Environmental Product Declaration

In accordance with
ISO 14025 and EN 15804:2012+A2:2019/AC:2021

STAINLESS STEEL HOT ROLLED & COLD ROLLED PRODUCTS

Marcegaglia Specialties S.p.A

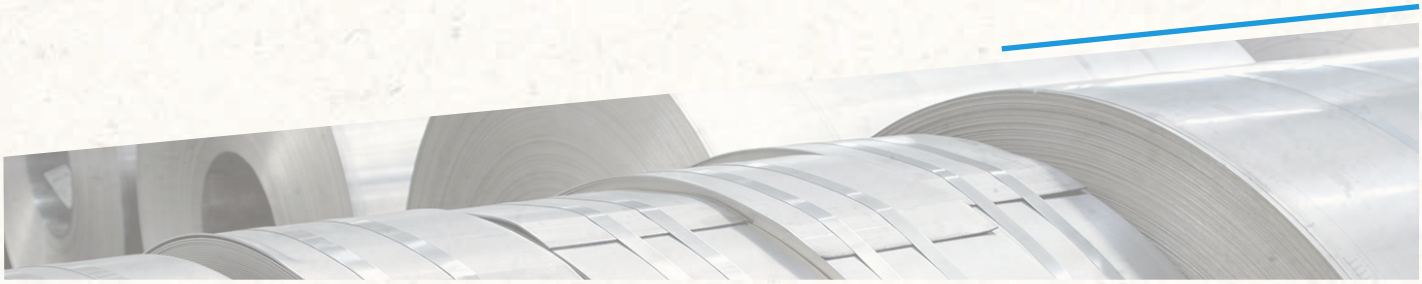
Programme: **The International EPD® System, www.environdec.com**

Programme operator: **EPD International AB**
EPD registration number: **S-P-09699**
Publication date: **2023-07-14**
Revision date: **2025-06-18**
Valid until: **2028-06-26**

MARCEGAGLIA SPECIALTIES

ECO PLATFORM EPD VERIFIED

EPD INTERNATIONAL EPD SYSTEM



GENERAL INFORMATION

PROGRAMME INFORMATION

Programme	The International EPD® System
Address	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website	www.environdec.com
E-mail	info@environdec.com

Accountabilities for PCR, LCA and independent third party verification.

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)

Product category rules (PCR):
Construction products (EN 15804:A2), 2019:14, UN CPC 54, version 1.11 valid until 01-08-2023

PCR review was conducted by:
The Technical Committee of the International EPD® System. Review chair: Claudia A. Peña
Contact through the secretariat www.environdec.com/contact

Life Cycle Assessment:
LCA accountability: Made HSE S.r.l.

Third-party verification:
Independent verification of the declaration and data, according to the UNI EN ISO 14025, via:

☒ EPD verification by accredited certification body

Third-party verification:
Bureau Veritas Italia S.p.A. *is an approved certification body accountable for the third party verification.*

The certification body is accredited by: Accredia

Procedure for follow-up of data during EPD validity involves third party verifier:

☒ Yes ☐ No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

COMPANY INFORMATION

Owner of the EPD:
Marcegaglia Specialties S.p.A. - www.specialties.marcegaglia.com

Contact:
To obtain more information about this Environment Product Declaration are available this contact:
Technical Support: Massimo Ciommei - Mail: massimo.ciommei@marcegaglia.com - Tel +39 0376 685594

Company description:
Marcegaglia Specialties S.p.A. sells rolled products produced at the Gazoldo degli Ippoliti (MN) plant, which is controlled by Marcegaglia Gazoldo Inox S.p.A. The plant produces many different rolled products from raw stainless steel coils: Coils, Sheets, Strips and Flat Bars.

Product/system certifications:
- Quality Management System ISO 9001;
- Environmental Management System ISO 14001;
- Energy Management System ISO 50001;
- Health & Safety Management System ISO 45001;
- Ethics Management System SA8000;
- Carbon Footprint Product Systematic Approach ISO 14067.

Production site's name and localization:
Via Bresciani, 16 – 36040 Gazoldo Degli Ippoliti (MN).

PRODUCT INFORMATION

Product name:
Hot rolled and cold rolled stainless steel products.

Product identification:
Long & plane products of stainless steel.

Product description:
Stainless steel rolled products with different thickness and dimensions for general and structural application or for pressure vessel.
The product in made in the site are:

- Coils
- Strips
- Sheets
- Flat Bars

Related by the end thickens the products are realize by hot rolling or by cold rolling.
From the company web site is possible download the catalogue whit the technical information of each product.

