ACCIAIERIE BERTOLI SAFAU
ABSOLUTE STEEL QUALITY

HIGH-CARBON STEEL RODS

ENVIRONMENTAL PRODUCT DECLARATION

EPD
INTERNATIONAL EPD SYSTEM

BASED ON
PCR 2015:03 v3.0.0
of 2025-07-14
ISO 14025:2006

PROGRAMME
The International EPD System
www.environdec.com

PROGRAMME OPERATOR
EPD international AB

TYPE OF EPD
EPD of multiple products, based on average results of the product group

MANUFACTURING SITE
Cargnacco (UD) and
Sisak, Croatia

VALID UNTIL
07/05/2031

REGISTRATION NUMBER
EPD-IES-0026624:001

CPC CODE
4124

PUBLICATION DATE
14/05/2026

GENERAL INFORMATION

EPD REFERENCES

EPD OWNER: ABS - Acciaierie Bertoli Safau S.p.A., Pozzuolo del Friuli (UD) Frazione Cargnacco, via Buttrio 28, CAP 33050

PROGRAM OPERATOR: EPD international ab, box 21060, Se-100 31 Stockholm, Sweden; info@environdec.com

INDEPENDENT VERIFICATION

This declaration has been developed referring to the International EPD System, following the General Programme Instructions v 4; further information and the document itself are available at: www.environdec.com.

EPD document valid within the following geographical area: Italy and other countries worldwide according to sales market conditions.

Reference PCR: 2015:03 - Basic Iron or steel products & special steels, except construcion steel products - version 3.0.0
PCR review conducted by: Gorka Benito Alonso, IK INGENIERIA, g.benito@ik-ingenieria.com
LCA Practitioner: eAmbiente S.r.l., via delle Industrie 5, Venezia (VE), CAP 30175.
The review panel may be contacted via the Secretariat at www.environdec.com/contact"

Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:

☑ EPD verification by accredited certification body

THIRD PARTY VERIFIER: IMQ S.p.A., Via Quintiliano 43, 20138 Milano (Italy).
Is an approved certification body accountable for the third-party verification.

The certification body is accredited by: IMQ S.p.A. – ACCREDIA (00013 VV)

Approved by: The Technical Committee of the International EPD® System
Procedure for follow-up during EPD validity involves third party verifier:

☐ YES ☑ NO

CONTACTS

sustainability@absacciai.com

ACCIAIERIE BERTOLI SAFAU
ABSOLUTE STEEL QUALITY

Technical support was provided by eAmbiente, Italy
(info@eambientesrl.com, www.eambientesrl.com).

