

ENVIRONMENTAL PRODUCT DECLARATION

SPLICING AND ANCHORING SYSTEMS

TAPER-THREADED SPLICING SYSTEMS, TAPER-THREADED TERMINATORS AND MECHANICAL ANCHORS, AND ULTIMATE SPLICING SYSTEMS



nVent LENTON is a world leader in advanced mechanical rebar splicing systems. Our Rebar Splicing Specialists understand the reinforced concrete business and inherent rebar splicing challenges on today's job sites

nVent LENTON has provided problem-solving solutions in thousands of the most well-known buildings, bridges and roads worldwide, so you can trust in the brand that has been setting the standard worldwide for more than 50 years.



ENVIRONMENTAL PRODUCT DECLARATION



STEEL TAPER THREADED PRODUCTS

Taper Threaded Splicing Systems, Terminator Mechanical Anchors,
Ultimate Splicing Systems



According to ISO 14025
and EN 15804+A2

EPD PROGRAM AND PROGRAM OPERATOR NAME, ADDRESS, LOGO, AND WEBSITE	UL Solutions 333 Pfingsten RD, Northbrook IL, 60062 www.ul.com www.spot.ul.com
GENERAL PROGRAM INSTRUCTIONS AND VERSION NUMBER	UL Solutions Program Operator Rules v2.7 2022
MANUFACTURER NAME AND ADDRESS	nVent LENTON Jules Verneweg 75 5015 BG Tilburg Netherlands
DECLARATION NUMBER	4791847269.101.1
DECLARED PRODUCT & DECLARED UNIT	1,000 kg of product
REFERENCE PCR AND VERSION NUMBER	UL Part A: Life Cycle Assessment Calculation Rules and Report Requirements, Standard 10010, Version 4.0 UL Part B: Designated Steel Construction Product EPD Requirements, UL 10010-34, Second Edition
DESCRIPTION OF PRODUCT APPLICATION/USE	Provide a positive locking connection and structural integrity in reinforced concrete, create anchorage within the concrete and/or create mechanical reinforcing bar connections
MARKETS OF APPLICABILITY	Europe
DATE OF ISSUE	July 23 rd , 2025
PERIOD OF VALIDITY	5 Years
EPD TYPE	Product specific
RANGE OF DATASET VARIABILITY	N/A
EPD SCOPE	Cradle-to-Gate with options (A1-A3, A4-A5, C1-C4, D)
YEAR(S) OF REPORTED PRIMARY DATA	2023
LCA SOFTWARE & VERSION NUMBER	Sphera LCA for Experts (fka GaBi) 10.9
LCI DATABASE(S) & VERSION NUMBER	Sphera Managed LCA Content (fka GaBi) 2025.1
LCIA METHODOLOGY & VERSION NUMBER	EN15804+A2 (EF 3.1)

The PCR review was conducted by:

UL Solutions

PCR Review Panel

epd@ul.com

This declaration was independently verified in accordance with ISO 14025: 2006.

☐ INTERNAL

☒ EXTERNAL

Cooper McCollum, UL Solutions

This life cycle assessment was conducted in accordance with ISO 14044 and the reference PCR by:

WAP Sustainability

This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by:

Sung Mo Yeon, H.I.P. Pathway

LIMITATIONS

Exclusions: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc.

Accuracy of Results: EPDs regularly rely on estimations of impacts; the level of accuracy in estimation of effect differs for any particular product line and reported impact.

Comparability: EPDs from different programs may not be comparable. Full conformance with a PCR allows EPD comparability only when all stages of a life cycle have been considered. However, variations and deviations are possible. Example of variations: Different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared.



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1. Product Definition and Information

1.1. Description of Company/Organization

nVent LENTON is a global brand with local support when our customers need it. The team provides in-depth guidance about engineered solutions for structural engineers and contractors, saving time in the construction process on the job. With plants in North America, Europe and Asia, products can get to the distributor with minimal delays.

Our engineering capabilities, broad experience and extensive testing base allow us to provide engineers and contractors with product solutions, like our multiple splicing and anchorage systems, for all rebar splicing challenges.

