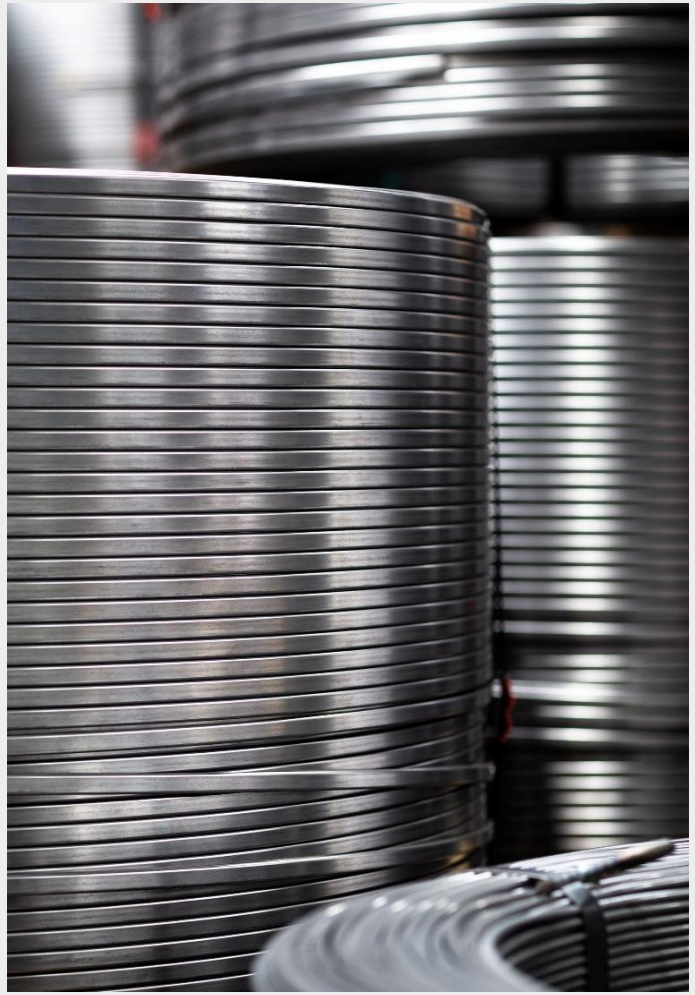


ENVIRONMENTAL PRODUCT DECLARATION

In compliance with ISO 14025 and EN15804+A2:2019

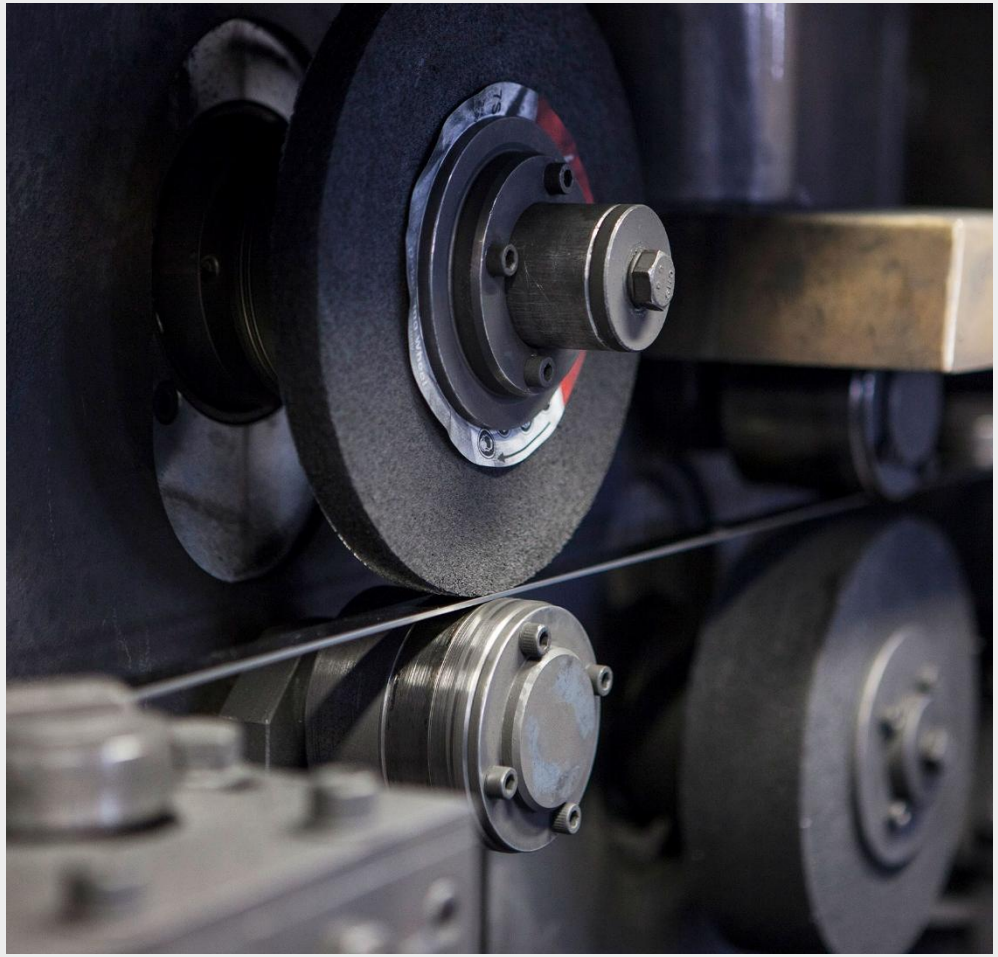
COLD ROLLED FLAT

Program operator: EPDITALY
Pubblicato da: SIAT S.p.A.
Dichiarazione n.: EPD_Piatto_SIAT_2024

EPDITALY registration code : **EPDITALY0919**

Published: **25/06/2025**
Valid until: **24/06/2030**
Production site: **Gemona and Osoppo (UD)**

General information



Environmental declarations published within the same product category, but belonging to different programs, might not be comparable. Specifically, EPDs regarding products for the building sector may not be comparable if not compliant with the EN 15804 standard.

The EPD Owner releases EPDItaly from any non-compliance with environmental legislation. The declaration holder shall be responsible for the information and supporting evidence provided. EPDItaly declines any responsibility regarding the information, data, and results supplied by the EPD Owner for the life cycle assessment.

REFERENCE DOCUMENTS: This declaration was drafted following EDPItaly's General Programme Instruction, available on www.epditaly.it.

PCR ICMQ-001/15 rev.3.1

CPC CODE: 4124

CONTACTS: Eng. Cristina Simeoni – Tel +39 3441150944 – cristina.simeoni@pittini.it

TECHNICAL SUPPORT: Spin Life s.r.l., via E. degli Scrovegni 29, 35131 Padova segreteria@spinlife.it

INDEPENDENT VERIFICATION OF DECLARATION AND DATA CARRIED OUT ACCORDING TO ISO 14025	
☐ EPD Process certification (Internal)	☒ EPD Verification (External)

General information

EPD OWNER:
S.I.A.T. S.p.A
Via Facini, 54
Gemona del Friuli (UD), Italia.

PROGRAM OPERATOR:
EPDITALY
Via Gaetano de Castillia 10
Milano (MI), Italia.

INDEPENDENT EVALUATION BY :
ICMQ S.p.A.
Via Gaetano de Castillia 10
Milano (MI), Italia.