ABOUT THE COMPANY

1,500
EMPLOYEES

1,500,000
TONNES OF STEEL

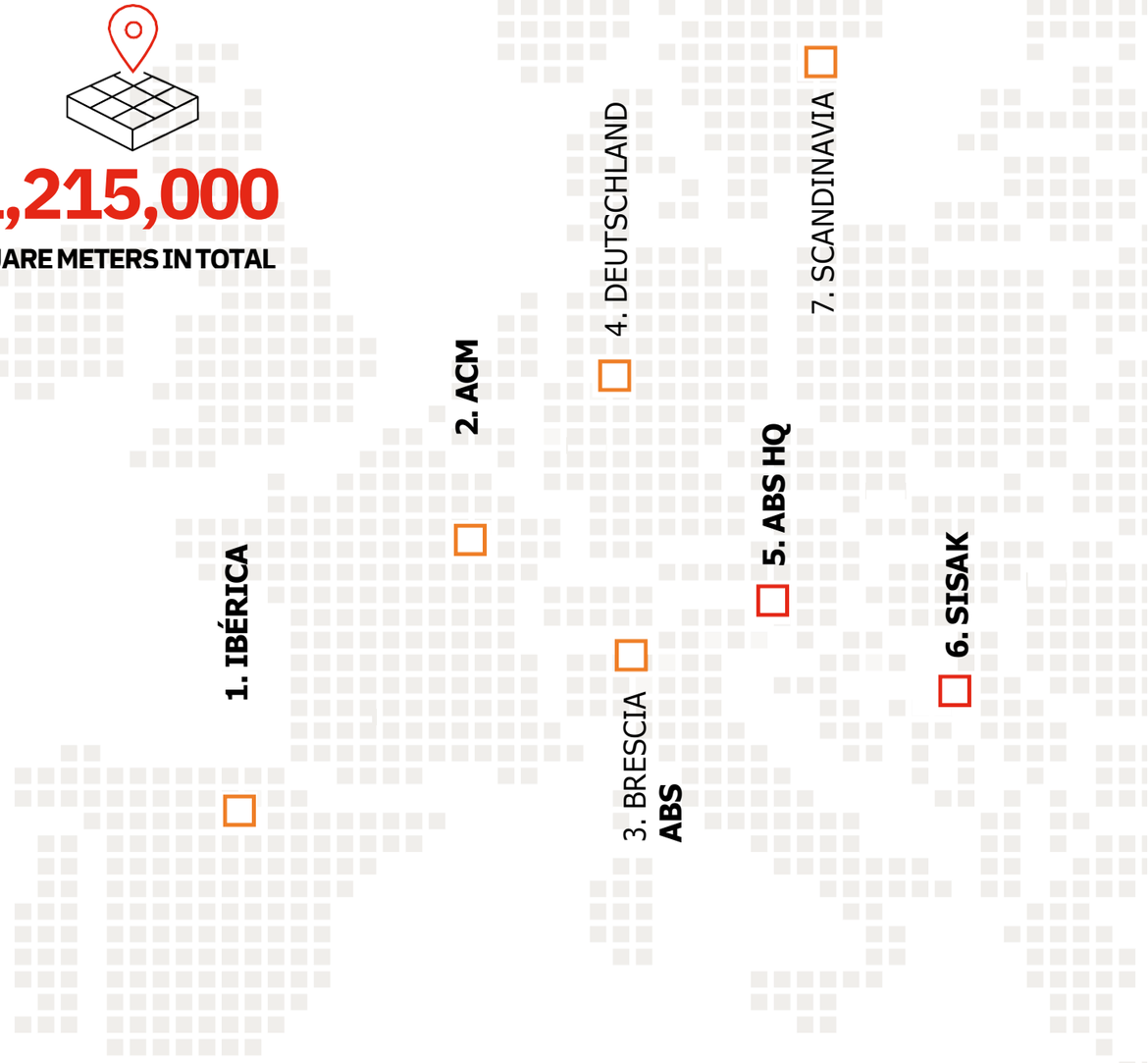
+1,000
DIFFERENT GRADES

1,215,000
SQUARE METERS IN TOTAL

THE COMPANY

Acciaierie Bertoli Safau S.p.A. was established in Cargnacco in **1988** following the merger of two steel mills of long experience and high specialisation: "Officine Bertoli" founded in **1813** and "Safau". It is the steelmaking division of the Danieli Group, with its production and management headquarters in Pozzuolo del Friuli (Udine, Italy), a production plant in Croatia (ABS SISAK), a research centre in Metz (ABS Centre Métallurgique) and sales offices in Germany, Sweden and Spain (ABS Deutschland, ABS Scandinavia, ABS Iberica). **ABS** specialises in the production of **special long steels** and offers a unique range in terms of both product **quality** and **variety** for highly specialised technical and mechanical application. Its production uses the full scrap cycle, reducing emissions by **65%** compared to the blast furnace cycle.

