |
| Expiration date | 7/30/2025 |

PCR review was conducted by:

| | |
|------------------------|--|
| Approval date | 10/1/2019 |
| PCR review panel chair | Yasunari Matsuno (Chiba University) |

Third party verifier*

Tomoko hutigami

Independent verification of data & declaration in accordance with ISO/TS14067

 internal external

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

Registration number : JR-AJ-20002C-A



1. Quantification results, and contents of the declaration

CFP quantification unit :

| Parameter | | | Unit |
|---------------------------------------|---|------------|----------------------------|
| CFP Quantification results | | 570 | kg-CO₂eq |
| Breakdown | [A1] Raw material acquisition s | 100 | kg-CO ₂ eq |
| | [A2] Distribution stage | 25 | kg-CO ₂ eq |
| | [A3] Production stage | 450 | kg-CO ₂ eq |
| | [D] scrup recycling effect for steel products | 250 | kg-CO ₂ eq |
| Value on CFP mark | | 570 | kg-CO₂eq |
| Unit for the value on CFP mark | | 1t | |

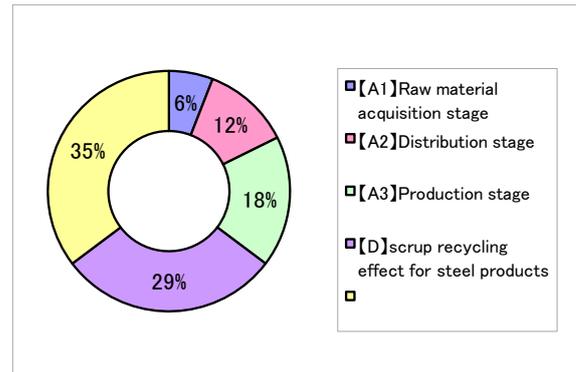
*Quantification results may slightly differ from the sum of the breakdown due to rounding of fractions.

3. Supplementary environmental information

Manufactured at ISO 14001 certified factories.

Manufactured at medical waste disposal certified factories.

2. Additional information



①Each LCI figure includes allocation for scrup recycling as an optional supplementary information[D].The recycling effect is calculated with the following totals.One is load accompanied with the scrap injection to the product production site.It is the credit accompanied with the scrap collection of the used steel product one more.

②Recycling rate(RR) of this EPD is 93.1%(the average of Japan in 2014).

③Transport to site scienario is based on PCR.

4. Interpretation

By this evaluation, the CO₂ emission at the [A3]stage of production became 80% degree and the dominant contribution degree. At the [A3]stage of production, The electric energy to use in the electric furnace, the electric energy and the burning of city gas to use in the rolling process were main discharge sources. Then, [A1]stage had a big contribution degree. At the [A1] stage, sub-raw materials production was a main discharge source. But this evaluation calculates it using company's quantity of raw materials and energy input. And, this evaluation calculates the manufacturing load of raw materials and energy load at the time of the production using the general values such as databases. This evaluation may not reflect a characteristic peculiar to our product. For example, this evaluation uses a PCR mention scienario at the time of the raw materials procurement transportation. Therefore, please understand that this result is an approximate value.

5. Assumptions of secondary data used

IDEA v2.1.3, and registered data of EcoLeaf Environmental Labeling Program, JLCA data v1.07 are used.

6. Remarks

Change main specifications of the product (January 1, 2023)

- 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/>)

- The CFP only addresses the single impact category of climate change and does not assess other potential social, economic and environmental impacts arising from the provision of a product.