Environmental Product Declaration

Environmental Product Declaration (EPD) Steel Slang

In conformity with ISO 14025 and EN 15804:2012+A2:2019

GERDAU CORSA

Program:

The International EPD® System- www.environdec.com

EPD registered through the fully aligned regional programme/ hub:

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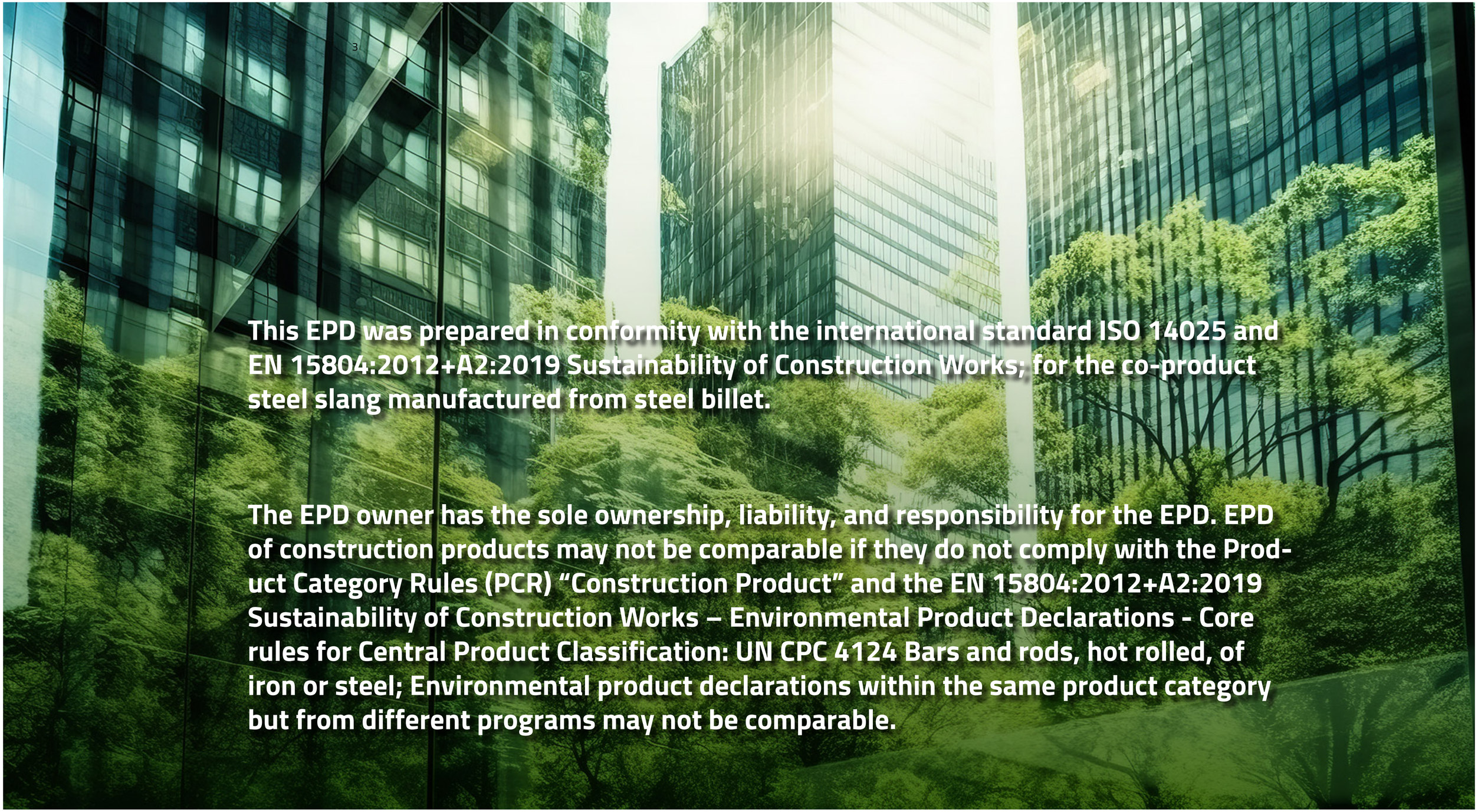
LATIN AMERICA EPD®