PLANT LOCATION :
S.I.A.T. S.p.A
Via Facini, 54
Gemona del Friuli (UD), Italia

Company profile

Pittini Group, with more than 60 years of experience in the steel sector, is an international reference in the production of **long steel products** for **mechanical industry** and **building sector**.

With a production of almost 3 million tons per year, 18 manufacturing and logistics facilities and 1,800 workers, Pittini Group is a strong company, focused on constant growth, guided by hi-tech investments, product innovation and a strict environmental sustainability policy (**Environmental Management System**, ISO 14001-certified since 2009).

Pittini Group **covers the whole production cycle**: from raw material (recycled ferrous materials) to the finished product, producing billets, wire rod, hot-rolled reinforcing steel bars and coils.

Scope and EPD type

✓	A1	Raw material supply	PRODUCTION STAGE
✓	A2	Transport	
✓	A3	Manufacturing	
MND	A4	Transport	CONSTRUCTION PROCESS
MND	A5	Construction/installation	
MND	B1	Use	USE
MND	B2	Maintenance	
MND	B3	Repair	
MND	B4	Replacement	
MND	B5	Refurbishment	
MND	B6	Operational energy use	
MND	B7	Operational water use	
✓	C1	De-commissioning \ Demolition	END OF LIFE
✓	C2	Transport	
✓	C3	Waste processing	
✓	C4	Disposal	
✓	D	Reuse \ Recovery \ Recycling potential	BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARY

MND=Module Not Declared

MODULES: The system modules include the compulsory modules A1, A2, A3, C1, C2, C3, C4 and D as per EN 15804 standard, following a "from cradle to gate with modules C1-C4 and D" approach.

EPD TYPE: Specific for the cold rolled flat produced in Gemona del Friuli (UD).

GEOGRAPHICAL LOCATION: Performances were calculated considering the plants of Gemona del Friuli. The reference market is european.