1.2. Product Description



Figure 1: Taper Threaded Splicing Systems Product Image

Taper-Threaded Splicing Systems

nVent LENTON Taper-Threaded Splicing Systems provide a positive locking connection and structural integrity in reinforced concrete construction. nVent LENTON spliced bars behave as continuous lengths of reinforcing steel bars by providing “full strength” in tension, compression and stress reversal applications. The self-aligning, taper-threaded design provides for ease of installation, consistent performance and durability. It also develops higher tensile strength than lap splices and provides for full load transfer with some of the slimmest and shortest couplers possible.



Figure 2: Terminator Mechanical Anchors Product Image

Taper-Threaded Terminators and Mechanical Anchors

Mechanical Anchors, often called headed bars, are secured to the end of a length of reinforcing steel bar (rebar), creating anchorage within the concrete. This approach greatly simplifies reinforcing bar placement and reduces congestion. Headed bars are often used as a replacement for hooked bars. nVent provides a variety of headed bar solutions including the nVent LENTON Taper-Threaded Terminator, which incorporates the time-tested and field-proven nVent LENTON tapered thread to attach the “head” to the reinforcing bar.



Figure 3: Ultimate Splicing Systems Product Image

Ultimate Splicing Systems

The nVent LENTON Ultimate Splicing Systems and Terminators are designed to maximize performance and shop efficiency as well as minimize installation difficulty in the field. Ultimate products are attached to the reinforcing steel using friction forging technology (commonly called friction welding). Each friction welder is manufactured with state-of-the-art control systems and quality monitoring to ensure every connection is produced as intended. The product design and optimized friction welding parameters maximize the performance of the rebar connections with multiple types and grades of rebar. The Ultimate system is robust, allowing for the inherent variability of rebar while maintaining the highest level of performance.



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Product Specification

This EPD covers the following products from CSI division 05 05 23 – Metal fastenings, associated with HS code 7308909590:

Table 1: Products Covered

PRODUCT SYSTEM	PRODUCT	PART NUMBER
Taper Threaded Splicing Products	A12 Standard Coupler, Plain	EL25A12N
	A12 Standard Transition Coupler, plain	EL2520A12N
	P13 Position Couplers	EL25P13LN
	P14 Position Couplers	EL25P14LN
	P13 Position Transition Couplers	EL2520P13LN
	P14 Position Transition Couplers	EL2520P14LN
	C15 Weldable Half Coupler	EL25C15N
	C14 Two-piece Weldable Coupler	EL25C14N
	C12SW Side Weldable Half-coupler	EL25C12SWSP01
Taper-Threaded Terminators and Mechanical Anchors	S13 Metric Parallel Bolt Coupler, plain	EL25S13N
	D14 Mechanical Anchor, plain	EL25D14N
	D16 Mechanical Anchor, plain	EL25D16N
Ultimate Splicing Systems	MT02 Male Taper Stud	LU25MT02
	FT02 Female Standard Coupler	LU25FT02
	PM09 Female Position Assembly	LU25PM09



Figure 4: Steel Taper Threaded Products Image

Product Average

The LCA details and results presented in this study will be reported as an average across all products, as their total Global Warming Potential (GWP) results fall within a 10% range of each other. Additionally, there are minimal differences in product composition which do not significantly influence the environmental outcomes between the products. The weighted average of all products has been determined by the manufacturing times between the standard and position couplers. It assumed that total production time is correlated to annual electricity consumption.

Table 2: Technical Data

PRODUCT NAME	REBAR SIZE DESIGNATION [MM]	WEIGHT [KG]
A12 Standard Coupler, Plain	10 – 57	0.07 – 4.45
A12 Standard Transition Coupler, plain	16-12 – 50-32	0.14 – 3.00
P13 Position Couplers	10 – 57	0.36 – 17.11
P14 Position Couplers	10 – 57	0.27 – 12.05
P13 Position Transition Couplers	12/10 – 57/50	0.40 – 18.66
P14 Position Transition Couplers	12/10 – 57/50	0.29 – 13.31
C15 Weldable Half Coupler	10 – 57	0.06 – 3.19



