

# Environmental Product Declaration

## Commercial long steel hot-rolled manufactured from steel scrap.

Environmental Product Declaration  
In accordance with ISO 14025:2006 and EN 15804:2012



<b>Program:</b>	<b>The International EPD<sup>®</sup> System</b> <b>EPD registered through the fully aligned regional programme/hub:</b> <b>EPD Latin America</b>
<b>Program operator:</b>	<b>EPD International AB</b>
<b>Regional Hub:</b>	<b>EPD Latin America</b>
<b>EPD registration number:</b>	<b>S-P-01663</b>
<b>Issue date:</b>	<b>2020/07/29</b>
<b>Validity date:</b>	<b>2025/03/22</b> <b>An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at <a href="http://www.environdec.com">www.environdec.com</a></b>
<b>Revision date:</b>	<b>2020/03/23</b>
<b>Geographical scope:</b>	<b>Mexico</b>

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# 1. GERDAU



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 clove 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 rebar 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 hot-rolled structural shapes manufactured from steel scrap.

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 and rods, hot rolled, of iron or steel; Environmental product declarations within the same product category but from different programs may not be comparable.

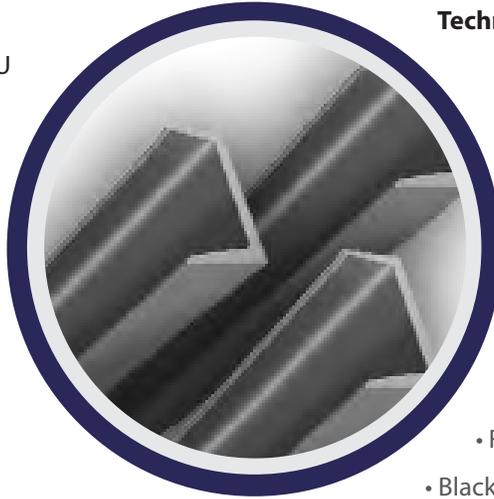
## 2. General information

Product:	Commercial long steel hot-rolled manufactured from steel scrap
Declaration owner:	<p>Aceros Corsa, S.A. de C.V.            Av Ejército Nacional 216, Anzures, Ciudad de México, CDMX            C.P. 11590            Contacto:            Itzia Nallely Santillán Fierro            Itzia.santillan@gerdau.com            Cel: 5515039744            Tel: 52627335            Marketing y relaciones públicas</p>
Description of the construction product:	<p>Steel profiles of different shapes and sizes (angles, squares, etc.) provide quality and aesthetic finishes for buildings and other structures.</p> <p>The use of steel products in the construction industry contributes to a more sustainable environment because they are made from a highly recyclable material.</p>
Declared Unit:	One metric ton of commercial long steel hot-rolled (Hex bars, angles profiles, flat bars, round bars, square bars) manufactured from steel scrap by GERDAU CORSA at the Presa plant in the State of México.
Main product components:	100% Steel manufactured using scrap steel as source of iron.
Life cycle stages not considered:	Downstream (A4, A5, B1, B2, B3, B4, B5, B6, B7, C1, C2, C3, C4), other environmental information (D), and inclusion of reference service life (RSL).
Content of the declaration:	<p>This EPD is based on information modules that do not cover the aspects of use and end of life of the product. It contains in detail, for Module A1, A2 and A3:</p> <ul style="list-style-type: none"> <li>• Product definition and physical data.</li> <li>• Information about raw materials and origin.</li> <li>• Specifications on manufacturing the product.</li> <li>• Notes on product processing.</li> <li>• LCA based on a declared unit, cradle-to-gate.</li> <li>• LCA results.</li> <li>• Evidence and verifications.</li> </ul>
For more information consult:	<a href="https://www.gerdaucorsa.com.mx/">https://www.gerdaucorsa.com.mx/</a>
Site for which this EPD is representative:	<p>Manufacturing Plant            Av. la Presa 2, industria la presa, Tlalnepantla de Baz, Ciudad de México. C.P. 54187</p>
Intended Public:	B2B (Business to Business)

# 3. Product description

## 3.1 Profile U

Gerdau profile U is a structural profile U used to carry load weight and is commonly employed in construction of nonresidential buildings, steps for staircases, foundation applications, and in OEM manufacturing of tractor trailers, and heavy-duty equipment and machinery.