DATABASE: Ecoinvent 3.10

SOFTWARE: SimaPro 9.6.0.1

REFERENCE YEAR: 2023

ELECTRICITY FROM GRID (GWP 100): 0,649 kg CO2e/kWh

The product: Cold rolled flat

DECLARED UNIT: 1000 kg of cold rolled flat

S.I.A.T. S.p.A. is a leading company in the production of cold-rolled flats and profiles from low and medium carbon wire rod.

With a production capacity of over 80,000 tons per year, S.I.A.T. supplies major users across Europe in sectors such as: mechanical engineering, window and door hardware, construction, furniture, household appliance industry, automotive, industrial displays and containers, and offshore cables.

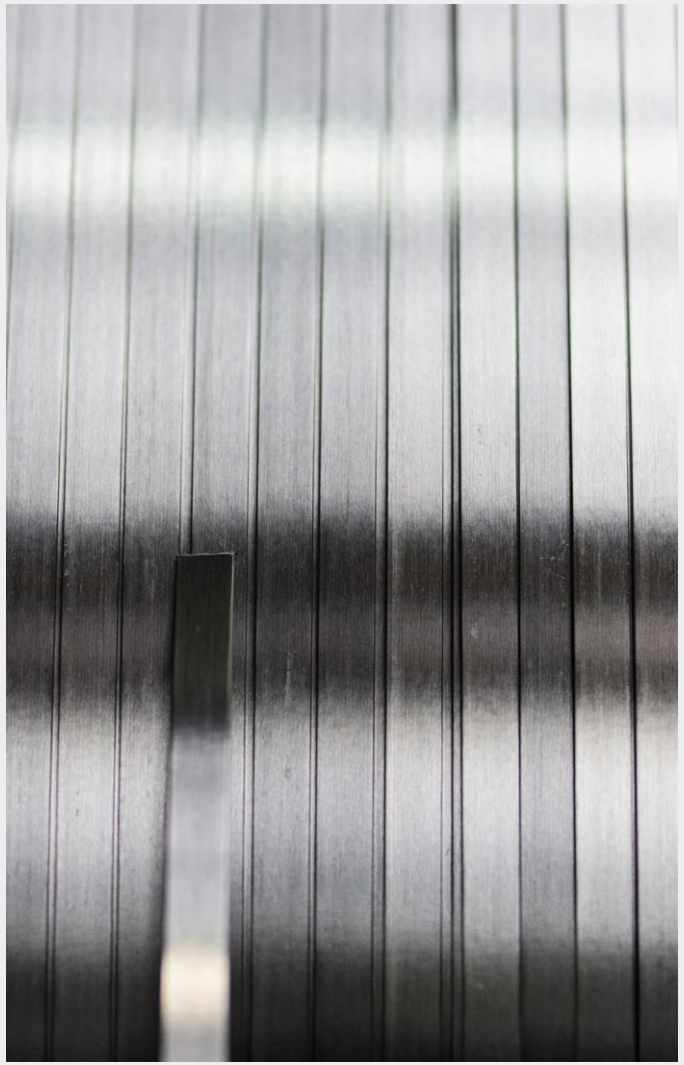
Thanks to state-of-the-art, fully automated facilities, it is possible to produce a wide range of rolled profiles, both standard and custom-designed according to customer specifications.

S.I.A.T. rolled flats are produced in rectangular sections: with sharp edges, square, rounded edges, round corners, oval, small oval, and other shaped profiles available upon request.

The product range includes thicknesses from 1.5 mm to 12 mm and widths between 5 mm and 30 mm, supplied in coils up to 2500 kg.

S.I.A.T. rolled flats are manufactured in accordance with the EN 10139 standard.

*Cold rolled flat produced in Gemona del Friuli **does not contain** substances included in the "**Candidate list of substances of very high concern (SVHC)**".*



Main raw materials

Main raw materials used to produce rolled flat are:

WIRE ROD

The main material used

SOLUBLE OIL

SULPHURIC ACID

GRIT

Scope and EPD type

DESCRIPTION OF THE PROCESSES INCLUDED:

Transport of material from production site to Gemona del Friuli has been included.
All **transports of raw materials from suppliers** to the production plants are included in the primary-information model.
INVENTORY QUANTITY, expressed in kgkm, is defined as the product between the mass of the material and the distance covered.
Transport of waste from the plant towards the outsourcing plants are included, based on primary data.
Processing of materials entering the plant, the **process of cold rolling and all activities** to obtain rolled flat are included.