Product-related or management system-related certifications: ISO 14001, ISO 9001



Name and location of production site(s):

1. COMMERCIAL PLANT
Spagna - Via Vieja de Lezama 82 - 48007, Bilbao

2. ACM CENTRE MÉTALLURGIQUE - R&D
Francia - 10, rue Pierre Simon Delaplace BP 25180, 57075 Metz cedex 03

3. COMMERCIAL PLANT
Italia - Via Achille Grandi, 30 - 25125, Brescia

4. COMMERCIAL PLANT
Germania - Am Brüll 17 - 40878 Ratingen, Germany

5. ABS HQ & PLANT
Italia - via Buttrio, 28 - 33050, Cargnacco - Frazione di Pozzuolo del Friuli, Udine

6. ABS SISAK D.O.O - PLANT
Croazia - Braće Kavurić, 12 44 010, Sisak

7. COMMERCIAL PLANT
Svezia - Nastagatan 10C 70227 Örebro

production plant
commercial plant

PRODUCT INFORMATION

THE PRODUCT

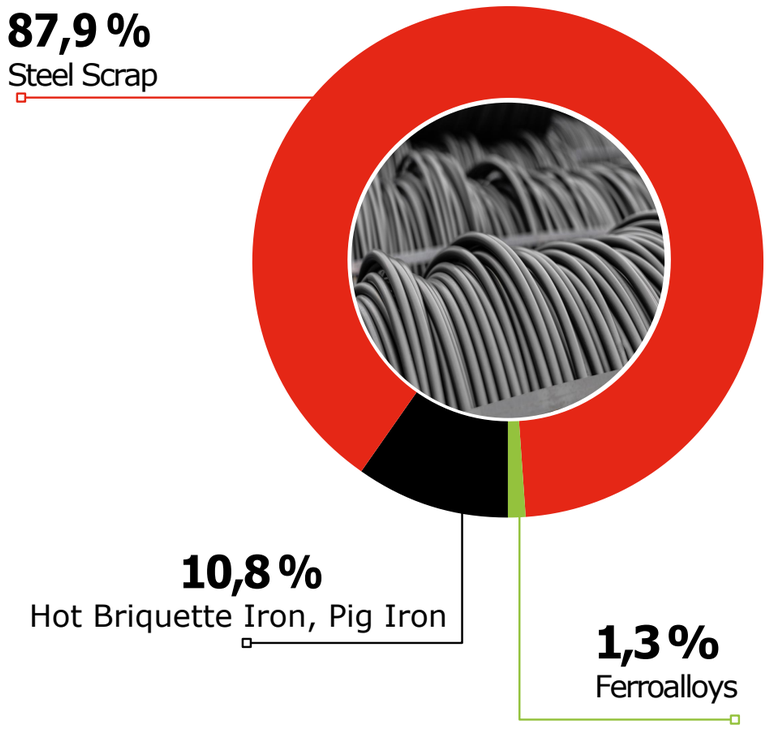
Steel rods, made of high carbon content. Semi-finished product for non-construction applications, that requires further processing at the downstream market.

Final product:
Wire rod ø 5,0 - ø 25,0 mm

PACKAGING

DISTRIBUTION PACKAGING: not applicable
CONSUMER PACKAGING: not applicable

THE AVERAGE COMPOSITION:



SCOPE AND TYPE OF EPD

GEOGRAPHICAL SCOPE: A1-A3: Global
SOFTWARE: Simapro 10.0
DATABASE: Ecoinvent 3.11
DECLARED UNIT: 1 metric ton of product (1.000 kg of product) . Product is shipped without a packaging
DESCRIPTION OF SYSTEM BOUNDARIES: Cradle to Gate, modules A1-A3

THE LCA STUDY INCLUDES ALL THE PROCESSES ACCORDING TO PCR 2015:03 V3.0.0

UPSTREAM PROCESS → **CORE** PROCESS

LCA INFORMATION

Product environmental burden has been processed in accordance with EPD general instructions issued by **International EPD® System** (GPI v 5.01) and **PCR 2015:03 v3.0.0**. This declaration is a cradle to gate EPD type, based on the application of Life Cycle Assessment (LCA) methodology according to reference PCR.