### Technical characteristics

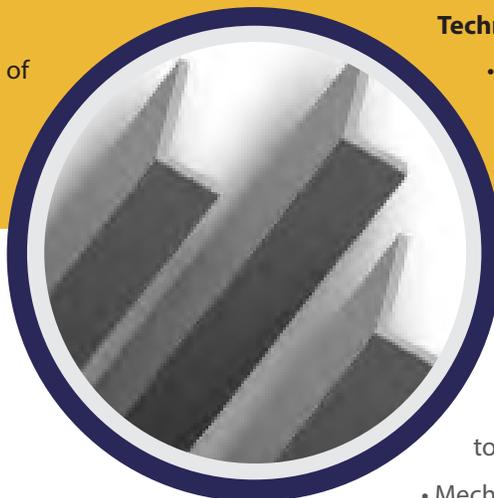
- Hot-Rolled
- Under the ASTM A-529 G50 standard
- Cant: 3"

### Application

- In robust and resistant metal structures
- Racks
- Blacksmithing
- Secondary elements on decks

## 3.2 Angles profile

Gerdau produces a wide range of sizes of Angles profile, with a lot of applications from weight support in structural building to large and small joists and decking, metal buildings, framework, decorative and ornamental applications, racking, and others.



### Technical characteristics

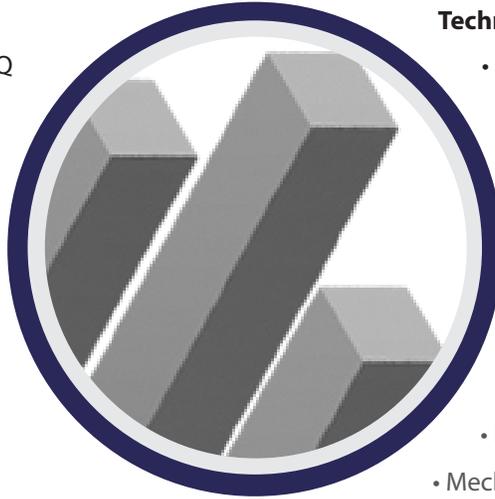
- Hot-Rolled
- Under the ASTM A-529 G50 standard.
- Cant: 1" - 3"

### Application

- Supports and armours
- Frames and blacksmiths
- Telecommunications and electrical towers
- Mechanical industry
- Farming industry
- Metal structures (joist beams)

### 3.3 Square Bars

Because of its square bars, Gerdau MBQ Squares are ideal in OEM production Square bars and ornamental applications such as furniture, fasteners, bolts and screws.



#### Technical characteristics

- Hot-Rolled.
- Under the ASTM A-36 standard.
- Under the SAE 1018, 1045 y 1060 standard.
- Minimum Cant: 1/2"
- Maximum Cant: 2 1/4"

#### Application

- Blacksmiths (bars, gates, etc.)
- Mechanical industry
- Agricultural implements

### 3.4 Rounds Bars

Gerdau Rounds bars are available in a large range of diameters, allowing for a lot of and ornamental items, such as mattresses and appliances to machined parts in the automotive industry for trucks and cars.



#### Technical characteristics

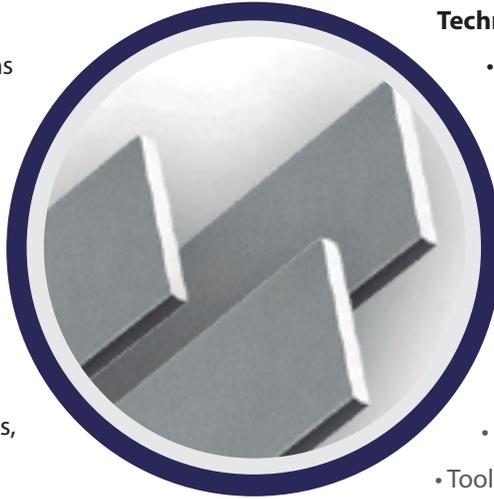
- Hot-Rolled.
- A-36 steel.
- On request SAE 1018, 1045 y 1060
- Minimum cant: 1/2"
- Maximum cant: 2 1/16"