PRODUCT INFORMATION

COILS

Type	Thickness [mm]	Width [mm]
Hot rolled	2.0	1000
		1250
		1500
	3.0	1000
		1250
		1500
	4.0	1000
		1250
		1500
	5.0	1000
		1250
		1500
	6.0	1000
		1250
		1500
	8.0	1000
		1250
		1500
	10.0	1000
		1250
		1500
	12.0	1000
		1250
		1500
Cold rolled	0.8	1000
		1250
		1500
	1.0	1000
		1250
		1500
	1.2	1000
		1250
		1500
	1.5	1000
		1250
		1500
	2.0	1000
		1250
		1500
	2.5	1000
		1250
		1500
	3.0	1000
		1250
		1500
	4.0	1000
		1250
		1500
	5.0	1000
		1250
		1500

STRIPS

Type	Thickness [mm]	Width [mm]
Hot rolled	3.0	Da 40 a 1500
	4.0	Da 40 a 1500
	5.0	Da 40 a 1500
	6.0	Da 40 a 1500
Cold rolled	0.8	Da 40 a 1500
	1.0	Da 40 a 1500
	1.5	Da 40 a 1500
	2.0	Da 40 a 1500
	2.5	Da 40 a 1500
	3.0	Da 40 a 1500
	4.0	Da 40 a 1500

PRODUCT INFORMATION

SHEETS

Type	Thickness [mm]	Width [mm]
Hot rolled	3.0	1000x2000
		1250x2500
		1250x3000
		1500x4000
		1500x6000
		2000x4000
		2000x6000
	4.0	1000x2000
		1250x2500
		1250x3000
		1500x4000
		1500x6000
		2000x4000
		2000x6000
	5.0	1000x2000
		1250x2500
		1250x3000
		1500x4000
		1500x6000
		2000x4000
		2000x6000
	6.0	1000x2000
		1250x2500
		1250x3000
		1500x4000
		1500x6000
		2000x4000
		2000x6000
	8.0	1000x2000
		1250x2500
		1250x3000
		1500x4000
		1500x6000
		2000x4000
		2000x6000
	10.0	1000x2000
		1250x2500
		1250x3000
		1500x4000
		1500x6000
		2000x4000
		2000x6000
	12.0	1000x2000
		1250x2500
		1250x3000
		1500x4000
		1500x6000
		2000x4000
		2000x6000
Cold rolled	0.8	1000x2000
		1250x2500
		1250x3000
		1500x4000
		1500x6000
	1.0	1000x2000
		1250x2500
		1250x3000
		1500x4000
		1500x6000
	1.2	1000x2000
		1250x2500
		1250x3000
		1500x4000
		1500x6000
	1.5	1000x2000
		1250x2500
		1250x3000
		1500x4000

PRODUCT INFORMATION

FLAT BARS

Type	Thickness [mm]	Width [mm]
Hot rolled	3.0	10
		12
		15
		20
		25
		30
		35
		40
		45
		50
		60
		65
		70
		75
		80
		100
	4.0	10
		12
		15
		20
		25
		30
		35
		40
		45
		50
		60
		65
		70
		75
		80
		90
		100
		120
	5.0	12
		15
		20
		25
		30
		35
		40
		45
		50
		60
		65
		70
		75
		80
		90
		100
		120
		140
		150
		200
	6.0	12
		15
		20
		25
		30
		35
		40
		45
		50
		60
		65
		70
		75

PRODUCT INFORMATION

FLAT BARS

Type	Thickness [mm]	Width [mm]
	8.0	20
		25
		30
		35
		40
		45
		50
		60
		65
		70
		75
		80
		90
		100
		120
		125
		140
		150
		160
		180
		200
	10.0	20
		25
		30
		35
		40
		45
		50
		60
		65
		70
		75
		80
		90
		100
		120
		125
		140
		150
		160
		180
		200
	12.0	30
		40
		50
		60
		65
		70
		75
		80
		100
		120
		125
		140
		150
		160
		180
		200

UN CPC code:
41232 Flat-rolled products of stainless steel, further worked

Geographical scope:
Global

LCA INFORMATION

Declared unit:
The declared unit is 1 ton of rolled product.

Reference service life - RSL:
The RLS of the rolled products are estimate around of 50 years [Rif.: Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR)].

Time representativeness:
All the data used for this LCA analysis are referred to the year 2024.

Data Quality:
The primary data come from the company and the secondary data come from Ecoinvent database.

Database e software:
Ecoinvent database v.3.11 April 2025/ Software SimaPro Craft 10.2.

Description of system boundaries:
The study is referred "from cradle to gate with options (A1-A3 + A4 + C1-C4 + D)", like the follow table (rif: PCR 2019:14 "Construction products" version 1.11), valid until 01/08/2023.