Wire rod production is modelled by using specific data from ABS manufacturing facility located in Cargnacco – Italy area, Sisak – Croatia and Blooms from EAF supplier data, for the fiscal year 2023-2024.
Customized LCA questionnaires were used to gather in-depth information about all aspects of the production system, in order to provide a complete picture of the environmental burden of the system from pig iron production and raw material supply (Upstream) to steel treatment and energy use (Core).

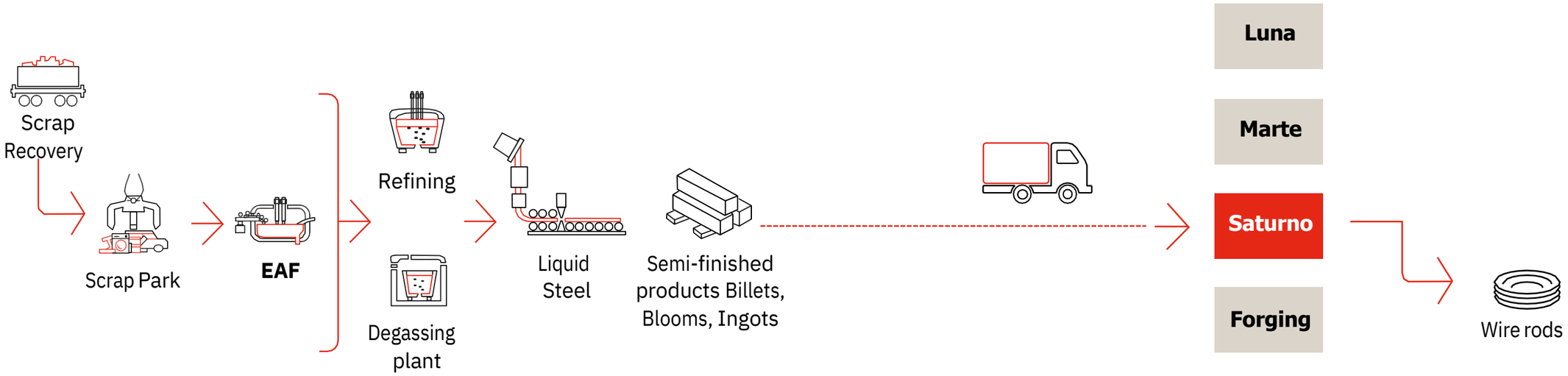
Electricity used in the A3 module, and referring to the production at the Italian site (Cargnacco) was modelled with the Ecoinvent 3.11 process “Electricity, high voltage {IT}| electricity, high voltage, residual mix | Cut-off, U”. The process refers to the Italian residual mix, high voltage, derived from AIB data 2024 (reference year 2023). Emission factor is 0,68 kg CO2eq/kWh. Electricity used in the A3 module, and referring to the production at the Croatian site (Sisak) was modelled with the Ecoinvent 3.11 process “Electricity, high voltage {HR}| electricity, high voltage, residual mix | Cut-off, U”. The process refers to the Croatian residual mix, high voltage, derived from AIB data 2024 (reference year 2023). Emission factor is 0,71 kg CO2eq/kWh.

PRODUCTION PROCESS

WIRE: CYCLE AND USES

Steel wire rods are manufactured from steel billets produced at ABS plants through electric arc furnace steelmaking and continuous casting. Both the Cargnacco (Italy) and Sisak (Croatia) sites operate electric arc furnace (EAF) steelmaking processes. However, only the Cargnacco plant performs the downstream hot rolling operations. Billets produced at the Sisak plant are therefore transported to Cargnacco, where they are reheated and hot rolled to the required final dimensions. The LCA covers the **upstream** and **core** stages only, in accordance with a **cradle-to-gate** system boundary.

PRODUCTION PROCESS



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EPD International website

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