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PRODUCT NAME	REBAR SIZE DESIGNATION [MM]	WEIGHT [KG]
C14 Two-piece Weldable Coupler	10 – 57	0.27 – 12.31
C12SW Side Weldable Half-coupler	12 – 40	0.14 – 2.75
S13 Metric Parallel Bolt Coupler, plain	10 – 57	0.07 – 6.78
D14 Mechanical Anchor, plain	10 – 57	0.13 – 9.72
D16 Mechanical Anchor, plain	10 – 57	0.13 – 5.74
MT02 Male Taper Stud	10 – 50	0.10 – 2.51
FT02 Female Standard Coupler	10 – 50	0.10 – 2.67
PM09 Female Position Assembly	10 – 50	0.44 – 8.46

1.3. Application

nVent LENTON Taper-Threaded Splicing Systems provide a positive locking connection and structural integrity in reinforced concrete construction. nVent LENTON spliced bars behave as continuous lengths of reinforcing steel bars by providing “full strength” in tension, compression and stress reversal applications. The nVent LENTON self-aligning, taper-threaded design provides for ease of installation, consistent performance and durability. It also develops higher tensile strength than lap splices and provides for full load transfer with some of the slimmest and shortest couplers possible. Mechanical Anchors like the nVent LENTON Terminator are secured to the end of a length of reinforcing steel bar (rebar), creating anchorage within the concrete to replace hooked or bent ends.

1.4. Technical Requirements

Technical requirements can be found on the nVent LENTON product overview sites:

- nVent LENTON Taper-Threaded Splicing Systems: <https://www.nvent.com/en-nl/lenton/products/nvent-lenton-taper-threaded-splicing-systems>
- nVent LENTON Taper-Threaded Terminators and Mechanical Anchors: <https://www.nvent.com/en-nl/lenton/products/nvent-lenton-taper-threaded-terminators-and-mechanical-anchors>
- nVent LENTON Ultimate Splicing Systems and Terminators: <https://www.nvent.com/en-nl/lenton/products/nvent-lenton-ultimate-splicing-systems-and-terminators>

1.5. Properties of Declared Product as Delivered

The final product can have protective plastic end caps added as a protection, and it is packaged in a plastic bag and sold in a cardboard box.

1.6. Material Composition

The product average material composition is shared in Table 3 below.





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Table 3. Material composition

MATERIAL	AVERAGE COMPOSITION (%)	RECYCLED CONTENT (%)	BIOGENIC CARBON CONTENT (KG C / KG)
Steel	97 – 99%	95.9%	0
Plastic packaging	0 – 2%	0	0
Cardboard packaging	0 – 2%	0	1.85E-02

1.7. Manufacturing

The product is manufactured in Tilburg, Netherlands, and the process begins with steel billets sourced from European suppliers. These billets are machined using CNC equipment, where they are cut and shaped. The machined parts then move to the assembly line, where some receive plastic protective covers. Next, a rust prevention spray is applied, and the products are packaged in plastic liner bags placed inside cardboard boxes. Finally, the packages are labeled and prepared for shipping.

1.8. Packaging

The packaging consists of protective end caps, a plastic bag for enclosing the product, and an outer cardboard box. The cardboard packaging is recyclable.

1.9. Transportation

The product is distributed directly from the Tilburg site to customers across Europe.

1.10. Product Installation

The equipment required for installation of the product does not require energy. No maintenance is required after installation.

1.11. Reuse, Recycling, and Energy Recovery

The recycling rates used at end-of-life are based on 2020 Eurostat waste rates for ferrous metal wastes, which indicate the product is 100% recycled.

1.12. Disposal

The product is assumed to be 100% recycled, based on 2020 Eurostat waste rates for ferrous metals.



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1.13. Interpreting the Results in Module D

The values in Module D include a recognition of the benefits or impacts related processes will evolve over time. The results included in Module D attempt to capture future benefits, or impacts, but are based on a methodology that uses current industry average data reflecting current processes.



2. Life Cycle Assessment Background Information

2.1. Functional or Declared Unit

1,000 kg (1 metric ton) of product, with a gross density of 7,850 kg/m³.

Results per kilogram can be obtained by dividing the following LCA results by 1,000.