#### Application

- Industrial applications
- Blacksmiths
- Wind bracing
- Forging
- Steel anchors

### 3.5 Flats bars

Gerda manufactures a range of widths and thicknesses of flats bars, allowing for a wide scope of applications. The flats bars are commonly processed for small strip applications such as durable goods, to large sections utilized in structural nonresidential construction applications as baseplate and brackets, as well as tanks, barges and railcars.



### Technical characteristics

- Hot-Rolled.
- Steel A-36
- On request steel SAE 1010, 1015, 1018, 1045, 1055 y 1060.
- Minimum cant: 1"
- Maximum cant: 3"

### Application

- Metal structures: bars, gates, squares, etc.
- Tool manufacturing
- Agricultural and road implements
- Mechanical industry general

The information on the tables of technical specifications is required, please consult the official GERDAU CORSA website <https://www.gerdaucorsa.com.mx> Where you can download the Profiles Manual, you can also contact Facebook / Youtube / Instagram / and LinkedIn.



# 4. Content declaration

Commercial long steel hot-rolled manufactured from steel scrap is produced in electric arc furnace with 93% of recycled material. The typical composition is in Table 1.



Table 1. Content commercial long steel hot-rolled manufactured from steel scrap

Homogeneous Material or Chemical Substances	Chemical Substances	Weight (%)	CAS Number	Function of Chemical Substance	Health class <sup>1</sup>
Steel scrap	Not applicable	93 %	Not applicable	Iron content in steel	Not listed
Insufflated coal	Anthracite	2 %	8029-10-5	Carbon content in steel	Not listed
Anthracite	Anthracite	<1 %	8029-10-5	Carbon content in steel	Not listed
Setting coal	Anthracite	<1 %	8029-10-5	Carbon content in steel	Not listed
Lime dolomite	Calcium carbonate magnesium	4 %	16389-88-1	Iron ore sintering agent steel foundry	Not listed
Lime C5-12	Calcium carbonate	<1 %	471-34-1	Iron ore sintering agent steel foundry	Not listed
Lime C1-2172	Calcium carbonate	<1 %	471-34-1	Iron ore sintering agent steel foundry	Not listed

<sup>1</sup> According to EN15804 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

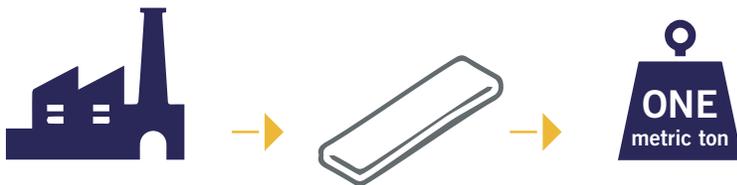
Environmental potential impacts were calculated according to EN 15804:2012 and PCR 2012:01 Construction products and construction services Version 2.3 (2018-11-15). This EPD is in accordance with ISO 14025:2006.

Environmental potential impacts were calculated through Life Cycle Assessment (LCA) methodology according to ISO 14040:2006 and ISO 14044:2006.

An external third-party verification process of the EPD was conducted according to General Programme Instructions for the International EPD® System Version 3.0. Verification 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

One metric ton of commercial long steel hot-rolled (U profiles, Angles profile, Flat bars, Square bars, Round bars) manufactured from steel scrap by GERDAU CORSA at La Presa plant in Mexico City.



## 5.2. System boundary

The potential environmental impacts were calculated through Life Cycle Assessment (LCA) methodology of commercial long steel hot-rolled manufactured from steel scrap according to ISO 14040:2006 and ISO 14044:2006.

This study went through a critical review process in accordance with ISO / TS 14071: 2014. For a “cradle-to-gate” EPD is based on information modules A1 to A3. (see table 2).

Table 2. Commercial long steel hot-rolled manufactured from steel scrap.

