

# ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14025 and EN 15804+A2

|                          |                                      |
|--------------------------|--------------------------------------|
| Owner of the Declaration | Peiner Träger GmbH                   |
| Publisher                | Institut Bauen und Umwelt e.V. (IBU) |
| Programme holder         | Institut Bauen und Umwelt e.V. (IBU) |
| Declaration number       | EPD-PTR-20210292-CBA1-EN             |
| Issue date               | 27.07.2023                           |
| Valid to                 | 26.07.2028                           |

## Structural Steel - Beams and Sections Peiner Träger GmbH

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## General Information

### Peiner Träger GmbH

#### Programme holder

IBU – Institut Bauen und Umwelt e.V.  
Hegelplatz 1  
10117 Berlin  
Germany

#### Declaration number

EPD-PTR-20210292-CBA1-EN

#### This declaration is based on the product category rules:

Structural steels, 01.08.2021  
(PCR checked and approved by the SVR)

#### Issue date

27.07.2023

#### Valid to

26.07.2028

Dipl.-Ing. Hans Peters  
(Chairman of Institut Bauen und Umwelt e.V.)

Florian Pronold  
(Managing Director Institut Bauen und Umwelt e.V.)

### Structural Steel - Beams and Sections

#### Owner of the declaration

Peiner Träger GmbH  
Gerhard-Lucas-Meyer-Str. 10  
31226 Peine  
Germany

#### Declared product / declared unit

1 metric ton of structural steel beams and sections

#### Scope:

This environmental product declaration (EPD) applies to hot rolled structural steel beams and sections produced by Peiner Träger GmbH, a company of Salzgitter AG, at its only production site at Peine, Germany. Information concerning SALCOS® (Salzgitter Low CO<sub>2</sub> Steel) Structural Steel - Beams and Sections are included in the Annex.

The products are intended for the use in bolted, welded or otherwise connected constructions of buildings, bridges and other structures. They are produced via the electric arc furnace (EAF) route. The owner of the declaration shall be liable for the underlying information and evidence; the IBU shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

The EPD was created according to the specifications of EN 15804+A2. In the following, the standard will be simplified as *EN 15804*.

#### Verification

|                                                                                  |            |
|----------------------------------------------------------------------------------|------------|
| The standard EN 15804 serves as the core PCR                                     |            |
| Independent verification of the declaration and data according to ISO 14025:2011 |            |
| <input type="checkbox"/>                                                         | internally |
| <input checked="" type="checkbox"/>                                              | externally |

Therese Daxner,  
(Independent verifier)



## Product

### Product description/Product definition

This EPD applies to 1 metric ton of hot rolled structural steel beams and sections in structural steel grades. For the placing on the market of the product in the European Union/European Free Trade Association (EU/EFTA) (with the exception of Switzerland) Regulation (EU) No. 305/2011 (CPR) applies. The product needs a declaration of performance taking into consideration *EN 10025-1* and the CE-marking. For the application and use the respective national provisions apply.

### Application

Structural steel beams and sections are intended for the use in bolted, welded or otherwise connected constructions of buildings, bridges and other structures, or in composite steel and concrete structures.

Examples are:

- buildings (industrial and storage buildings, residual and office buildings, stadiums, airports, train stations, car parks, convention centers, etc.)
- bridges (railway bridges, road bridges, pedestrian bridges, etc.)
- other structures (industrial and power plants, onshore and offshore energy facilities, harbour and port constructions, etc.)

### Technical Data

This EPD is valid for structural steel beams and sections of various steel grades and different forms of delivery. Specific information on steel grades, dimensions and tolerances can be found in the relevant literature and/or standards.

In Europe the most relevant standards applicable for structural steel beams and sections are *EN 10025* and *EN 10365* in combination with *EN 10034* or *EN 10279*. Also international product standards like *ASTM A6*, *ASTM A36*, *ASTM A992*, *ASTM A572*, etc. can be applicable.