THE INTERNATIONAL EPD® SYSTEM

ECO PLATFORM EPD VERIFIED

ENVIRONMENTAL PRODUCT DECLARATION

Content



This EPD was prepared in conformity with the international standard ISO 14025 and EN 15804:2012+A2:2019 Sustainability of Construction Works; for the co-product steel slang manufactured from steel billet.

The EPD owner has the sole ownership, liability, and responsibility for the EPD. EPD of construction products may not be comparable if they do not comply with the Product Category Rules (PCR) “Construction Product” and the EN 15804:2012+A2:2019 Sustainability of Construction Works – Environmental Product Declarations - Core rules for Central Product Classification: UN CPC 4124 Bars and rods, hot rolled, of iron or steel; Environmental product declarations within the same product category but from different programs may not be comparable.

1. GERDAU

LATIN AMERICA EPD®

1.1 GERDAU CORSA

Gerdau is a major producer of long steel in the Americas, and one of the world's largest suppliers of special steel. We operate in 10 countries and employ 30,000 individuals.

The trajectory of GERDAU began in 1901 with a factory in Porto Alegre, Brazil. Today, GERDAU products are present in the daily lives of millions of people.

We are also one of the largest recyclers in the world. Each year, we transform millions of tons of scrap into steel that is used to shape the future. Gerdau is a publicly traded company listed on the New York, São Paulo and Madrid stock exchanges.

Gerdau Arrived in Mexico in 2007 with the acquisition of a billet plant, in 2008 Gerdau and Aceros Corsa create a joint venture with Aceros Corsa's merchant bar plant, and in 2012, Gerdau and Aceros Corsa unify the brand in Mexico under Gerdau Corsa name.
In 2015, Gerdau Corsa starts production in the new structural shapes plant located in Sahagun city, Hidalgo, Mexico.

GERDAU CORSA provides quality products and offers value-added services such as custom length cuts for optimized building structure fabrication.

Our network of steel mills covers the United States, Venezuela, Colombia, Argentina, Perú, Uruguay, Brasil, Republica Dominicana, Canada, and Mexico. We offer made to order Steel grades and lengths.

We have a technical team focused on the customer needs and able to offer the right solution for your building steel structure.

We believe in the strength of Steel transformation, and from the beginning of our history, the Main goal has always been to transform the lives of the people around us. Steel can turn projects into reality and boost the development of a better society and a better place to live.

Our Purpose is to: Empower people who build the future.

The men and women in the steel industry make a transformative impact on society. They create and build with steel. They connect the world through bridges and cars, move people on elevators and across railroads, construct homes that protect families, and erect structures that revitalize landscapes. At Gerdau Corsa, we empower people who build the future.

This Environmental Product Declaration (EPD) is in accordance with ISO 14025, for the co-product steel slag.

The EPD owner has the sole ownership, liability, and responsibility for the EPD. EPD of construction products may not be comparable if they do not comply with EN 15804 Sustainability of Construction Works – Environmental Product Declarations – Core rules for Central Product Classification: UN CPC 4124 bars; Environmental product declarations within the same product category but from different programs may not be comparable.