Commercial long steel hot-rolled manufactured from steel scrap			EPD type	
Life cycle stages in the international EPD- System	Asset life cycle stages (EN 15804)	Information modulo (EN 15804)	Declared unit: Cradle-Gate Cradle-Gate with options	Function of Chemical Substance
Upstream	A1) Raw material supply	A1-A3) Product stage	Mandatory	Mandatory
Core	A2) Transport A3) Manufacturing			
Downstream	A4) Transport A5) Construction installation	A4-A5) Construction process stage	Optional for a product, mandatory for a service	Mandatory
	B1) Use B2) Maintenance B3) Repair B4) Replacement B5) Refurbishment	B1-B5) Use stage	Optional	Mandatory
	B6) Operational energy use B7) Operational water use	----- -----	----- -----	----- -----
	C1) Deconstruction, demolition C2) Transport C3) Waste processing C4) Disposal	C1-C4) End of life stage	Optional	Mandatory
	Other environmental information	D) Future, reuse, recycling or energy recovery potentials	D) Recovery stage	Optional
Inclusion of reference service life (RSL)	-----	-----	Mandatory if any module in Bis included	Mandatory

Description of information modules is included in Table 3.



### A1) Raw material supply

- 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.



### A2) Transportation

- Transportation of scrap steel.
- Transportation of other raw materials.
- Transportation of packaging materials for raw materials.
- Transportation of packaging materials for commercial long steel.



### A3) Manufacturing

- 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 3. Description of information modules included in this EPD.

# 5.3. Description of the manufacturing process



The manufacturing process is described in Figure 1:  
 This process is common in the different production plants of GERDAU CORSA.



Figure. 1. Commercial long steel hot-rolled manufactured from steel scrap.



## 5.4. Assumptions

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

- The steel scrap of the states Hidalgo, Queretaro, Mexico and Guanajuato, is treated in the centre (Los Reyes).
- The steel scrap of Veracruz, Puebla, Tlaxcala and Tabasco own are collected and treated in the Veracruz collection center.
- The Sahagún collection center receives steel scrap the treated from others collection Centre, the untreated material that arrives directly and GERDAU CORSA production returns steel exclusively.
- The steel scrap of Jalisco is being collected and treated in Guadalajara collection center.
- The steel scrap of Morelos is being collected and treated in the collection center Mexico City (San Juan).
- The steel scrap data from Nuevo León ruled out was since it is not a constant supplier and the quantities that I handle are not representative.

## 5.5. Cut-off criteria

The flows like fuel, grease, oil, energy and raw materials necessary to produce the commercial long steel have considered.

- GERDAU CORSA has the scrap input data for January to August and the total amount of scrap that input the production process in 2018, with this information, the amounts of the pending months.

- The realized an average of the distances of recollect for the geographical area.

The following are the assumptions was for the life cycle inventory of the commercial long steel:

- For the weights of packaging materials, did take as a reference to technical data sheets of suppliers.
- It did assume that the consumption of water and diesel used in the manufacture of the structural beams are the same the long commercial steel.



The materials that could use in preventive or corrective maintenance of machinery were disregarded, as well as the use of uniforms and personal protective equipment or another consumer of area administrative.

## 5.6. Allocation

Allocation of inputs and outputs of the system between product and coproducts was based on a mass relation, considering the quantity produced per year of each product and coproduct at the level of the unit process.

The assignment amount of resource of the life cycle inventory is for 99.8% scrap, and the 0.21% to waste of usable ferrous material. In table 6, shows the coproducts generated during the processing of steel scrap.

Table 4. Coproduct generated the processing of steel scrap.

Product	Quantity	Unit	Assignment
Waste of usable ferrous material	2.14	kg	0.21%
Steel scrap	1000	kg	99.8%
Total	1002.14	kg	100%

The assignment amount of resource of the life cycle inventory is for 89.8% steel billet manufactured from steel scrap, and the 10.2% to waste of usable ferrous material, called slag.

Below are the assignments related to the manufacturing process of the steel billet manufactured from steel scrap.