### Constructional data

| Name                                                     | Value  | Unit                             |
|----------------------------------------------------------|--------|----------------------------------|
| Density                                                  | 7850   | kg/m <sup>3</sup>                |
| Modulus of elasticity                                    | 210000 | N/mm <sup>2</sup>                |
| Coefficient of thermal expansion                         | 12     | 10 <sup>-6</sup> K <sup>-1</sup> |
| Thermal conductivity                                     | 48     | W/(mK)                           |
| Melting point (depending on the alloy proportions up to) | 1536   | °C                               |
| Shear modulus                                            | 81000  | N/mm <sup>2</sup>                |

## LCA: Calculation rules

### Declared Unit

The reference unit is 1 ton of structural steel beams and sections.

Foreground data for the production are integrated into the *LCA FE (GaBi) Software* model for the production site under study. LCI is assessed as per the annual production data of Peiner Träger GmbH at the site Peine.

Background data are taken from the *LCA FE (GaBi) Database*.

### Declared unit

| Name                      | Value | Unit              |
|---------------------------|-------|-------------------|
| Declared unit             | 1     | t                 |
| Density                   | 7850  | kg/m <sup>3</sup> |
| Conversion factor to 1 kg | 1000  | -                 |

Performance data of the product in accordance with the declaration of performance with respect to its essential characteristics according to *EN 10025-1*.

Additional information can be obtained from [www.peiner-traeger.de](http://www.peiner-traeger.de).

### Base materials/Ancillary materials

Structural steels are non-alloyed or low-alloyed iron alloys with a carbon content of typically below 0.3%. The base material for structural steel beams and sections of this EPD is steel scrap, which is recycled by the EAF-steelmaking process.

Alloying elements like manganese, silicon, aluminum and vanadium are added in the form of ferroalloys or metals. The rates of these additives depend on the steel grade and are on average: 0,9% silico manganese, 0,2% ferro manganese, 0,1% ferro silicon, 0,1% aluminium and < 0,1% other alloys (e. g. ferro vanadium, ferro niobium, ferro titanium).

Other elements such as nitrogen or copper may be present in the steel depending on the steel grade, but are generally not intentionally added.

The product for authorization contains substances on the ECHA list of substances of very high concern (SVHC) (14 July 2021) above 0.1 % by mass: **No**.

The product contains further carcinogenic, mutagenic, reprotoxic (CMR) substances of category 1A or 1B that not in the candidate list, above 0.1 mass % in at least one subproduct: **No**.

Biocides have been added to the construction product, or the product has been treated with biocides (a treated product pursuant to the Biocidal Product Regulation (EU) No. 528/2012): **No**.

### Reference service life

A reference service life for structural steel beams and sections is not declared. These are construction products with many different applications purposes that define the service life of the construction and their components.

For the calculation of the declared average, all grades produced were included in the form of an annual average. Input and production quantities for the entire calendar year 2020 were taken into account. The calculated results can thus be considered representative for the entire product portfolio structural steels – beams and sections of Peiner Träger GmbH.

The EPD is calculated with residual grid mix.

### System boundary

Type of the EPD: cradle-to-gate - with options: Module A1-A3, Modules C1-C4 and Module D were considered.

**Modules A1-A3** covers the production stage including the upstream burdens of purchased raw materials (ferro-alloys, lime, dolomite, etc.), their transports and the manufacturing at

the production site in Peine.

Material and energy flows for the electric arc furnace and the hot rolling mills are considered.

Electricity consumption is modelled via residual grid mix (i.e. production in Germany + imports - exports - certified "green" electricity).

**Modules C1-C4** consider the dismantling of the considered product (C1), the transportation of the dismantled components to their final EoL destination (C2), the waste processing for reuse, recovery or recycling (C3) as well as the disposal (C4). It is assumed that the product is not connected with other materials and can therefore be dismantled. Associated efforts are negligible, no environmental impacts from the deconstruction of the products are declared (Module C1)

**Module D** refers to the End-of-Life, including recycling and/or reuse.

#### Geographic Representativeness

Land or region, in which the declared product system is manufactured, used or handled at the end of the product's lifespan: Germany

#### Comparability

Basically, a comparison or an evaluation of EPD data is only possible if all the data sets to be compared were created according to *EN 15804* and the building context, respectively the product-specific characteristics of performance, are taken into account. The *LCA FE (GaBi)* background database (content version 2022.2) was used to calculate the LCA.

## LCA: Scenarios and additional technical information

### Characteristic product properties of biogenic carbon

The declared product does not include biogenic carbon.