The modules A1-A3 describe the raw materials, the transport until the production's site and the production's process.
The modules C1-C4 describe the transport, the demolition process, and the end life of the products. These operations aren't under company's control.
In this regard, literature relating to the construction sector is used. It is considered:

- an average diesel consumption equivalent to 46 MJ for each ton of material demolished;
- an average distance of 80 km to transport the material to the recovery center;
- an average electricity consumption of 28 kWh for each ton of material sorted.

Module D considers the recovery and recycling potential of steel deriving from end-of-life processes: the calculation of the environmental benefits deriving from the recovery of steel is based on the instructions provided in the document "Product Category Rules for Type III environmental product declaration of construction products to EN 15804:2012 – Par. 6.3.4.6.
Benefits and loads beyond the product system boundary, information Module D".

DESCRIPTION OF MAIN ACTIVITIES

The production site Gazoldo degli Ippoliti produces stainless steel rolled products with different thickness and dimensions for general and structural application or for pressure vessel.
The production begins with the arrival of raw materials at the plant by road, but the journey between the starting steel mill and the Gazoldo degli Ippoliti plant can be by intermodal transport using mainly ships and trains.

The raw materials are:

- Coils from European steel mill by trains until the Piadena station;
- Coils from Asiatic steel mill by ship until the Marcegaglia Ravenna S.p.A. plants, and by train until the Piadena station.

Following there are the phases of the production:

PICKLING
Stainless steel pickling is a chemical process of removing metal oxides, which is usually followed by a passivation step. This process can be carried out in various ways depending on the intended use of the product and the type of material undergoing the process (stainless steel, carbon steel, etc.). In the case of stainless steel, the process is carried out by immersing the metal to be pickled in a tank containing a bath of hydrogen peroxide (a substitute for nitric acid) and hydrofluoric acid. The former exerts an oxidizing action the latter an aggressive action. Passivation of the surface is carried out with sulfuric acid. Finally, the pickled metal is washed with water and dried. This process is made possible by the addition of a suitable stabilizer based on organic and inorganic acids that allows hydrogen peroxide to remain stable even in the presence of high concentrations of dissolved metal salts in the pickling tanks.

COLD ROLLING
The cold rolling process, which is intended to reduce the thickness of the strip, produces an increase in strength characteristics and a decrease in stemability characteristics to a greater extent the higher the degree of reduction. During the rolling stage, in order to reduce friction between rolling rolls and coils, oil emulsion is used. The rolled coils are placed in the special magazine for cooling and a second pass in the pickling.

SKINPASS
The coil after cold rolling and pickling treatment needs slight variable surface reduction to improve surface quality and appearance.

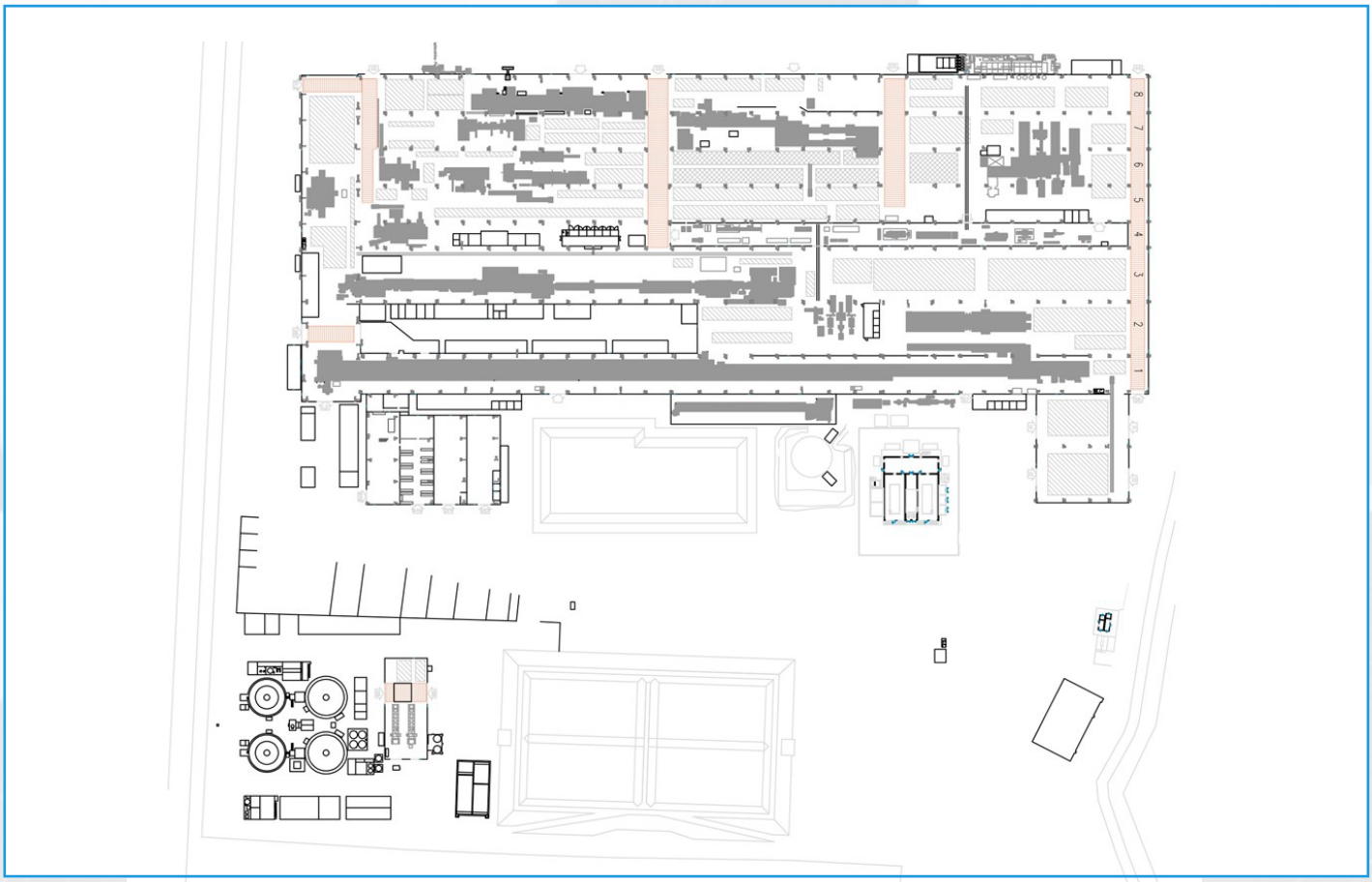
STRIPS CUTTING.
Pickled or skinpassed coils, depending on the physical characteristics of the obtainable product, are sent to cutting lines. These machines produce a longitudinal cutting action to obtain coils of various widths that will follow a diversified processing cycle to obtain welded tubes, open profiles, sheets, strips according to the desired production.