Table 5. Coproduct generated in the manufacturing steel billet

Co-product	Quantity	Unit	Assignment
Slag	113.61	kg	10.2%
Structural beams hot-rolled manufactured from steel scrap	1000	kg	89.8%
Total	1113.60	kg	100%
Yield	1.12	Ton	100%

In table 6, shows the coproducts generated during the processing of commercial long steel.

Table 6. Coproduct generated in the manufacturing commercial long steel

Co-product	Quantity	Unit	Assignment
Total husk and yard land sold	2,331,740	kg	1.4%
Annual production of comercial long steel	169,717,540.00	kg	98.6%
Total	172,049,280	kg	100%

For the case of waste sold for recycling: The applies polluter pays principle did use for the allocation procedure during recycling. In this way, in each case when there was an input of secondary material to the steel product system, recycling process and transportation to the site were included in life cycle inventory (for example, steel scrap).

In those cases, in which the output of material to recycling presented, material transportation to recycling plant did include. This principle applied to plastic and metal containers recycled by a third party.

For generic data Mexicaniuh and Ecoinvent 3.3 (Allocation - Recycled Content version) databases were used.

## 5.7. Time representativeness

Direct data obtained from GERDAU CORSA is representative for 2018.

## 5.8. Data quality assessment

Data quality assessment per information module is provided in Tables 7, 8 and 9.

**Table 7. Raw material supply module data quality assessment**

Data	Time related coverage	Geographic coverage	Technological coverage	Data source	Measured or estimated
Consumption steel scrap	2018	Mexico	Modern	GERDAU CORSA	M
Transport distance of Steel scrap to pre-processing plants	2018	Mexico	Modern	GERDAU CORSA	M
Energy and materials consumption, coproduct and emissions generation from pre-processing steel scrap	2018	Mexico	Modern	GERDAU CORSA	M
Raw material consumption for steel billet manufactured from steel scrap	2018	Mexico	Modern	GERDAU CORSA	M
Production of raw materials packaging	2018	Mexico	Modern	GERDAU CORSA	M
Raw material consumption for steel rebar manufactured from steel scrap	2018	Mexico	Modern	GERDAU CORSA	M
Consumption of energy, emissions, waste and materials for the manufacture of steelmaking raw materials	1980-2016	Mix european	European production	Ecoinvent 3.3	M&E
Consumption of fuels and emissions related to electricity production in Mexico at country level	2017	Mexico	Mix technological Mexico	Mexicanihuh	M&E
Energy and materials consumption and emissions related to natural gas production in Mexico	2017	Mexico	Mix technological Mexico	Mexicanihuh	M&E

M&E: Measured and Estimated, M: Measured, E: Estimated

**Table 8. Transportation module data quality assessment**

Data	Time related coverage	Geographic coverage	Technological coverage	Data source	Measured or estimated
Transport distance of scrap and other raw materials	2018	Mexico	N/A	GERDAU CORSA	M
Transport distance of auxiliary supplies	2018	Mexico	N/A	GERDAU CORSA	M
Transport distance of materials packaging (commercial long steel)	2018	Mexico	N/A	GERDAU CORSA	M
Consumption of materials and energy and emissions related to the transport requirements of raw materials and auxiliary inputs.	1992-2014	Mix european	European production	Ecoinvent 3.3	M&E

M&E: Measured and Estimated, M: Measured, E: Estimated

**Table 9. Manufacture module data quality assessment**

Data	Time related coverage	Geographic coverage	Technological coverage	Data source	Measured or estimated
Water consumption	2017	Mexico	Modern	GERDAU CORSA	M
Consumption of auxiliary materials during manufacturing	1990 - 2016	Worldwide average based on Europe	Worldwide average based on Europe	Ecoinvent 3.3	M&E
Consumption of energy and materials for the manufacture of auxiliary materials.	1990 - 2016	Worldwide average based on Europe	Worldwide average based on Europe	Ecoinvent 3.3	M&E
Consumption of energy and materials for the manufacture of the packaging of auxiliary materials used during manufacturing	2018	Mexico	Modern	GERDAU CORSA	M
Emissions to air and water during the manufacturing process	2018	Mexico	Modern	GERDAU CORSA	M
Emissions to waste during the manufacturing process	2018	Mexico	Modern	GERDAU CORSA	M
Waste treatment processes	1992- 2014	Worldwide average based on Europe	Worldwide average based on Europe	Ecoinvent 3.3	M&E
Distance and consumption of materials, energy and emissions related to waste transport requirements	2018/ 1992- 2014	Mexico/ Worldwide average based on Europe	Mexico/ Worldwide average based on Europe	GUERDAU CORSA/ Ecoinvent 3.3	M&E

M&E: Measured and Estimated, M: Measured, E: Estimated

## 6. Environmental performance

SimaPro 8.4 was used for Life Cycle Impact Assessment.