Foto 1. Foto Gerdau Metaldom

2. GENERAL INFORMATION

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PRODUCT:	STEEL SLAG MANUFACTURED FROM STEEL SCRAP
Declaration owner:	Gerdau Corsa, S.A. de C.V. Kilómetro 3 carretera México - Ciudad Sahagún S/N Hidalgo - México CP 43990 Contact person: Itzia Nallely Santillán Fierro Itzia.santillan@gerdau.com Cel: 5515039744
Description of the construction product:	Gerdau produces steel billet manufactured from steel scrap, during this process a co-product is obtained that corresponds to steel slag. Their application is generally in the construction of hydraulic bases and other applications of the sector.
Declared Unit:	1000 Kg of steel slag was obtained from the manufacture of steel billets from steel scrap by GERDAU CORSA at the Ciudad Sahagún plant.
Construtión product identification	Central Product Classification: CPC 4124 Bars and rods, hot rolled, of iron or steel
Life cycle stages not considered:	100% Steel billet manufactured using steel scrap.
Life cycle stages not considered:	Downstream (A4, A5, B1, B2, B3, B4, B5, B6, B7, C1, C2, C3, C4, D), and the reference service life (RSL).
For more information consult:	This environmental product declaration is based on information modules that do not cover aspects of construction stage and use. It contains detailed information on the stage of input materials used for the generation of raw material and central process, modules A1, A2, A3. ▪ Definition of the product. ▪ System boundary. ▪Content declaration. ▪ Environmental performance. ▪ Declared unit. ▪Evidence and verifications.
Comparability of EPD of construction products	a. EPD of construction products may not be comparable if they do not comply with EN 15804:2012+A2:2019. b. Environmental product declarations within the same product category from different programs may not be comparable
For more information consult:	https://www.gerdaucorsa.com.mx/
Site for which this EPD is representative:	Manufacturing Plant: Gerdau Corsa, S.A. de C.V. Km 3 carretera México - Ciudad Sahagún, Zona Industrial Tepeapulco, Hidalgo, CP 43990, México.
Intended Public:	B2B (Business to Business)

3. PRODUCT DESCRIPTION

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3.1 STEEL SLAG

Waste that we transform into wealth.

The co-products are those residues that have a high potential for reuse and that are no longer subjected to any type of process or internal treatment.

Through them, we offer alternatives that benefit the environment, such as the reuse and reduction of waste generated by the production of steel, as well as the implementation of alternatives focused on the recycling of co-products to incorporate them into a new Lifecycle. Thanks to this they can be used in construction, paving, the cement industry, etc.

Co-products

The use of co-products guarantees you great advantages in projects. They reduce the consumption of natural resources by substituting and minimizing raw materials. They reduce the emissions of compounds and greenhouse gases (CyGHEI). On the other hand, its cost is lower compared to that of traditional materials.

We divide co-products into two types: process-generated and service-generated. The first are slag, scale, and dust from steel foundry. The second, is refractories, cardboard, wood, PET, aluminium, and copper, among others.

Steel Slang

The slag processed from the electric arc furnace is the co-product that is most generated in the production of steel, it has different uses and applications in the construction industry, such as paving, hydraulic base, railway ballast, aggregates, material cementing agent, among others, since we are constantly developing new ways of taking advantage of it. (GERDAU CORSA, 2022)

For more information on the technical specifications required, please consult the official GERDAU CORSA website https://www.gerdaucorsa.com.mx. or francisco.angeles@gerdau.com, you can also contact Facebook / Instagram / and Linkedin.

4. CONTENT DECLARATION

Gerdau is a major producer of long steel in the Americas, and one of the The co-product steel slang manufactured from steel billet is produced in an electric arc furnace with in Table 1. The total raw materials that make up the product were not declared, only the materials with a more representative percentage that make up the steel slang.

The typical composition of steel slag is found in Table 1.

4.1 Recycled material content

The steel billet from which Gerdau Corsa generates steel slag is manufactured from 96% ferrous scrap.

4.2 Distribution packaging

The co-product is sent to the customers in no packaging.