A1 **ENERGY AND RAW MATERIAL SUPPLY**

A2 **TRANSPORT**

A3 **MANUFACTURING (WASTE PROCESSING, ANCILLARY MATERIALS, EMISSIONS)**

Scope and EPD type

Following the review of the EN 15804 standard, groups C1, C2, C3, C4 and D have been included.
The groups C1-C4 include the impacts associated with the removal of the material from the building in which it is installed, the transport of the waste to the treatment center and the related activities (recycling, treatment ecc.), including the disposal in landfill.
The group D, includes the benefits coming from the outputs of recycling (intended as avoided products) and energy recovery operations.

C1 **DE-CONSTRUCTION/DEMOLITION**

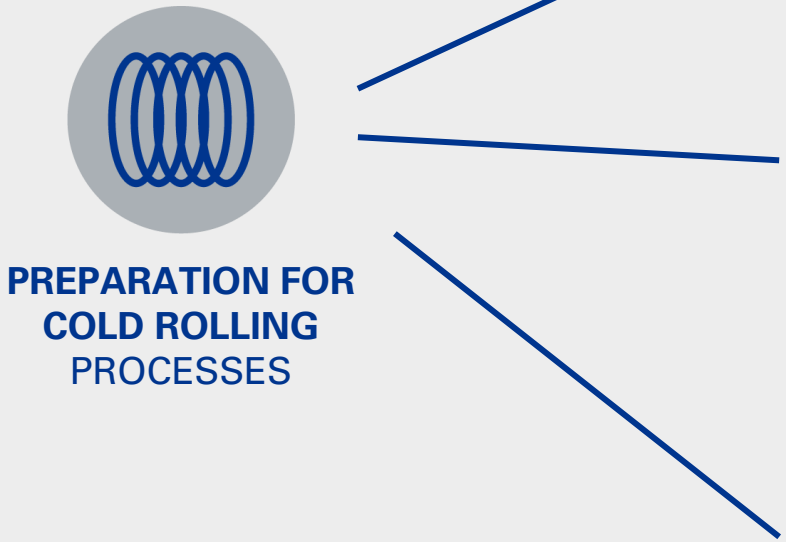
C2 **TRANSPORT**

C3 **WASTE PROCESSING**

C4 **DISPOSAL**

D **REUSE-RECOVERY-RECYCLING POTENTIAL**

Scope and EPD type



Wire rod preparation (outsourcing):
annealing

Wire rod processing:
pickling;