### 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 10.

**Table 10. Resource Indicators per metric ton of commercial long steel**

Parameter	Unit	Total	A1) Raw materials supply	A2) Transportation	A3) Manufacturing
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	3.07E+02	2.20E+02	1.02E+01	7.68E+01
Use of renewable primary energy as raw materials	MJ	0	0	0	0
Total use of renewable primary energy resources	MJ	3.07E+02	2.20E+02	1.02E+01	7.68E+01
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	MJ	9.50E+03	7.82E+03	9.10E+02	7.66E+02
Use of non-renewable primary energy used as raw materials	MJ	0	0	0	0
Total use of non-renewable primary energy resources	MJ	9.50E+03	7.82E+03	9.10E+02	7.66E+02
Use of secondary material	kg	1.05E+00	0	0	1.05E+00
Use of renewable secondary fuels	MJ	0	0	0	0
Use of non-renewable secondary fuels	MJ	0	0	0	0
Use of net fresh water	m <sup>3</sup>	3.81E+00	3.17E-01	1.65E-01	3.33E+00

M&E: Measured and Estimated, M: Measured, E: Estimated

## 6.2. Potential environmental impact

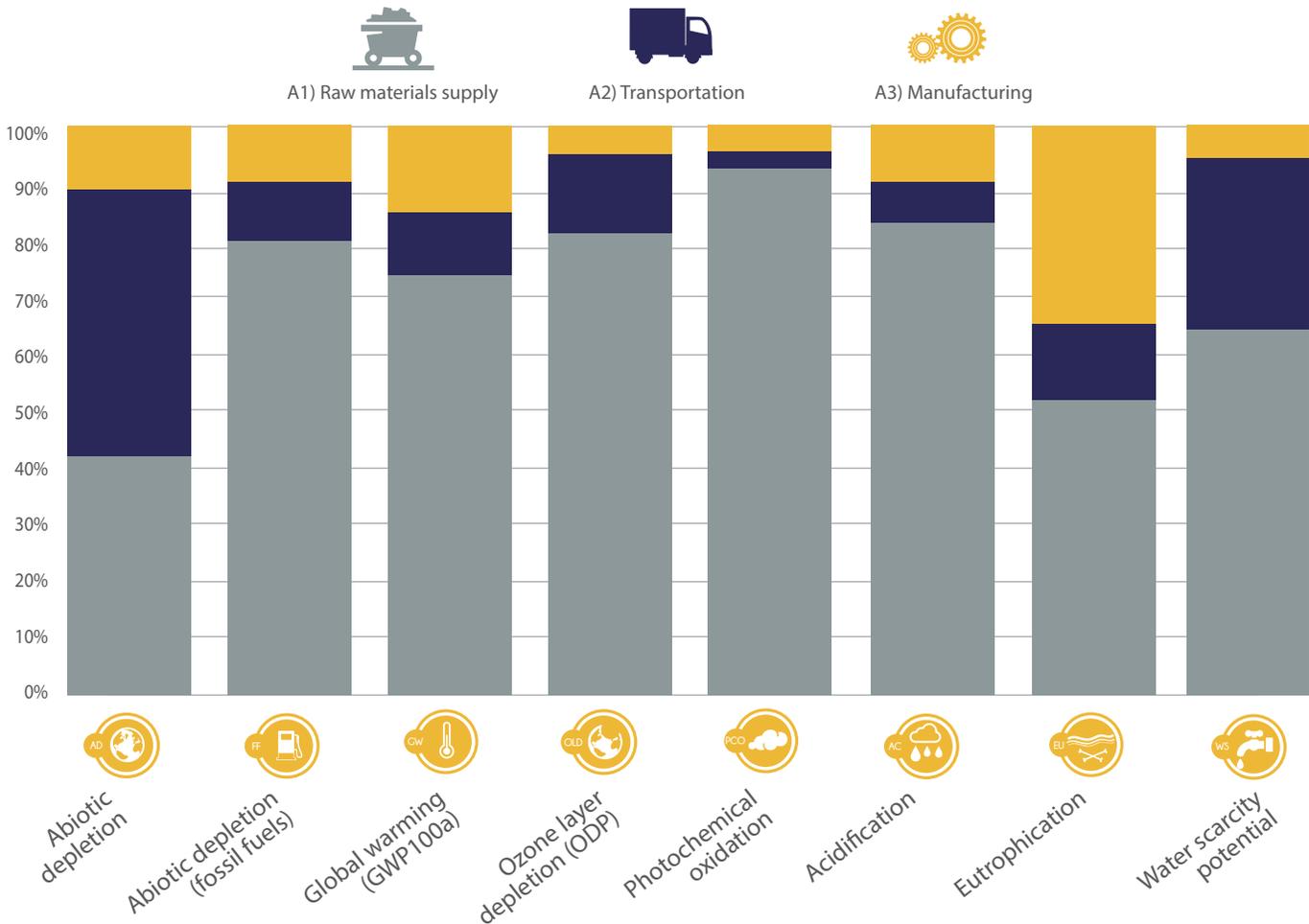
All information modules are reported and value separately. However, in the present EPD presents itself the total impact across all stage. Parameters describing environmental potential impacts were calculated using