There is no packaging considered within the given study.

The EPD covers four End of Life scenarios (*SteelConstruction-info; Sansom, M. / Meijer, J.*):

- Scenario 0: 100% Recycling
- Scenario 1: 100% Reuse
- Scenario 2: 100% Loss / Landfill
- Scenario 3: 88% Recycling, 11% Reuse and 1% Loss

The following technical information is a basis for the declared modules or can be used for developing specific scenarios in the context of a building assessment if modules are not declared (MND).

A5 is not declared including the disposal of the packaging material on the construction site, the amounts of packaging materials included in the LCA calculations must be declared as

technical scenario information for Module A5.

### End of life (C1 - C4)

| Name                     | Value | Unit |
|--------------------------|-------|------|
| Landfilling - Scenario 0 | 0     | kg   |
| Landfilling - Scenario 1 | 0     | kg   |
| Landfilling - Scenario 2 | 1000  | kg   |
| Landfilling - Scenario 3 | 10    | kg   |

### Reuse, recovery and/or recycling potentials (D), relevant scenario information

| Name                   | Value | Unit |
|------------------------|-------|------|
| Recycling - Scenario 0 | 1000  | kg   |
| Recycling - Scenario 1 | 0     | kg   |
| Recycling - Scenario 2 | 0     | kg   |
| Recycling - Scenario 3 | 880   | kg   |
| Reuse - Scenario 0     | 0     | kg   |
| Reuse - Scenario 1     | 1000  | kg   |
| Reuse - Scenario 2     | 0     | kg   |
| Reuse - Scenario 3     | 110   | kg   |



## LCA: Results

The following table contains the LCA results for a declared unit of 1 ton structural steel beams and sections.

**DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; ND = MODULE OR INDICATOR NOT DECLARED; MNR = MODULE NOT RELEVANT)**

| Product stage       |           |               | Construction process stage          |          | Use stage |             |        |             |               |                        |                       | End of life stage          |           |                  |          | Benefits and loads beyond the system boundaries |
|---------------------|-----------|---------------|-------------------------------------|----------|-----------|-------------|--------|-------------|---------------|------------------------|-----------------------|----------------------------|-----------|------------------|----------|-------------------------------------------------|
| Raw material supply | Transport | Manufacturing | Transport from the gate to the site | Assembly | Use       | Maintenance | Repair | Replacement | Refurbishment | Operational energy use | Operational water use | De-construction demolition | Transport | Waste processing | Disposal | Reuse-Recovery-Recycling-potential              |
| A1                  | A2        | A3            | A4                                  | A5       | B1        | B2          | B3     | B4          | B5            | B6                     | B7                    | C1                         | C2        | C3               | C4       | D                                               |
| X                   | X         | X             | MND                                 | MND      | MND       | MND         | MNR    | MNR         | MNR           | MND                    | MND                   | X                          | X         | X                | X        | X                                               |

### RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1 ton structural steel beams and sections

| Parameter      | Unit                             | A1-A3    | C1 | C2       | C3 | C3/1 | C3/2 | C3/3 | C4 | C4/1 | C4/2      | C4/3      | D         | D/1       | D/2       | D/3       |
|----------------|----------------------------------|----------|----|----------|----|------|------|------|----|------|-----------|-----------|-----------|-----------|-----------|-----------|
| GWP-total      | kg CO <sub>2</sub> eq            | 6.88E+02 | 0  | 5.41E+00 | 0  | 0    | 0    | 0    | 0  | 0    | 1.45E+01  | 1.45E-01  | 2.36E+02  | -6.87E+02 | 1.97E+03  | 1.52E+02  |
| GWP-fossil     | kg CO <sub>2</sub> eq            | 6.88E+02 | 0  | 5.15E+00 | 0  | 0    | 0    | 0    | 0  | 0    | 1.49E+01  | 1.49E-01  | 2.36E+02  | -6.87E+02 | 1.97E+03  | 1.52E+02  |
| GWP-biogenic   | kg CO <sub>2</sub> eq            | 6.2E-01  | 0  | 2.66E-01 | 0  | 0    | 0    | 0    | 0  | 0    | -4.42E-01 | -4.42E-03 | -1.21E-01 | -6.18E-01 | -1.01E+00 | -1.84E-01 |
| GWP-luluc      | kg CO <sub>2</sub> eq            | 7.38E-02 | 0  | 0        | 0  | 0    | 0    | 0    | 0  | 0    | 2.75E-02  | 2.75E-04  | 4.88E-03  | -7.05E-02 | 4.06E-02  | -3.06E-03 |
| ODP            | kg CFC11 eq                      | 1.07E-09 | 0  | 0        | 0  | 0    | 0    | 0    | 0  | 0    | 3.51E-11  | 3.51E-13  | 5.17E-13  | -1.07E-09 | 4.3E-12   | -1.17E-10 |
| AP             | mol H <sup>+</sup> eq            | 1.7E+00  | 0  | 2.15E-03 | 0  | 0    | 0    | 0    | 0  | 0    | 1.06E-01  | 1.06E-03  | 5.08E-01  | -1.7E+00  | 4.23E+00  | 3.02E-01  |
| EP-freshwater  | kg P eq                          | 1.1E-04  | 0  | 0        | 0  | 0    | 0    | 0    | 0  | 0    | 2.53E-05  | 2.53E-07  | 4.29E-05  | -1.07E-04 | 3.57E-04  | 2.95E-05  |
| EP-marine      | kg N eq                          | 4.65E-01 | 0  | 1.08E-03 | 0  | 0    | 0    | 0    | 0  | 0    | 2.71E-02  | 2.71E-04  | 8.93E-02  | -4.64E-01 | 7.44E-01  | 3.5E-02   |
| EP-terrestrial | mol N eq                         | 5.09E+00 | 0  | 1.21E-02 | 0  | 0    | 0    | 0    | 0  | 0    | 2.97E-01  | 2.97E-03  | 7.84E-01  | -5.07E+00 | 6.53E+00  | 1.97E-01  |
| POCP           | kg NMVOC eq                      | 1.29E+00 | 0  | 2.2E-03  | 0  | 0    | 0    | 0    | 0  | 0    | 8.22E-02  | 8.22E-04  | 3.62E-01  | -1.29E+00 | 3.02E+00  | 2.07E-01  |
| ADPE           | kg Sb eq                         | 1.18E-04 | 0  | 0        | 0  | 0    | 0    | 0    | 0  | 0    | 1.53E-06  | 1.53E-08  | 5.89E-04  | -1.18E-04 | 4.91E-03  | 5.55E-04  |
| ADPF           | MJ                               | 9.05E+03 | 0  | 0        | 0  | 0    | 0    | 0    | 0  | 0    | 1.95E+02  | 1.95E+00  | 2.17E+03  | -9.04E+03 | 1.81E+04  | 1.1E+03   |
| WDP            | m <sup>3</sup> world eq deprived | 7.24E+01 | 0  | 0        | 0  | 0    | 0    | 0    | 0  | 0    | 1.64E+00  | 1.64E-02  | 4.39E+01  | -7.23E+01 | 3.66E+02  | 3.44E+01  |

GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources; WDP = Water (user) deprivation potential)

### RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A2: 1 ton structural steel beams and sections

| Parameter | Unit           | A1-A3    | C1 | C2       | C3 | C3/1 | C3/2 | C3/3 | C4 | C4/1 | C4/2     | C4/3     | D         | D/1       | D/2       | D/3       |
|-----------|----------------|----------|----|----------|----|------|------|------|----|------|----------|----------|-----------|-----------|-----------|-----------|
| PERE      | MJ             | 4.32E+02 | 0  | 1.89E+00 | 0  | 0    | 0    | 0    | 0  | 0    | 2.93E+01 | 2.93E-01 | -1.37E+02 | -4.29E+02 | -1.14E+03 | -1.79E+02 |
| PERM      | MJ             | 0        | 0  | 0        | 0  | 0    | 0    | 0    | 0  | 0    | 0        | 0        | 0         | 0         | 0         | 0         |
| PERT      | MJ             | 4.32E+02 | 0  | 1.89E+00 | 0  | 0    | 0    | 0    | 0  | 0    | 2.93E+01 | 2.93E-01 | -1.37E+02 | -4.29E+02 | -1.14E+03 | -1.79E+02 |
| PENRE     | MJ             | 9.05E+03 | 0  | 3.33E+01 | 0  | 0    | 0    | 0    | 0  | 0    | 1.96E+02 | 1.96E+00 | 2.17E+03  | -9.04E+03 | 1.81E+04  | 1.1E+03   |
| PENRM     | MJ             | 0        | 0  | 0        | 0  | 0    | 0    | 0    | 0  | 0    | 0        | 0        | 0         | 0         | 0         | 0         |
| PENRT     | MJ             | 9.05E+03 | 0  | 3.33E+01 | 0  | 0    | 0    | 0    | 0  | 0    | 1.96E+02 | 1.96E+00 | 2.17E+03  | -9.04E+03 | 1.81E+04  | 1.1E+03   |
| SM        | kg             | 1.14E+03 | 0  | 0        | 0  | 0    | 0    | 0    | 0  | 0    | 0        | 0        | -1.37E+02 | 0         | -1.14E+03 | -1.31E+02 |
| RSF       | MJ             | 0        | 0  | 0        | 0  | 0    | 0    | 0    | 0  | 0    | 0        | 0        | 0         | 0         | 0         | 0         |
| NRSF      | MJ             | 0        | 0  | 0        | 0  | 0    | 0    | 0    | 0  | 0    | 0        | 0        | 0         | 0         | 0         | 0         |
| FW        | m <sup>3</sup> | 2.67E+00 | 0  | 2.14E-03 | 0  | 0    | 0    | 0    | 0  | 0    | 4.97E-02 | 4.97E-04 | 9.92E-01  | -2.67E+00 | 8.26E+00  | 6.63E-01  |

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water



## RESULTS OF THE LCA – WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A2:

### 1 ton structural steel beams and sections

| Parameter | Unit | A1-A3    | C1 | C2       | C3    | C3/1  | C3/2 | C3/3    | C4 | C4/1 | C4/2     | C4/3     | D         | D/1       | D/2       | D/3       |
|-----------|------|----------|----|----------|-------|-------|------|---------|----|------|----------|----------|-----------|-----------|-----------|-----------|
| HWD       | kg   | 8.86E-07 | 0  | 1.6E-10  | 0     | 0     | 0    | 0       | 0  | 0    | 1E-08    | 1E-10    | 1.68E-08  | -8.86E-07 | 1.4E-07   | -8.13E-08 |
| NHWD      | kg   | 7.19E+00 | 0  | 4.78E-03 | 0     | 0     | 0    | 0       | 0  | 0    | 1E+03    | 1E+01    | -3.29E+01 | -7.19E+00 | -2.74E+02 | -3.25E+01 |
| RWD       | kg   | 4.99E-01 | 0  | 4.1E-05  | 0     | 0     | 0    | 0       | 0  | 0    | 2.17E-03 | 2.17E-05 | -2.7E-04  | -4.98E-01 | -2.25E-03 | -5.51E-02 |
| CRU       | kg   | 0        | 0  | 0        | 0     | 1E+03 | 0    | 1.1E+02 | 0  | 0    | 0        | 0        | 0         | 0         | 0         | 0         |
| MFR       | kg   | 0        | 0  | 0        | 1E+03 | 0     | 0    | 8.8E+02 | 0  | 0    | 0        | 0        | 0         | 0         | 0         | 0         |
| MER       | kg   | 0        | 0  | 0        | 0     | 0     | 0    | 0       | 0  | 0    | 0        | 0        | 0         | 0         | 0         | 0         |
| EEE       | MJ   | 0        | 0  | 0        | 0     | 0     | 0    | 0       | 0  | 0    | 0        | 0        | 0         | 0         | 0         | 0         |
| EET       | MJ   | 0        | 0  | 0        | 0     | 0     | 0    | 0       | 0  | 0    | 0        | 0        | 0         | 0         | 0         | 0         |