Table 1. Content commercial steel slag

Homogeneous Material or Chemical Substances	Chemical Substances	Weight (%)	CAS Number	Function of Chemical Substance	Health class[1]
Steel scrap	Not applicable	96 %	Not applicable	Iron content in steel	Not listed
Anthracite	Anthracite	<1%	8029-10-5	Carbon content in steel	Not listed
Anthracite M6-20	Anthracite	1%	8029-10-5	Carbon content in steel	Not listed
Lime	Calcium carbonate	<1%	471-34-1	Iron ore sintering agent steel foundry	Not listed
Lime	Calcium carbonate	1%	471-34-1	Iron ore sintering agent steel foundry	Not listed
Hard Coal	Anthracite	<1%	8029-10-5	Carbon content in steel	Not listed
Lime	Calcium carbonate	<1%	471-34-1	Iron ore sintering agent steel foundry	Not listed
Dolomite	Calcium carbonate magnesium	<1%	16389-88-1	Iron ore sintering agent steel foundry	Not listed

1 Conformity to EN15804 declaration of material content of the product shall List of substances of Very High Concern (SVHC) that are listed by European Chemical Agency.

Other components of minimal quantities and that are not part of the composition of the product but that are necessary for its manufacture were not placed in Table 1, but it was confirmed that these were not found in ECA.

1 According to EN15804+A2:2019 declaration of material content of the product shall List of Substances of Very High Concern (SVHC) that are listed by European Chemicals Agency.

5. LCA Rules

Environmental potential impacts were calculated conformity to EN 15804:2012+A2:2019 sustainability of construction works and PCR 2019:14 Construction products Version 1.11 UN CPC 4124 bars and rods, hot rolled, of iron or steel. This EPD is in accordance with ISO 14025:2006.

Environmental potential impacts were calculated through Life Cycle Assessment (LCA) methodology conformity to ISO 14040:2006 and ISO 14044:2006. An external third-party veri¬fication process of the EPD was conducted according to General Programme Instructions for the International EPD® System Version 4.0. Verifi¬cation includes a documental review and a validation of both the underlying LCA study and documents describing additional environmental information that justify data provided in the EPD.

5.1 Declared unit

1000 Kg of steel slag was obtained from the manufacture of steel billets from steel scrap by GERDAU CORSA at the Ciudad Sahagún plant.

5.2 System boundary

The potential environmental impacts were calculated through (LCA) methodology for steel slag, manufactured from steel billet according to ISO 14040:2006 and ISO 14044:2006. This study went through a critical review process in accordance with ISO / TS 14071: 2014.

According to EN 15804 section 5.2 the following type of EPD is “cradle to gate". This EPD is based on information upstream processes and core processes, modules A1 to A3, and il was not possible to include approximations of scenarios C1, C2, C3, C4, and D based on construction sector statistics in Mexico.

Does not include A4-A5 Construction stage and B Usage stage.

Although the table 2, indicates the inclusion of modules C and D, for the present EPD, they were not considered since in this case a co-product resulting from a primary process such as billet manufacturing is being analyzed. The slag is a waste that has a high potential for reuse and recovery, which is also not subjected to additional internal processes or treatment, for sale, used in the market in construction projects such as bases for pavements, hydraulic bases, railway ballast, aggregates, cementing material, leaving the material incorporated for an indefinite period without the possibility of being separated, for specific processing at its end of life, that is to say, that the end of life of the material is in any of the mentioned uses, clarifying that these bases construction works are not removed in time but are repaired and superficial layers where the slag is not incorporated are removed.

Life cycle stages in the international EPD- System	Asset life cycle stages	EPD TYPE			
		From cradle to gate with modules C1-C4, module D as optional modules	From cradle to gate with module C1-C4, module D and optional modules	From cradle to grave and module D	EPD construction services: Cradle to door with modules A1-A5 and optional modules
A1-A3) Product stage	A1) Raw material supply	Mandatory	Mandatory	Mandatory	Mandatory
	A2) Transport				
	A3) Manufacturing				
A4-A5) Construction process stage	A4) Transport	-	Optional for goods Mandatory for services	Mandatory	Mandatory
	A5) Construction installation				
B Use stage	B1) Use	-	Optional	Mandatory	Mandatory
	B2) Maintenance				
	B3) Repair				
	B4) Replacement				
	B5) Refurbishment				
	B6) Operational energy use				
	B7) Operational water use				
C End of life stage	C1) Deconstruction, demolition	Mandatory	Mandatory	Mandatory	Optional
	C2) Transport				
	C3) Waste processing				
	C4) Disposal				
D Recovery stage	Inclusion of reference useful life	Mandatory	Mandatory	Mandatory	-
Declared unit	Inclusion of reference useful life	Optional	Mandatory	Mandatory	-