2.2. System Boundary

Cradle-to-Gate with Options (A1-A3, A4-A5, and C1-C4)

Table 4. Description of the system boundary modules

	PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARY
	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
	Raw material supply	Transport	Manufacturing	Transport from gate to site	Assembly/Install	Use	Maintenance	Repair	Replacement	Refurbishment	Building Operational Energy Use During Product Use	Building Operational Water Use During Product Use	Deconstruction	Transport	Waste processing	Disposal	Reuse, Recovery, Recycling Potential
Cradle-to-Gate with Options	X	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X

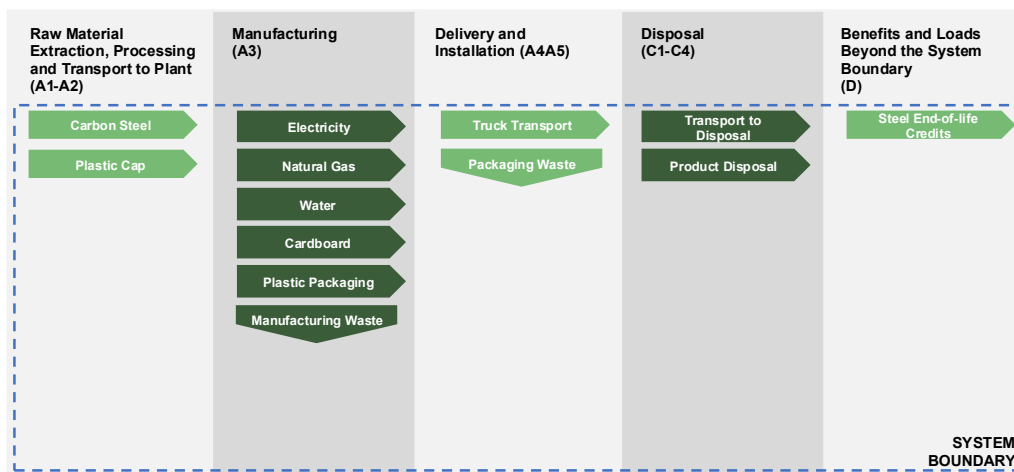


Figure 5. Product Flow Diagram



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2.3. Estimates and Assumptions

All estimates and assumptions are within the requirements of ISO 14040/44 and EN 15804+A2. The primary data was collected as annual totals for electricity usage and production volume. The utility consumption per unit was determined by the relative manufacturing times of the standard and position couplers, under the assumption that total production time is directly proportional to annual electricity usage.

2.4. Cut-off Criteria

Material inputs greater than 1% (based on total mass of the final product) were included within the scope of analysis. Material inputs less than 1% were included if sufficient data was available to warrant inclusion and/or the material input was thought to have significant environmental impact.

2.5. Data Sources

Primary data were collected by facility personnel and from utility bills and was used for all manufacturing processes. Whenever available, supplier data was used for raw materials used in the production process. When primary data did not exist, secondary data for raw material production was utilized from Sphera Managed LCA Content Database 2025.1.

2.6. Data Quality

The geographical scope of the manufacturing portion of all life cycle modules is Europe. All primary data were collected from the manufacturer. The geographic coverage of primary data is considered excellent. Time coverage of this data is considered good. Primary data provided by the manufacturer is specific to the technology used in manufacturing their product. It is site-specific and considered of good quality. Data necessary to model cradle-to-gate unit processes was sourced from Sphera Managed LCA Content LCI datasets.

2.7. Period under Review

The period under review is the calendar year 2023.

2.8. Allocation

General principles of allocation were based on ISO 14040/44. To derive a per-unit value for manufacturing inputs such as electricity, thermal energy and water, allocation based on production time was adopted.