CML-IA method version 3.04 (Guinee et al. 2001; Huijbregts et al. 2003; Wegener et al. 2008) as implemented in SimaPro 8.4. Water scarcity potential was calculated using AWARE method (Boulay et al. 2018).

**Table 11. Potential environmental impact indicators per metric ton of Commercial long steel hot-rolled manufactured from steel scrap**

Impact Category	Unit	A1) Raw materials supply	A2) Transportation	A3) Manufacture	Total A1 - A3	A4 - A5, B1 -B7 C1-C4, D
 Abiotic depletion	kg Sb eq	1.2E-04	1.4E-04	3.1E-05	3.0E-04	Modules not declared
	%	41%	48%	10%	100%	
 Abiotic depletion (fossil fuels)	MJ	8.3E+03	8.3E+02	7.8E+02	9.9E+03	
	%	84%	8%	8%	100%	
 Global warming (GWP100a)	kg CO <sub>2</sub> eq	3.5E+02	5.1E+01	7.4E+01	4.7E+02	
	%	74%	11%	16%	100%	
 Ozone layer depletion (ODP)	kg CFC-11 eq	5.8E-05	9.4E-06	3.2E-06	7.1E-05	
	%	82%	13%	4%	100%	
 Photochemical oxidation	kg C <sub>2</sub> H <sub>4</sub> eq	4.4E-01	9.1E-03	1.6E-02	4.6E-01	
	%	95%	2%	3%	100%	
 Acidification	kg SO <sub>2</sub> eq	3.5E+00	2.2E-01	3.7E-01	4.1E+00	
	%	86%	5%	9%	100%	
 Eutrophication	kg PO <sub>4</sub> <sup>3--</sup> eq	1.9E-01	4.9E-02	1.3E-01	3.7E-01	
	%	51%	13%	35%	100%	
 Water scarcity potential	m <sup>3</sup>	2.29E+01	1.02E-03	1.90E+00	3.50E+01	
	%	65%	29%	%	100%	

Figure. 2 Commercial long steel hot-rolled manufactured from steel scrap.



## 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 11 shows waste and other outputs generated during each information module.