Table 2. System boundary steel slag

5. LCA Rules

Description of the modules included in this EPD.

	Product stage			Construction process phase		Usage stage						End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction facility	Use	Maintenance	Repair	Restoration	Operational energy use	Operational use of water	Demolition/ Deconstruction	Transport	Waste processing	Disposal	Reuse – Recovery – Recycling - potential
Module	A1	A2	A3	A4	A5	B1	B2	B4	B5	B6	B7	C1	C2	C3	C4	D
Declared modules	X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Geography	MX	MX	MX	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Specific data used	>99%			-	-	-	-	-	-	-	-	-	-	-	-	-
Product variation	ND			-	-	-	-	-	-	-	-	-	-	-	-	-
Site variation	ND			-	-	-	-	-	-	-	-	-	-	-	-	-

X = Declared module; ND = No declared module; MX= México

Table 3. Description of the modules included in this EPD.

5. LCA Rules

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5.3 Description of information modules is included in Table 4.

A1) Raw materials supply	A2) Transportation	A3) Manufacturing
• Pre-processing of steel scrap. • Production of raw materials: ferroalloys, lime, carbon, graphite electrodes, etc. • Production of packaging materials for raw materials. • Generation and distribution of the electricity consumed in manufacturing. • Generation and distribution of the natural gas consumed in manufacturing.	• Transportation of scrap steel. • Transportation of other raw materials. • Transportation of packaging materials for raw materials. • Transportation of packaging materials for commercial steel slag.	• Consumption of fresh water. • Production and consumption of auxiliary materials: oxygen, nitrogen, chemicals for water treatment. • Waste generation and waste management processes. • Emissions to air. • Transport of waste to the treatment and final disposal site.

ⓘ Table 4. Modules included in this EPD

5. LCA Rules

5.4 Description of the manufacturing process

The manufacturing process is described in Figure 1:

Figure. 1. Flow diagram of steel slag (co-product)

5. LCA Rules

5.5 Assumptions

The following are the assumptions related to the industrialization process of scrap metal:

The steel scrap from Hidalgo, Queretaro, State of Mexico and Guanajuato, is treated in the los Reyes scrap collection center State of Mexico, grouping the raw material sources by geographical area.

The steel scrap of Veracruz, Puebla, Tlaxcala and Tabasco own are collected and treated in the Veracruz collection center.

The Sahagún plant collection center receives steel from the other collection centers the treated of collection Centre others, the untreated material that arrives directly and GERDAU CORSA production returns steel exclusively.

The steel scrap from Jalisco is being collected and treated in the yard Guadalajara collection center.

The steel scrap of Morelos is being collected and treated in the San Juan collection center.

The steel scrap data from Nuevo Leon was ruled out since it is not a constant supplier and the quantities that I handle are not representative.

Gerdau Corsa provided the scrap consumption data from January to August, and the total amount of scrap consumption in 2021. With this information a correlation for the missing months data was created.

The distance from the collection center to the plant consumption was done using an average of the distances covered regarding each geographical area. The following assumptions regard the life cycle inventory for the structural shapes:

The shipment of non-hazardous waste take place at 34 km from the plant.

The direct emissions were calculated using the factors for natural gas emissions.