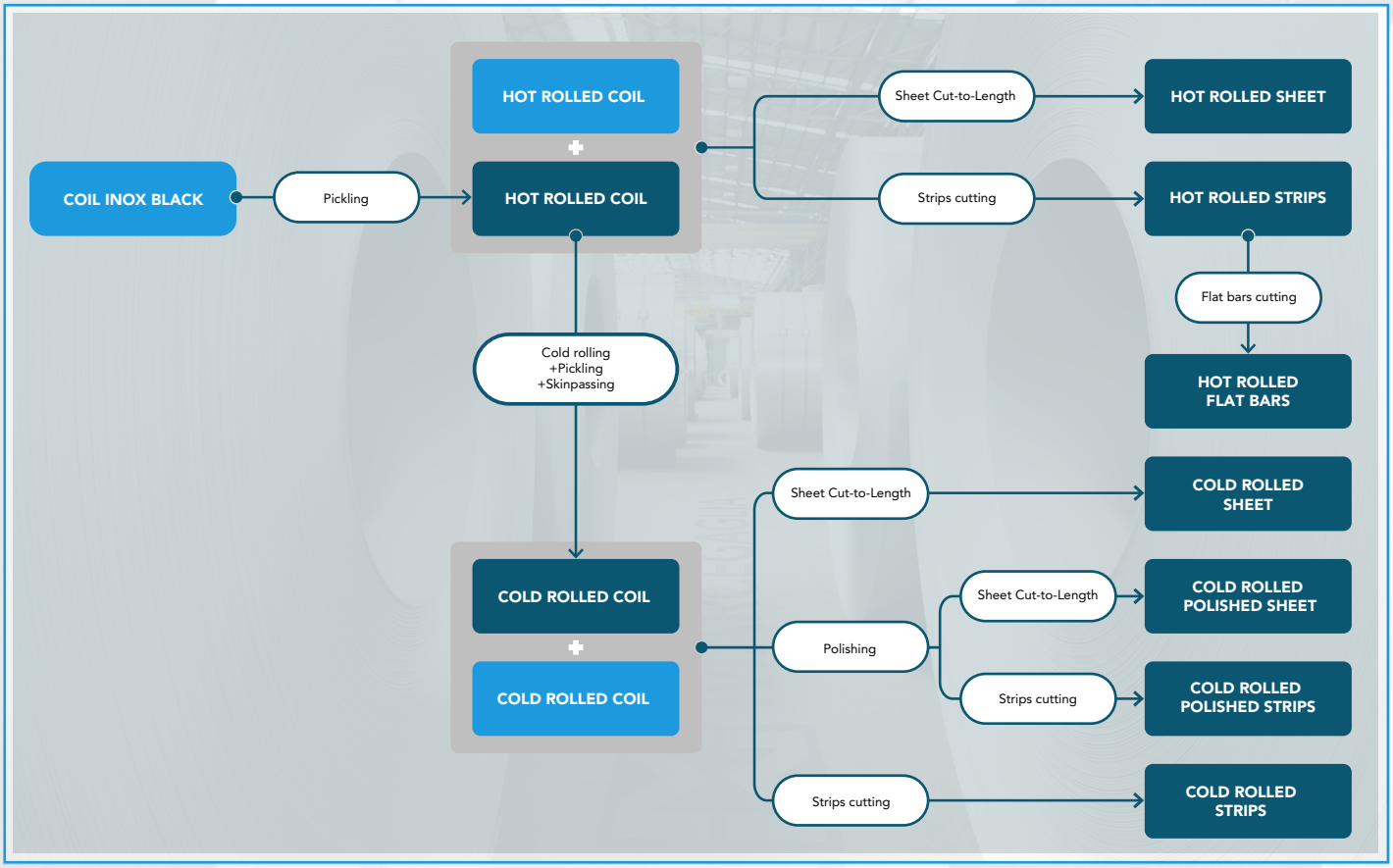
FLATTENING FOR SHEETS
From coiled sheets (coils), flat sheets of numerous formats are obtained by means of machines called flattening machines. The machine is equipped with rollers and counter rollers to obtain perfect flatness. A special cutter obtains the required lengths from a minimum of 400 mm to a maximum of 1300 mm. (transportable materials). Bundling of the sheet metal sheets is done in line with a special mechanical stacker. Next, weighing of the packs and manual strapping with Signode equipment takes place.