Finished product preparation (outsourcing):
annealing

Scope and EPD type

IN-HOUSE TRANSPORT AND OPERATING MACHINES USED

Inbound transport of materials by truck

In-house handling of the wire rod with forklift

In-house handling of finished product with forklift and crane

Transport of waste to destination facilities

Transport of finished products by truck

Scope and EPD type

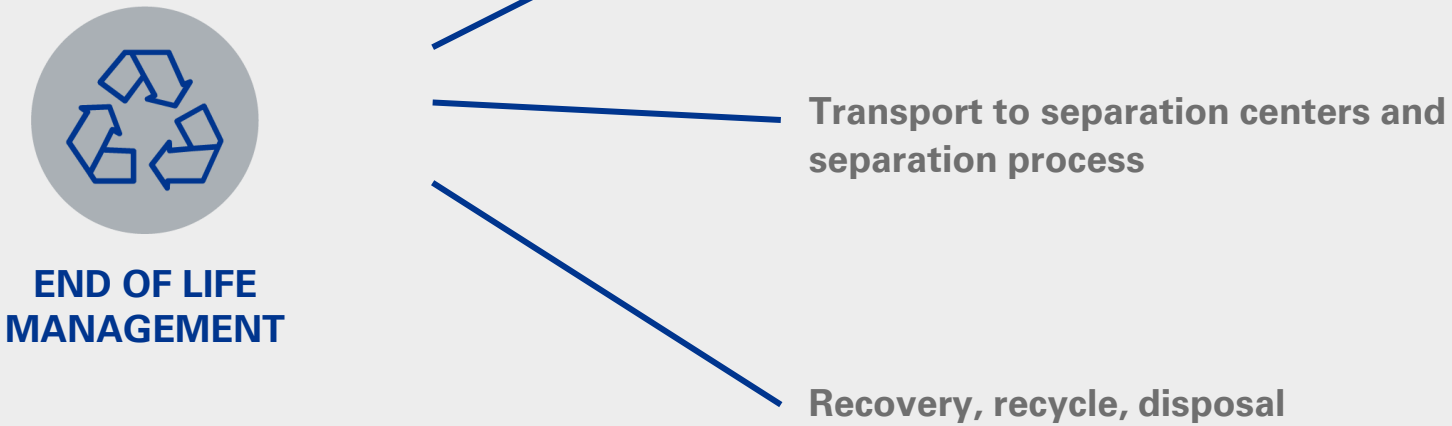
COLD ROLLING

Blasting

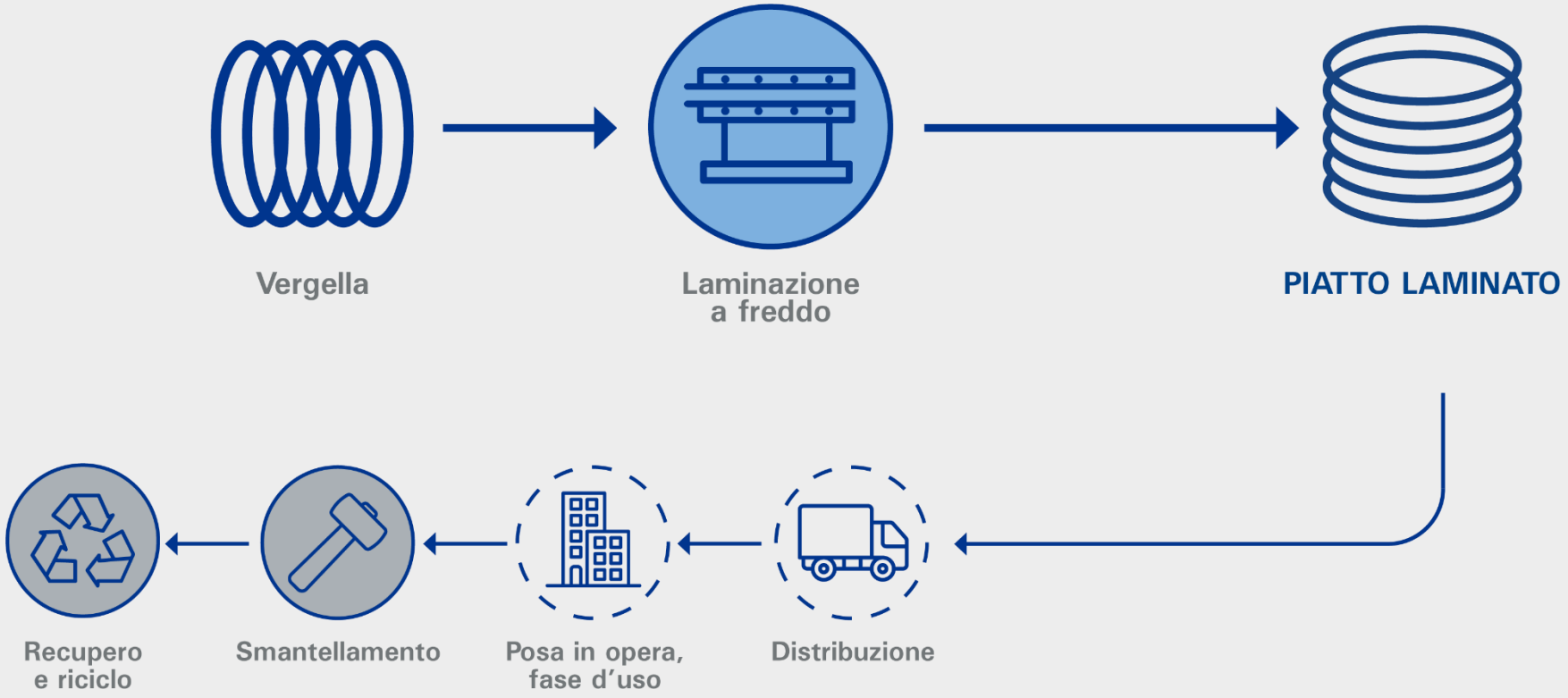
Cold rolling

Treatment of semi-finished product

Scope and EPD type



Scope and EPD type



Environmental performance: rolled flat

Data referring to 1,000 kg of rolled flat

ENVIRONMENTAL IMPACT PARAMETERS	UNIT	A1	A2	A3	A1-A3	A4, A5, B1 ÷ B7	C1	C2	C3	C4	D
GWP-total	kg CO2 eq	1,05E+3	1,41E+1	1,64E+1	**1,08E+3**	MND	6,57E+0	1,55E+1	1,24E+0	8,63E-1	-5,94E+1
GWP-biogenic	kg CO2 eq	1,84E+1	6,43E-2	3,36E-2	**1,85E+1**	MND	1,02E-3	5,14E-3	4,41E-2	2,86E-4	-4,46E-2
GWP-fossil	kg CO2 eq	1,03E+3	5,03E-3	1,63E+1	**1,06E+3**	MND	6,57E+0	1,55E+1	1,19E+0	8,62E-1	-5,94E+1
GWP-luluc	kg CO2 eq	8,73E-1	1,40E+1	1,39E-2	**8,92E-1**	MND	2,26E-4	3,85E-4	3,54E-3	2,40E-5	5,65E-4
ODP	kg CFC11 eq	1,85E-5	1,85E-5	2,72E-7	**1,91E-5**	MND	1,03E-7	3,20E-7	1,88E-8	1,68E-8	-1,84E-7
AP	mol H+ eq	3,21E+0	3,21E+0	6,54E-2	**3,31E+0**	MND	6,14E-2	8,43E-2	6,28E-3	5,27E-3	-2,25E-1
EP-freshwater	kg P eq	1,66E-1	1,66E-1	1,56E-4	**1,66E-1**	MND	6,21E-6	1,31E-5	1,09E-4	1,18E-6	-2,59E-3
EP-marine	kg N eq	7,70E-1	7,70E-1	2,69E-2	**8,05E-1**	MND	2,89E-2	3,88E-2	1,05E-3	2,42E-3	-4,75E-2
EP-terrestrial	mol N eq	7,99E+0	7,99E+0	2,95E-1	**8,34E+0**	MND	3,17E-1	4,24E-1	1,17E-2	2,65E-2	-5,56E-1
POCP	kg NMVOC eq	2,39E+0	2,39E+0	9,78E-2	**2,52E+0**	MND	9,41E-2	1,33E-1	3,77E-3	8,20E-3	-1,90E-1
ADP-minerals&metals*	kg Sb eq	1,69E-3	1,69E-3	5,06E-7	**1,69E-3**	MND	2,75E-7	5,18E-7	7,28E-8	2,98E-8	-4,27E-4