5. LCA Rules

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5.6 Cut-off criteria

The PCR document establishes that a minimum of 95% of the total flows (matter and energy) in modules A1, A2 and A3 must be included in the ICV (PCR 2019:14 V1.11 Construction Products, 2021). In order to include the relevant data, the minimum established by the RPC was met, leaving outside the scope of this study, the company's infrastructure, activities related to the transportation of employees, administrative activities carried out by employees, elements of personal protection used by workers, as well as the supplies used for corrective and preventive maintenance, such as rags, tow and grease, taking this type of material out of inventories that after use can become hazardous waste as they are impregnated with chemical substances .

5.7 Allocation

In this study, allocation procedures were applied for co-products generated during the industrialization and entry of scrap into the billet manufacturing process, which is shown in the table below:

Co-Product	Quantity	Unit	Assignment
Waste of usable ferrous material	2.141814579	kg	0.21%
Scrap	1000	kg	99.8%
Total	1002.141815	kg	100%

Table 5. Scrap allowances.

5.8 Time representativeness

Direct data obtained from GERDAU CORSA is representative for 2021

Co-product	Quantity	Unit	Assignment
Manufactured billet	712271000.0	kg	87.29%
Slag	103708530.0	t	12.7%
Total	815979530.0	kg	100.00%

TTable 6. Coproduct generated in the manufacturing steel slag

6. ENVIRONMENTAL PERFORMANCE

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SimaPro 9.3.0.3 was used for LCA, the impact categories were calculated under the EN 15804:2012+A2:2019 Method V1.02 / EF 3.0 normalization and weighting set (PRé-Sustainability, 2021) implemented in the SimaPro 9.3.0.3 software. The results of the environmental impact assessment are presented for the basic and additional environmental impact categories obtained through the EN 15804:2012+A2:2019 Method V1.02 / EF 3.0 normalization and weighting set (PRé-Sustainability, 2021) implemented in the data base Ecoinvent 3.8.

6.1 Use of resources

Parameters describing resource use were evaluated with the Cumulated Energy Demand method version 1.09 (Frischknecht et al. 2007) except for the indicator of use of net fresh water that was evaluated with Recipe 2016 Midpoint (H) version 1.00 (Huijbregts et al. 2017). The detailed description of the use of resources is provided in Table 7.

Parameters that describe the use of resources	Unit	A1) Raw materials supply	A2) Transport	A3) Manufacturing	Total, Mod A1 – A3	Mód A4 - D
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	2.52E-02	1.32E-03	2.62E-02	5.27E-02	MND
Use of renewable primary energy as raw materials	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Total use of renewable primary energy resources	MJ	2.52E-02	1.32E-03	2.62E-02	5.27E-02	
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	MJ	1.27E+00	1.22E-01	1.87E-01	1.58E+00	
Use of non-renewable primary energy used as raw materials	MJ	3.26E-02	0	0	3.26E-02	
Total use of non-renewable primary energy resources	MJ	1.27E+00	1.22E-01	1.87E-01	1.58E+00	
Use of secondary material	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Use of renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Use of non-renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Use of net fresh water	m^3	9.03E-05	1.32E-05	3.96E-04	4.99E-04	

Table 7. Resource Indicators per metric ton of steel slag

6. ENVIRONMENTAL PERFORMANCE

6.2 Potential environmental impact

All information modules are reported and valued separately. However, this EPD presents itself as the total impact across all stages A1-A3.

Table 8 describes the basic environmental impact categories calculated with the EN 15804:2012+A2:2019 Method V1.02 / EF 3.0 normalization and weighting set (PRé-Sustainability, 2021). It should be noted that emissions greater than 100 years were eliminated.