Table 12. Waste and other outputs per metric ton of commercial long steel hot-rolled manufactured from steel scrap

Output parameter	Unit	Total	1) Raw materials supply	A2) Transportation	A3) Manufacturing
Hazardous waste	kg	5.29E-03	3.73E-03	5.02E-04	1.06E-03
Non hazardous waste	kg	5.61E-01	2.23E+01	3.22E+01	1.60E+00
Radioactive waste*	kg	1.62E-02	8.45E-03	5.79E-03	1.94E-03
Components for reuse	kg	0	0	0	0
Materials for recycling	kg	1.13E+00	1.03E+00	0	1.02E-01
Materials for energy recovery	kg	0	0	0	0
Exported electricity	MJ	0	0	0	0
Exported heat	MJ	0	0	0	0

\*No radioactive waste is produced during GERDAU CORSA operation.

## 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 first of all on people, the environment and the quality of our products, this is why all our plants are ISO certified in management systems regarding health and safety, environment, and quality (ISO 45001:2018, ISO 14001:2015, ISO 9001:2015 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 filtered 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	
Program:	International EPD® System www.environdec.com EPD registered through the fully aligned regional program/hub: EPD Latin America www.epdlatinamerica.com
Program operator:	EPD International AB Box 210 60 SE-100 31 Stockholm, Sweden EPD Latin America Chile: Alonso de Ercilla 2996, Ñuñoa, Santiago Chile. Mexico: Av. Convento de Actopan 24 Int. 7A, Colonia Jardines de Santa Mónica, Tlalnepantla de Baz, Estado de México, México, C.P. 54050
EPD registration number:	S-P-01663
Issue date:	2020/07/29
Validity date:	2025/03/22
Revision date:	2020/03/23
Reference year of data:	2018
Geographical scope:	Mexico
Product group classification:	CPC Division 54 Construction services
PCR:	PCR 2012:01 construction products and construction services, Version 2.3 (2018-11-15)
PCR review was conducted by:	The Technical Committee of the International EPD® System. Chair: Massimo Marino. Contact via info@environdec.com
Independent verification of the declaration data, according to ISO 14025:2006.	EPD process certification (Internal) <input type="checkbox"/> EPD verification (External) <input checked="" type="checkbox"/>
Third-party verifier:	Rubén Carnerero Acosta, approved EPD verifier r.carnerero@ik-ingenieria.com
Accredited or approved by:	The International EPD® System
Procedure for follow-up of data during EPD validity involves third-party verifier:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

# 8. Certifications



# 9. Contact information

EPD owner:



Aceros Corsa, S.A. de C.V.  
Av Ejército Nacional 216,  
Anzures  
Ciudad de México, CDMX  
C.P. 11590

[www.gerdaucorsa.com.mx](http://www.gerdaucorsa.com.mx)

Contact person:  
Itzia Nallely Santillán Fierro  
[Itzia.santillan@gerdau.com](mailto:Itzia.santillan@gerdau.com)  
Cel: 5515039744  
Tel: 52627335  
Marketing y relaciones  
publicas

LCA author



Center for Life Cycle Assessment  
and Sustainable Design – CADIS

Bosques de Bohemia 2 #9  
Bosques del Lago  
Cuautitlán Izcalli, Estado de  
México, México  
C.P. 54766  
[www.centroacv.mx](http://www.centroacv.mx)

LCA Study: Life Cycle Assessment  
(LCA) methodology of commercial  
long steel hot-rolled manufactured  
from steel scrap.

LCA Authors: Luque Claudia,  
Gonzales Mireya, Chargoy Juan  
Pablo.

Contact person:  
Juan Pablo Chargoy  
[jpchargoy@centroacv.mx](mailto:jpchargoy@centroacv.mx)

Program operator (PO):



EPD International AB

Box 210 60, SE-100 31,  
Stockholm, Sweden.  
[www.environdec.com](http://www.environdec.com)

[info@environdec.com](mailto:info@environdec.com)

EPD registered through the fully  
aligned regional program/hub:



EPD Latin America  
[www.epd-latinamerica.com](http://www.epd-latinamerica.com)

Chile:  
Alonso de Ercilla 2996, Ñuñoa,  
Santiago Chile.

Mexico:  
Av. Convento de Actopan 24  
Int. 7A, Colonia Jardines de  
Santa Mónica, Tlalnepantla de  
Baz, Estado de México, México,  
C.P. 54050

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