ADP-fossil*	MJ	1,19E+4	1,19E+4	2,79E+1	**1,20E+4**	MND	9,28E-1	2,07E+0	1,97E+1	1,88E-1	-4,54E+2
WDP*	m3 depriv.	3,62E+2	3,62E+2	4,63E-1	**3,69E+2**	MND	6,81E-2	8,78E-2	2,94E-1	5,84E-3	-3,76E+0
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption										

MND=Module Not Declared; **The additional impact indicators calculated into the LCA study are not included in the present declaration.**

** The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.*

Environmental performance: rolled flat

Data referring to 1,000 kg of rolled flat

RENEWABLE RESOURCES	UNIT	A1	A2	A3	A1-A3	A4, A5, B1 ÷ B7	C1	C2	C3	C4	D
Use of renewable primary energy excluding renewable primary energy resources used as raw materials (PERE)	MJ	4,43E+2	7,83E+0	2,67E+0	**4,54E+2**	MND	1,72E-1	6,42E-1	6,66E+0	3,41E-2	-2,27E+1
Use of renewable primary energy resources used as raw materials (PERM)	MJ	1,83E+2	1,26E+0	8,76E-1	**1,85E+2**	MND	2,21E-2	9,02E-2	8,85E-1	8,74E-3	-2,72E+0
Total use of renewable primary energy resources (PERT)	MJ	6,26E+2	9,09E+0	3,54E+0	**6,39E+2**	MND	1,94E-1	7,32E-1	7,54E+0	4,29E-2	-2,54E+1

MND=Module Not Declared

Environmental performance: rolled flat

Data referring to 1,000 kg of rolled flat

NON-RENEWABLE RESOURCES	UNIT	A1	A2	A3	A1-A3	A4, A5, B1 ÷ B7	C1	C2	C3	C4	D
Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials (PENRE)	MJ	1,19E+4	2,78E+1	6,98E+0	**1,20E+4**	MND	9,28E-1	2,07E+0	1,97E+1	1,88E-1	-4,54E+2
Use of non renewable primary energy resources used as raw materials (PENRM)	MJ	0,00E+0	0,00E+0	0,00E+0	**0,00E+0**	MND	0,00E+0	0,00E+0	0,00E+0	0,00E+0	0,00E+0
Total use of non renewable primary energy resources (PENRT)	MJ	1,19E+4	2,78E+1	6,98E+0	**1,20E+4**	MND	9,28E-1	2,07E+0	1,97E+1	1,88E-1	-4,54E+2

MND=Module Not Declared)