SATINING
If requested by the customer, the cold-processed coils pass through a satin-finishing machine that allows almost all surface imperfections to be removed before being sheared or flattened to obtain satin-finished coils and satin-finished sheets.

FLAT BARS CUTTING
Bars of numerous sizes are obtained from hot-rolled strips by means of machines called Bar Cutters. The machine is equipped with rollers and counter rollers to obtain perfect flatness. A special cut obtains the required lengths. Bundling of the bars is done in line with a special mechanical stacker. Then the weighing of the packs and manual strapping with Signode equipment takes place.

SYSTEM DIAGRAM





CONTENT INFORMATION

The materials used for the packaging of the final products consist of plastic and / or metal straps, wooden saddles and polyester bands.
The quantities of these packaging compared to one ton of final product identify a value of less than 1%.

Product	Product content	Weight, kg	Post-consumer material, weight	Biogenic material, weight-% and kg C/kg
Hot rolled	Stainless Steel	1,000	75.3%	0
Cold rolled	Stainless Steel	1,000	76.6%	0

Electricity information
The electricity used in the manufacturing process of module A3 accounts less than 30% of the GWP-GHG results of modules A1-A3 and the impact of electricity use in the manufactory phases is 0.342 kg CO2 eq/kWh.

Allocation's rules
Was done a mass allocation of the energy and water consumption, polluted emission, and waste.

MODULES DECLARED

Modules declared, geographical scope, share of specific data (in GWP-GHG indicator) and data variation:

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Disposal	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling potential
Module	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Modules declared	X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	GLO	GLO	IT	-	-	-	-	-	-	-	-	-	GLO	GLO	GLO	GLO	IT
Specific data	> 60%					-	-	-	-	-	-	-	-	-	-	-	-
Variations product	Not relevant					-	-	-	-	-	-	-	-	-	-	-	-
Variations site	Not relevant					-	-	-	-	-	-	-	-	-	-	-	-

X = Module considered | **ND** = Module not declared | **GLO** = Global | **IT** = Italy

ENVIRONMENTAL INFORMATION

All the performance indicators are referred of 1 ton of rolled products.

Environmental impact

IMPACT CATEGORY	ABB.	UNIT
Climate change - total	GWP - t	kg CO_2 eq
Climate change - Fossil	GWP - fossil	kg CO_2 eq
Climate change - Biogenic	GWP - biogenic	kg CO_2 eq
Climate change - Land use and LU change	GWP - luluc	kg CO_2 eq
Climate change - Greenhouse Gases	GWP - GHG	kg CO2 eq
Ozone depletion	ODP	kg CFC11 eq
Photochemical ozone formation	POCP	kg NMVOC eq
Acidification of land and water	AP	mol H+ eq
Eutrophication	EP - freshwater	kg P eq
	EP - marine	kg N eq
	EP - terrestrial	mol N eq
Water use *	WDP	m^3 depriv.
Resource use, fossils *	ADP - F	MJ
Resource use, minerals, and metals *	ADP - MM	kg Sb eq

* The results of this environmental impact indicator shall be used with care as the uncertainties of the results are high and as there is limited experience with the indicator.