Impact basic category	Unit	A1) Raw materials	A2) Transportation	A3) Manufacture	Total
Cambio climático- GWP100	kg CO2-eq	4,67E-02	7,47E-03	1,49E-02	6,91E-02
	%	68%	11%	22%	100%
Cambio climático - total	kg CO2 eq	4,77E-02	7,54E-03	1,53E-02	7,06E-02
	%	68%	11%	22%	100%
Climate change - Fossil	kg CO2 eq	4,77E-02	7,54E-03	1,52E-02	7,05E-02
	%	68%	11%	22%	100%
Climate change - Biogenic	kg CO2 eq	-2,43E-05	4,14E-06	5,63E-05	3,62E-05
	%	-67%	11%	156%	100%
Climate change - Land use and LU change	kg CO2 eq	6,27E-06	3,21E-06	2,41E-05	3,36E-05
	%	19%	10%	72%	100%
Ozone depletion	kg CFC11 eq	8,17E-09	1,69E-09	5,74E-10	1,04E-08
	%	78%	16%	6%	100%
Acidification	mol H+ eq	1,89E-04	4,07E-05	9,60E-05	3,26E-04
	%	58%	13%	29%	100%
Eutrophication, freshwater	kg P eq	1,04E-05	5,74E-07	6,97E-06	1,80E-05
	%	58%	3%	39%	100%
Eutrophication, freshwater 2	kg PO4 eq	3,20E-05	1,76E-06	2,14E-05	5,51E-05
	%	58%	3%	39%	100%
Eutrophication, marine	kg N eq	3,45E-05	1,37E-05	1,94E-05	6,76E-05
	%	51%	20%	29%	100%
Eutrophication, terrestrial	mol N eq	3,58E-04	1,50E-04	2,04E-04	7,12E-04
	%	50%	21%	29%	100%
Photochemical ozone formation	kg NMVOC eq	1,20E-04	4,25E-05	5,89E-05	2,21E-04
	%	54%	19%	27%	100%
Abiotic depletion potential - fossil resources (ADPF)	MJ	1,17E+00	1,15E-01	1,76E-01	1,46E+00
	%	80%	8%	12%	100%
Abiotic depletion potential - non-fossil resources (ADPE)	kg Sb eq	3,64E-08	2,58E-08	1,02E-07	1,64E-07
	%	22%	16%	62%	100%
Water use	m3 depriv.	3,84E-03	4,02E-04	1,38E-02	1,81E-02
	%	21%	2%	77%	100%
Water scarcity	m3 H2O eq	1,79E-03	1,04E-03	4,54E-03	7,37E-03
	%	24%	14%	62%	100%

ⓘ Table 8. Potential environmental impact indicators per metric ton of steel slag

6. ENVIRONMENTAL PERFORMANCE

6. ENVIRONMENTAL PERFORMANCE

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6.3 Waste production

Environmental indicators describing waste generation were obtained from LCI except for background information which has been calculated using EDIP 2003 method (Hauschild and Potting, 2005). Table 9 shows waste and other outputs generated during each information module.

Output parameter	Unit	1) Raw materials supply	A2) Transportation	A3) Manufacturing	Total, modules A1 - A3	Modules A4 -D
Hazardous waste	kg	1.57E-06	2.94E-07	1.15E-07	1.98E-06	MND
Non hazardous waste	kg	4.34E-03	5.53E-03	9.36E-03	1.92E-02	
Radioactive waste*	kg	2.96E-06	7.51E-07	4.54E-07	4.16E-06	
Components for reuse	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Materials for recycling	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Exported electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Exported heat	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	

ⓘ Table 9. Waste and other outputs per metric ton of steel slag

6.4 Additional environmental information

Our Purpose in Gerdau Corsa is to Empower people who build the future.
The men and women in the steel industry make a transformative impact on society. They create and build with steel.

They connect the world through bridges and cars, move people on elevators and across railroads, construct homes that protect families, and erect structures that revitalize landscapes. At Gerdau Corsa, we empower people who build the future.

We believe that thorough empowering people we can achieve continuous improvement in our processes and communities, this is key in order to make a better workplace, society and planet; our philosophy is based _rst of all on people, the environment and the quality of our products, this is why all our plants are ISO certi_ed in management systems regarding health and safety, environment, and quality (ISO 45001:2018, ISO 14001:2015, ISO 9001:20115 accordingly).