Environmental performance: rolled flat

Data referring to 1,000 kg of rolled flat

USE OF SECONDARY RAW MATERIALS	UNIT	A1	A2	A3	A1-A3	A4, A5, B1 ÷ B7	C1	C2	C3	C4	D
Use of secondary materials (SM)	Kg	0,00E+0	0,00E+0	0,00E+0	**0,00E+0**	MND	0,00E+0	0,00E+0	0,00E+0	0,00E+0	0,00E+0
Use of renewable secondary fuels (RSF)	MJ	0,00E+0	0,00E+0	0,00E+0	**0,00E+0**	MND	0,00E+0	0,00E+0	0,00E+0	0,00E+0	0,00E+0
Use of non renewable secondary fuels (NRSF)	MJ	0,00E+0	0,00E+0	0,00E+0	**0,00E+0**	MND	0,00E+0	0,00E+0	0,00E+0	0,00E+0	0,00E+0
USE OF FRESH WATER	**UNIT**	**A1**	**A2**	**A3**	**A1-A3**	**A4, A5, B1 ÷ B7**	**C1**	**C2**	**C3**	**C4**	**D**
Net use of fresh water (FW)	m3	9,74E+0	3,39E-2	1,42E-1	**9,92E+0**	MND	2,53E-3	5,25E-3	2,26E-2	3,04E-4	-2,25E-1

MND=Module Not Declared

Environmental performance: rolled flat

Data referring to 1,000 kg of rolled flat

WASTE DISPOSAL	UNIT	A1	A2	A3	A1-A3	A4, A5, B1 ÷ B7	C1	C2	C3	C4	D
Hazardous waste disposed (HWD)	kg	1,23E-1	1,13E-3	5,24E-4	**1,25E-1**	MND	5,94E-4	1,37E-3	4,19E-5	7,56E-5	-6,21E-3
Non-hazardous waste disposed (NHWD)	kg	1,67E+2	2,58E-2	5,19E+0	**1,72E+2**	MND	2,53E-3	6,31E-3	1,56E-2	5,99E+1	-3,79E-1
Radioactive waste disposed (RWD)	kg	1,73E-2	2,79E-4	6,17E-5	**1,76E-2**	MND	4,42E-6	1,94E-5	1,98E-4	1,00E-6	5,90E-4
Components for re-use (CRU)	kg	0,00E+0	0,00E+0	0,00E+0	**0,00E+0**	MND	0,00E+0	0,00E+0	0,00E+0	0,00E+0	0,00E+0
Materials for Recycling (MFR)	kg	0,00E+0	0,00E+0	0,00E+0	**0,00E+0**	MND	0,00E+0	0,00E+0	9,40E+02	0,00E+0	0,00E+0
Materials for Energy Recovery (MER)	kg	0,00E+0	0,00E+0	0,00E+0	**0,00E+0**	MND	0,00E+0	0,00E+0	0,00E+0	0,00E+0	0,00E+0
Exported Energy (EE)	MJ	0,00E+0	0,00E+0	0,00E+0	**0,00E+0**	MND	0,00E+0	0,00E+0	0,00E+0	0,00E+0	0,00E+0

MND=Module Not Declared

The biogenic carbon content in the product and in the packaging has been omitted since its weight is lower than 5%

Calculation rules

DECLARED UNIT: 1000 kg of cold rolled flat

ASSUMPTIONS: System boundaries include the compulsory modules A1, A2, A3, C1, C2, C3, C4 and D as required by EN 15804 Standard, according to a “from cradle to gate with modules C1-C4 and D” approach. It should be noted that **building, maintenance and decommissioning of the infrastructures - intended as buildings - and use of industrial ground, were not taken into consideration**, because their contribution to environmental impact relating to the declared unit is deemed negligible. C**onsumption of oils, detergents and other technical materials for machine maintenance, energy consumption for plant lighting, energy consumption for office activities related to the management of the steel mill are included. Moreover, it should be noted that product distribution, use and disposal phases are not included in this study.**

CUT-OFF RULES: The criterion chosen for the initial inclusion of the inbound and outbound elements, takes into account a 1% cut-off level, both in terms of mass, energy and environmental relevance. This means that a process was neglected if responsible of less than 1% of the total amount of mass, primary energy and total impact. However, all processes for which data are available were taken into account, even though with a contribution less than 1%. As a consequence, this threshold value was used in order to avoid collecting unknown data, not with the purpose of neglecting available data.

DATA QUALITY: in the LCA study, **particular relevance was given to primary data collected** through extensive measurements carried out at the plants.

ALLOCATIONS: allocation was avoided, whenever possible, by dividing the system into sub-systems. Otherwise, physical allocation was applied. As for waste modeling, the "Polluter pays principle" was applied.