Resource use

IMPACT CATEGORY	ABB.	UNIT
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	PERE	MJ
Use of renewable primary energy resources used as raw materials	PERM	MJ
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	PERT	MJ
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	PENRE	MJ
Use of non-renewable primary energy resources used as raw materials	PENRM	MJ
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	PENRT	MJ
Use of secondary material	SM	kg
Use of renewable secondary fuels	SRF	MJ
Use of non-renewable secondary fuels	NRSF	MJ
Use of net fresh water	FW	m^3

Waste production

IMPACT CATEGORY	ABB.	UNIT
Hazardous waste disposed	HW	kg
Non-hazardous waste disposed	NHW	kg
Radioactive waste disposed	RW	kg

Output flows

IMPACT CATEGORY	ABB.	UNIT
Reuse components	REUSE	kg
Materials for recycle	RECYCLE	kg
Materials for energy recovery	EN-REC	kg
Exported energy-electrical energy	EE-E	MJ
Exported energy-thermal energy	EE-T	MJ

STAINLESS STEEL HOT ROLLED PRODUCTS

Abb.	Unit	A1-A3	C1	C2	C3	C4	D
GWP - t	kg CO2 eq	3.47E+03	9.32E+00	8.58E+00	9.32E+00	7.70E-01	-2.48E+03
GWP - fossil	kg CO2 eq	3.45E+03	9.25E+00	8.57E+00	9.25E+00	7.69E-01	-2.45E+03
GWP - biogenic	kg CO2 eq	2.19E+01	6.85E-02	5.24E-03	6.85E-02	3.76E-04	-2.66E+01
GWP - luluc	kg CO2 eq	2.83E+00	7.55E-04	3.08E-03	7.55E-04	4.37E-04	-2.77E+00
GWP - GHG	kg CO2 eq	3.45E+03	9.26E+00	8.57E+00	9.26E+00	7.70E-01	-2.45E+03
ODP	kg CFC-11 eq	3.49E-03	2.35E-07	1.87E-07	2.35E-07	2.14E-08	-1.76E-05
POCP	kg NMVOC eq	1.22E+01	2.18E-02	4.49E-02	2.18E-02	8.15E-03	-8.41E+00
AP	mol H+ eq	1.89E+01	1.94E-02	2.84E-02	1.94E-02	5.39E-03	-1.41E+01
EP - freshwater	kg P eq	2.48E+00	1.10E-03	6.05E-04	1.10E-03	6.73E-05	-2.48E+00
EP - marine	kg N eq	3.63E+00	4.71E-03	9.63E-03	4.71E-03	2.07E-03	-2.58E+00
EP - terrestrial	mol N eq	3.81E+01	4.94E-02	1.05E-01	4.94E-02	2.26E-02	-2.70E+01
WDP	m3 depriv.	9.06E+02	6.07E-01	5.70E-01	6.07E-01	8.21E-01	-6.24E+02
ADP - F	MJ	4.02E+04	1.39E+02	1.25E+02	1.39E+02	1.88E+01	-2.80E+04
ADP - MM	kg Sb eq	3.15E-01	1.18E-05	2.41E-05	1.18E-05	1.13E-06	-6.84E-02
PERE	MJ	5.41E+03	4.55E+00	1.93E+00	4.55E+00	1.76E-01	-7.37E+03
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	5.41E+03	4.55E+00	1.93E+00	4.55E+00	1.76E-01	-7.37E+03
PENRE	MJ	4.35E+04	1.52E+02	1.33E+02	1.52E+02	2.00E+01	-2.99E+04
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	4.35E+04	1.52E+02	1.33E+02	1.52E+02	2.00E+01	-2.99E+04
SM	kg	4.11E+02	1.22E-02	0.00E+00	1.22E-02	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m3	1.88E+01	3.23E-02	2.32E-02	3.23E-02	1.96E-02	-1.19E+01
HW	Kg	2.12E+00	1.52E-03	3.58E-03	1.52E-03	2.75E-04	-1.17E+00
NHW	Kg	3.10E+02	1.48E-01	1.08E+01	1.48E-01	1.23E+02	-3.49E+02
RW	kg	3.60E-02	1.32E-04	3.45E-05	1.32E-04	2.75E-06	-4.06E-02
REUSE	Kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RECYCLE	Kg	7.49E+00	1.93E-02	0.00E+00	1.93E-02	0.00E+00	0.00E+00
EN-REC	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE-E	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE-T	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