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy

## RESULTS OF THE LCA – additional impact categories according to EN 15804+A2-optional:

### 1 ton structural steel beams and sections

| Parameter | Unit              | A1-A3 | C1 | C2 | C3 | C3/1 | C3/2 | C3/3 | C4 | C4/1 | C4/2 | C4/3 | D  | D/1 | D/2 | D/3 |
|-----------|-------------------|-------|----|----|----|------|------|------|----|------|------|------|----|-----|-----|-----|
| PM        | Disease incidence | ND    | ND | ND | ND | ND   | ND   | ND   | ND | ND   | ND   | ND   | ND | ND  | ND  | ND  |
| IR        | kBq U235 eq       | ND    | ND | ND | ND | ND   | ND   | ND   | ND | ND   | ND   | ND   | ND | ND  | ND  | ND  |
| ETP-fw    | CTUe              | ND    | ND | ND | ND | ND   | ND   | ND   | ND | ND   | ND   | ND   | ND | ND  | ND  | ND  |
| HTP-c     | CTUh              | ND    | ND | ND | ND | ND   | ND   | ND   | ND | ND   | ND   | ND   | ND | ND  | ND  | ND  |
| HTP-nc    | CTUh              | ND    | ND | ND | ND | ND   | ND   | ND   | ND | ND   | ND   | ND   | ND | ND  | ND  | ND  |
| SQP       | SQP               | ND    | ND | ND | ND | ND   | ND   | ND   | ND | ND   | ND   | ND   | ND | ND  | ND  | ND  |

PM = Potential incidence of disease due to PM emissions; IR = Potential Human exposure efficiency relative to U235; ETP-fw = Potential comparative Toxic Unit for ecosystems; HTP-c = Potential comparative Toxic Unit for humans (cancerogenic); HTP-nc = Potential comparative Toxic Unit for humans (not cancerogenic); SQP = Potential soil quality index

Disclaimer 1 – for the indicator “Potential Human exposure efficiency relative to U235”. This impact category deals mainly with the eventual impact of low-dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure or radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, radon and from some construction materials is also not measured by this indicator.

Disclaimer 2 – for the indicators “abiotic depletion potential for non-fossil resources”, “abiotic depletion potential for fossil resources”, “water (user) deprivation potential, deprivation-weighted water consumption”, “potential comparative toxic unit for ecosystems”, “potential comparative toxic unit for humans – cancerogenic”, “Potential comparative toxic unit for humans - not cancerogenic”, “potential soil quality index”. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high as there is limited experience with the indicator.

## References

### Standards

#### ASTM A6

ASTM A6 / A6M - 19 Standard Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes, and Sheet Piling

#### ASTM A36

ASTM A36 / A36M - 19 Standard Specification for Carbon Structural Steel

#### ASTM A572

ASTM A572 / A572M - 21e1 Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel

#### ASTM A992

ASTM A992 / A992M - 20 Standard Specification for Structural Steel Shapes

#### EN 10025-1

EN 10025-1:2004 Hot rolled products of structural steels – Part 1: General technical delivery conditions

#### EN 10025-2

EN 10025-2:2019 Hot rolled products of structural steels – Part 2: Technical delivery conditions for non-alloy structural steels

#### EN 10025-3

EN 10025-3:2019 Hot rolled products of structural steels – Part 3: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels

#### EN 10025-4

EN 10025-4:2019 Hot rolled products of structural steels – Part 4: Technical delivery conditions for thermomechanical rolled weldable fine grain structural steels

#### EN 10025-5

EN 10025-5:2019 Hot rolled products of structural steels – Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance

#### EN 10034

EN 10034:1993 Structural steel I and H sections; Tolerances on shape and dimensions

#### EN 10279

EN 10279:2000 Hot rolled steel channels - Tolerances on shape, dimensions and mass

#### EN 10365

EN 10365:2017 Hot rolled steel channels, I and H sections - Dimensions and masses

#### EN 15804

EN 15804:2019+A2, Sustainability of construction works —

Environmental Product Declarations — Core rules for the product category of construction products

**ISO 14025**

DIN EN ISO 14025:2011-10, Environmental labels and declarations — Type III environmental declarations — Principles and procedures

**Further References**

**Candidate List of SVHC**

Candidate List of substances of very high concern for Authorisation (published by the European Chemicals Agency (ECHA) in accordance with Article 59(10) of the REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH))

**LCA FE (GaBi) Software / Database**

GaBi, Software and Database for Life Cycle Engineering, Sphera Solution GmbH, Leinfelden-Echterdingen, 2022, <http://documentation.gabi-software.com>

**IBU 2021**

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**PCR, Part A**

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