Additional information

MINIMUM RECYCLED CONTENT RECYCLED, RECOVERED, BY-PRODUCT Minimum content of recycled, recovered, by-product materials								
PRODUCT NAME[1)]		Recycled material			Recovered material	By-product material		Total content of Recycled, Recovered, By-product material[2)]
		Total	Pre-consumer	Post-consumer				
		[%]	[%]	[%]	[%]	[%]		[%]
Rolled flat	≥	80%	n.p.d.	80%	n.p.d	n.p.d		80%

Legenda:

n.p.d.: no performance determined

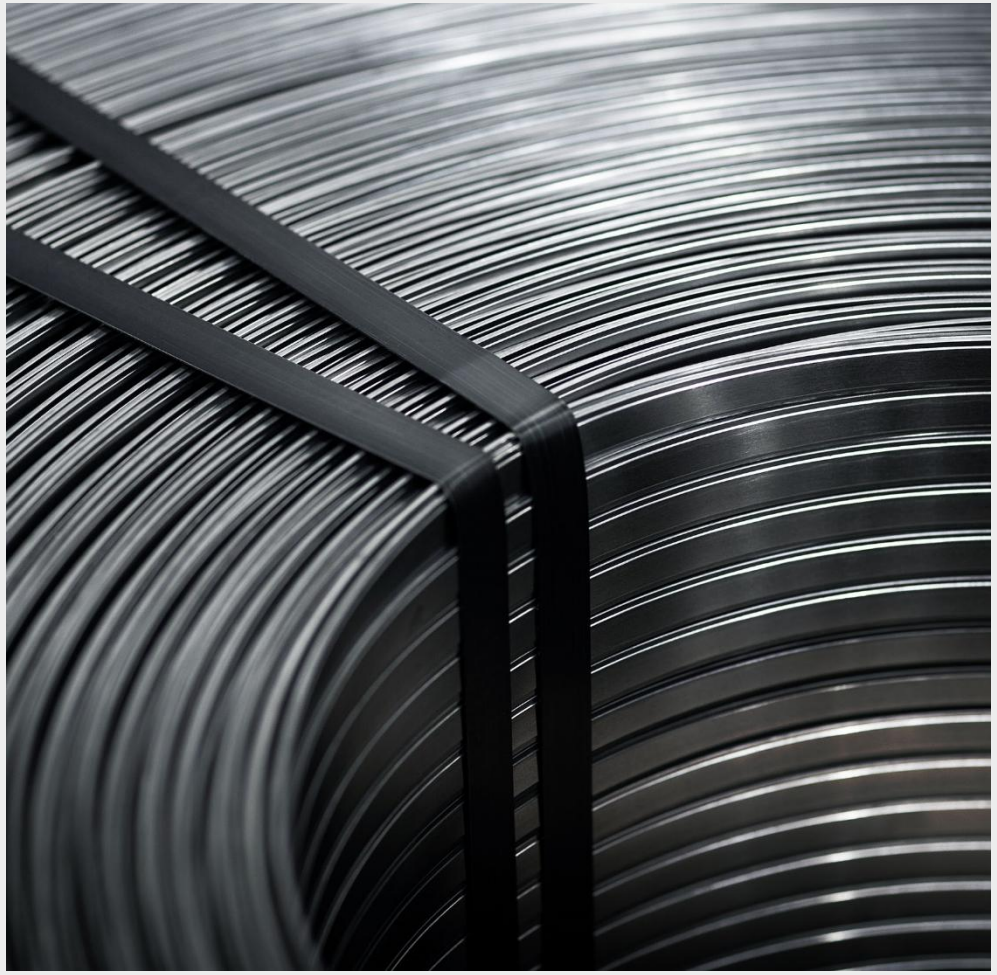
Note:

1) All products of every size and color
2) The minimum recycled, recovered, by-product content does not imply that all three types are included in the product. In particular, this value may not correspond to the sum of the minimum content of each fraction.

Production units: Via Facini, 54, 33013 Gemona UD - Via della Cartiera, 3 Osoppo (UD), Italia

Methodology for the determination of the recycled/recovered/by-product content: Regulation for the verification and validation of environmental declarations on recycled content into steel products – IGQ – SC026 in compliance with UNI PdR 88:2020

References



- **ISO 14040:2006/Amd 1:2020** Environmental management - Life cycle assessment - Principles and framework
- **ISO 14044:2006/Amd 2:2020** Environmental management — Life cycle assessment — Requirements and guidelines — Amendment 1
- **ISO 14020:2000** Environmental labels and declarations -- General principles
- **EN 15804:2012+A2:2019** Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction works
- **PD CEN/TR 16970:2016** Sustainability of construction works – Guidance for the implementation of EN 15804
- **PD CEN/TR 15941:2010** Sustainability of construction works – Environmental Product Declarations – Methodology for selection and use of generic data.
- **PCR ICMQ-001/15 rev.3.1 del 12/11/2024**
- **EPDItaly Regulation rev.6 (30/10/2023)**
- **Report EPD SIAT rev 3.0 23.05.25**