STAINLESS STEEL COLD ROLLED PRODUCTS

Abb.	Unit	A1-A3	C1	C2	C3	C4	D
GWP - t	kg CO2 eq	3.54E+03	9.66E+00	8.89E+00	9.66E+00	7.98E-01	-2.56E+03
GWP - fossil	kg CO2 eq	3.52E+03	9.59E+00	8.88E+00	9.59E+00	7.97E-01	-2.52E+03
GWP - biogenic	kg CO2 eq	1.65E+01	7.10E-02	5.43E-03	7.10E-02	3.90E-04	-2.75E+01
GWP - luluc	kg CO2 eq	2.49E+00	7.83E-04	3.19E-03	7.83E-04	4.53E-04	-2.86E+00
GWP - GHG	kg CO2 eq	3.53E+03	9.59E+00	8.88E+00	9.59E+00	7.97E-01	-2.53E+03
ODP	kg CFC-11 eq	2.30E-03	2.43E-07	1.94E-07	2.43E-07	2.22E-08	-1.82E-05
POCP	kg NMVOC eq	1.26E+01	2.26E-02	4.66E-02	2.26E-02	8.45E-03	-8.69E+00
AP	mol H+ eq	1.94E+01	2.01E-02	2.94E-02	2.01E-02	5.58E-03	-1.45E+01
EP - freshwater	kg P eq	2.81E+00	1.14E-03	6.27E-04	1.14E-03	6.98E-05	-2.56E+00
EP - marine	kg N eq	3.76E+00	4.88E-03	9.98E-03	4.88E-03	2.14E-03	-2.66E+00
EP - terrestrial	mol N eq	3.89E+01	5.12E-02	1.09E-01	5.12E-02	2.34E-02	-2.78E+01
WDP	m3 depriv.	9.49E+02	6.29E-01	5.90E-01	6.29E-01	8.51E-01	-6.44E+02
ADP - F	MJ	4.19E+04	1.44E+02	1.30E+02	1.44E+02	1.95E+01	-2.89E+04
ADP - MM	kg Sb eq	3.21E-01	1.22E-05	2.49E-05	1.22E-05	1.17E-06	-7.06E-02
PERE	MJ	4.45E+03	4.72E+00	2.00E+00	4.72E+00	1.83E-01	-7.61E+03
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	4.45E+03	4.72E+00	2.00E+00	4.72E+00	1.83E-01	-7.61E+03
PENRE	MJ	4.56E+04	1.58E+02	1.38E+02	1.58E+02	2.08E+01	-3.09E+04
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	4.56E+04	1.58E+02	1.38E+02	1.58E+02	2.08E+01	-3.09E+04
SM	kg	3.73E+02	1.27E-02	0.00E+00	1.27E-02	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m3	2.09E+01	3.35E-02	2.41E-02	3.35E-02	2.03E-02	-1.23E+01
HW	Kg	4.35E+00	1.57E-03	3.71E-03	1.57E-03	2.85E-04	-1.21E+00
NHW	Kg	2.68E+02	1.54E-01	1.12E+01	1.54E-01	1.27E+02	-3.60E+02
RW	kg	3.27E-02	1.37E-04	3.57E-05	1.37E-04	2.85E-06	-4.19E-02
REUSE	Kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RECYCLE	Kg	6.34E+00	2.00E-02	0.00E+00	2.00E-02	0.00E+00	0.00E+00
EN-REC	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE-E	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE-T	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

ADDITIONAL ENVIRONMENTAL INFORMATION

It is shown that the indicator deviations of the 4 hot-rolled products is less than 10%,it is the same for the 5 cold-rolled products.

Quite the opposite, the variation of all the indicator between hot-rolled and cold-rolled products are greater than 10%. The impact of the input raw material, which corresponds to 94% of the total impacts for hot rolled products and 90% of the total impacts for cold re-rolled products.

It should be noted that at the end of its useful life, the product is destined for recycling. In particular, the amount of steel destined for recycling is 87.9% in line with what is indicated in the " Special waste report" of ISPRA - No. 402/2024".

The products manufactured by the plant of Gazoldo degli Ippoliti are characterized by a recycled content of 75.3% for hot-rolled products, and 76.6% for cold-rolled products. This percentage is calculated as average of the value associated with the incoming raw material and derived from both Type III environmental declarations as well as self-declarations in accordance with ISO 14021.

The products do not contain hazardous substances from the SVHC Candidate List for Authorization in quantities greater than 0.1%.