Our passion comes from the people we employ and collaborate within the industry; while investing in the latest technologies that take care of our environment.

All of our mills have modern dust removal systems that capture particles generated in the steel production process. This _ltered material is a co-product used by other industries.

Our co-products - which are the secondary materials produced during steel production - can be used in numerous industrial applications, such as road paving, railway ballasts, foundries, cement manufacturing and ceramics. Gerdau reuses 73% of its co-products globally and donate the remaining co-products to help municipalities improve the roads in areas near our operations.

We also rely on water to cool production equipment and steel products. To conserve this water, Gerdau Corsa uses a closed-loop system that allows this valuable resource to be treated and reused. This process optimizes and substantially reduces water consumption.
Through new technology and awareness, our water intake is decreasing. Today, the company reuses almost 97% of its industrial process water.

We are truly committed to our planet and all of us living in it and that is what makes us special.

7. VERIFICATION AND REGISTRATION

CEN STANDARD EN 15804 SERVED AS THE CORE PCR	
Programme	EPD International EPD® System www.environdec.com EPD registered through the fully aligned regional programme/hub: EPD Latin America www.epdlatinamerica.com
Programme operator	EPD International AB Box 210 60 SE-100 31 Stockholm, Sweden EPD Latin America Chile: Alonso de Ercilla 2996, Ñuñoa, Santiago Chile. Mexico: Bosques De Bohemia 2 No. 9, Bosques del Lago. Cuautitlan Izcalli, Estado de México, México
EPD registration number:	S-P-08532
Date of validity:	2028-07-26
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Reference year of data:	2021
Geographical scope:	Mexico
Production Plant:	Km 3 carretera México - Ciudad Sahagún, Zona Industrial Tepeapulco, Hidalgo, CP 43990, México
Central product classification:	UN CPC 4124 Bars and rods, hot rolled, of iron or steel
PCR:	PCR 2019:2014 V 1.11 Construction products
PCR review was conducted by:	Martin Erlandsson, IVL Swedish Environmental Research Institute, martin.erlandsson@ivl.se
Independent verification of the declaration data, according to ISO 14025:2006	☐ EPD process certification (Internal) ☒ EPD verification (External)
Third-party verifier: Approved by:	Dr. Ruben Carnerero Acosta Approved EPD verifier r.carnerero@ik-ingenieria.com The International EPD® System
Procedure for follow-up of data during EPD validity involves third-party veri-fier:	☐ Yes ☒ No

8. CERTIFICATIONS

The company has following certifications:

9. CONTACT INFORMATION

EPD OWNER	LCA AUTOR	PROGRAMME OPERATOR
Gerdau Corsa, S.A. de C.V. Kilómetro 3 carretera México - Ciudad Sahagún S/N Hidalgo México CP 43990 www.gerdaucorsa.com.mx Contact person: Francisco Guadalupe Angeles Montijo francisco.angeles@gerdau.com Cel: 55 4602 4284	Center for Life Cycle Assessment and Sustainable Design – CADIS Bosques De Bohemia 2 No. 9, Bosques del Lago. Cuautitlan Izcalli, Estado de México, México. C.P. 54766 www.centroacv.mx LCA Study: Life Cycle Assessment (LCA) methodology of steel slag manufactured from steel scrap. LCA Authors: Luque Claudia, Ochoa Gabriel, Duarte Nathalia. Contact person: Juan Pablo Chargoy jpchargoy@centroacv.mx	EPD International AB Box 210 60, SE-100 31, Stockholm, Sweden. www.environdec.com info@environdec.com EPD registered through the fully aligned regional programme/hub: EPD Latin America www.epd-latinamerica.com Chile: Alonso de Ercilla 2996, Ñuñoa, Santiago Chile. Mexico: Bosques De Bohemia 2 No. 9, Bosques del Lago. Cuautitlan Izcalli, Estado de México, México.

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