DIFFERENCES FROM THE PREVIOUS EPD VERSION

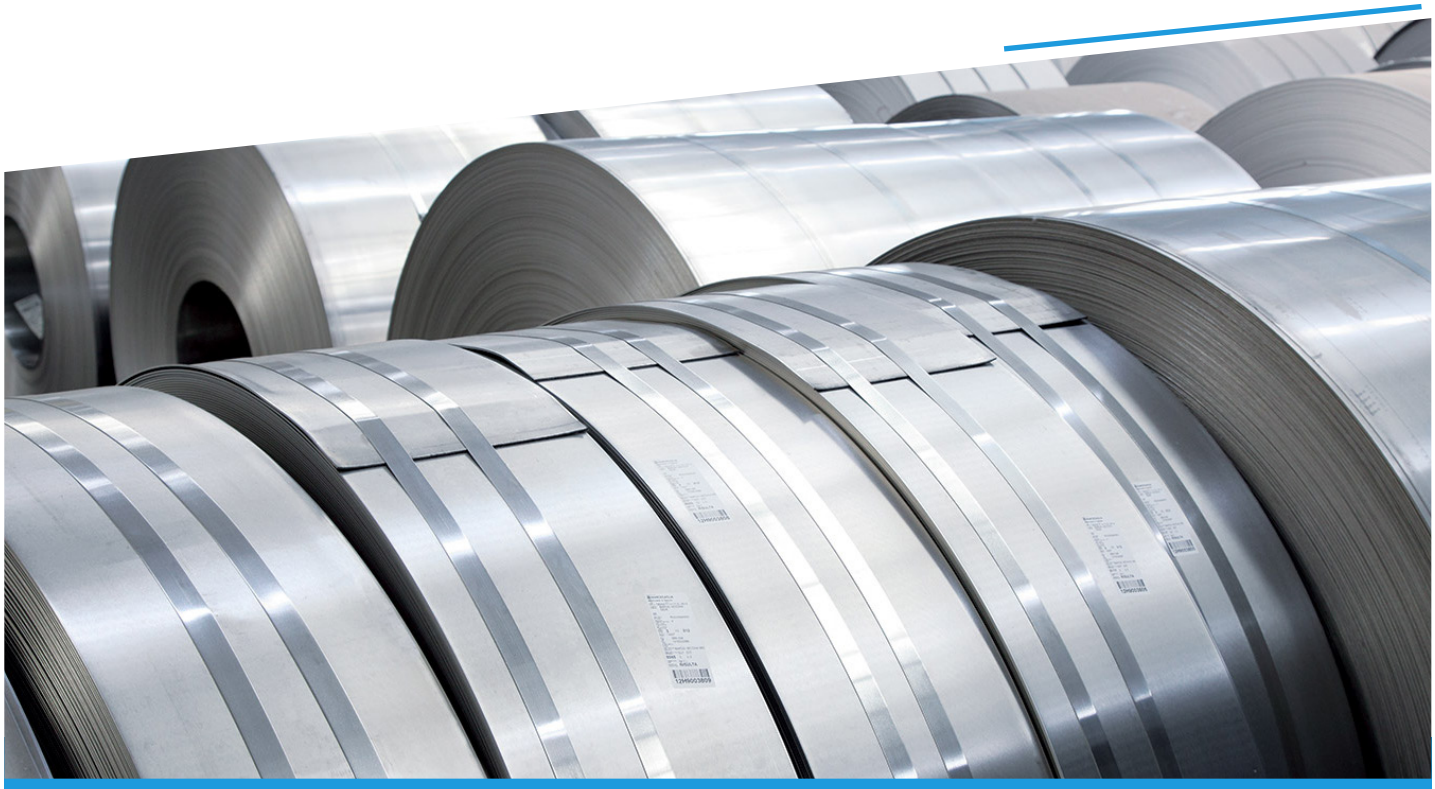
Between the year 2023 (the year for which data was used to develop and publish the last EPD version) and the year 2024, variations of more than 10% were observed in the indicators. The final results are influenced by the raw materials arriving at the plant.

The main changes are listed below:

- Italian updated energy residual mix has been considered (ref.: "European Residual Mixes Results of the calculation of Residual Mixes for the calendar year 2024");
- In 2024, the effect of the G.O. electricity supplied was considered;
- The EDIP 2003 method was used to calculate hazardous, non-hazardous, and radioactive waste;
- The Comulative Energy Demand method was used to calculate "Use of renewable primary energy excluding renewable primary energy resources used as raw materials" and "Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials".

REFERENCES

- General Programme Instructions of the International EPD® System. Version 3.01;
- PCR 2019:14 - Version 1.11 "CONSTRUCTION PRODUCTS";
- BRE Global Product Category Rules (PCR) for Type III EPD of construction products to EN 15804+A2;
- Ecoinvent database v.3.11 April 2025;
- ISO 14025: 2010 "Environmental labels and declarations - Type III environmental declarations - Principles and procedures";
- ISO 14040: 2021 "Environmental management - Life cycle assessment - Principles and framework";
- ISO 14044:2021 "Environmental management - Life cycle assessment - Requirements and guidelines";
- ISO 15804:2021 "Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products";
- European Residual Mixes 2024 Association of Issuing Bodies "European Residual Mixes Results of the calculation of Residual Mixes for the calendar year 2024" – 2025-05-30;
- ISPRA "Rapporto rifiuti speciali" – n° 402/2024.
- Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR)



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