3. Life Cycle Assessment Scenarios

Table 5. Transport to the building site (A4)

NAME	VALUE	UNIT
Fuel type	Diesel	
Liters of fuel	56.2	l/100km
Vehicle type	Truck-trailer, Euro 1, 34 - 40t gross weight / 27t payload capacity	
Transport distance	100	km
Capacity utilization (including empty runs, mass based)	61	%
Gross density of products transported	7.85E+03	kg/m ³
Capacity utilization volume factor	1	-

Table 6. Installation into the building (A5)

NAME	VALUE	UNIT
Ancillary materials	0.00E+00	kg
Net freshwater consumption	0.00E+00	m ³
Other resources	0.00E+00	kg
Electricity consumption	0.00E+00	kWh
Other energy carriers	0.00E+00	MJ
Product loss per functional unit	0.00E+00	kg
Packaging waste materials at the construction site before waste processing, generated by product installation	2.24E+01	kg
Output materials resulting from on-site waste processing	0.00E+00	kg
Biogenic carbon contained in packaging	1.80E+01	kg CO ₂
Direct emissions to ambient air, soil and water	N/A	kg
VOC content	N/A	µg/m ³

Table 7. End of life (C1-C4)

NAME		VALUE	UNIT
Recovery (specified by type)	Reuse	0.00E+00	kg
	Recycling	1.00E+03	kg
	Landfill	0.00E+00	kg
	Incineration	0.00E+00	kg
	Incineration with energy recovery	0.00E+00	kg
Disposal (recycling)	Product or material for final deposition	1.00E+03	kg
Removals of biogenic carbon (excluding packaging)		0.00E+00	kg CO ₂

Table 8. Benefits and Loads Beyond the System Boundary (D), relevant information

NAME	VALUE	UNIT
Recycling rate of the product	100	%
Recycled content of the product	95.9 ¹	%

¹ This value is based on external supplier and worldsteel information (where the post-consumer recycled content is unknown).



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4. Life Cycle Assessment Results

4.1. Life Cycle Impact Assessment Results

All results are a weighted average of all products, per declared unit. The variability of the results is less 10% between the products. Modules B1 through B7 are not declared, and have been excluded in the results tables for readability.

Results per kilogram can be obtained by dividing the following LCA results by 1,000.

Table 9. LCA Impact Assessment Results

EF 3.1	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP total [kg CO ₂ eq]	1.42E+03	7.57E+01	7.18E+00	0.00E+00	9.59E+00	0.00E+00	0.00E+00	-6.72E+01
GWP fossil [kg CO ₂ eq]	1.41E+03	7.56E+01	6.86E+00	0.00E+00	9.58E+00	0.00E+00	0.00E+00	-8.29E+01
GWP biogenic [kg CO ₂ eq]	1.13E+01	3.69E-02	3.15E-01	0.00E+00	4.68E-03	0.00E+00	0.00E+00	1.57E+01
GWP land use [kg CO ₂ eq]	1.71E+00	2.90E-03	5.78E-04	0.00E+00	3.67E-04	0.00E+00	0.00E+00	-1.29E-03
ODP [kg CFC-11 eq]	1.18E-05	2.09E-11	1.63E-12	0.00E+00	2.65E-12	0.00E+00	0.00E+00	4.74E-11
AP [Mole of H ⁺ eq]	5.74E+00	6.34E-01	2.96E-03	0.00E+00	8.04E-02	0.00E+00	0.00E+00	-1.99E-01
EP freshwater [kg PO ₄ eq]	3.73E-03	1.92E-05	1.70E-05	0.00E+00	2.43E-06	0.00E+00	0.00E+00	-1.51E-04
EP marine [kg N eq]	1.72E+00	3.20E-01	1.23E-03	0.00E+00	4.05E-02	0.00E+00	0.00E+00	-3.61E-02
EP terrestrial [mol N eq]	1.89E+01	3.51E+00	1.49E-02	0.00E+00	4.44E-01	0.00E+00	0.00E+00	-3.27E-01
POCP [kg NMVOC eq]	4.32E+00	6.16E-01	2.67E-03	0.00E+00	7.80E-02	0.00E+00	0.00E+00	-1.48E-01
ADP elements ² [kg Sb-eq]	1.12E-02	2.82E-06	2.63E-08	0.00E+00	3.57E-07	0.00E+00	0.00E+00	-4.02E-04
ADP fossil ¹ [MJ]	1.99E+04	1.00E+03	6.45E+00	0.00E+00	1.27E+02	0.00E+00	0.00E+00	-1.13E+03
WDP [m ³]	1.26E+02	1.00E-01	6.71E-01	0.00E+00	1.27E-02	0.00E+00	0.00E+00	-4.92E+00

Comparability: Comparisons cannot be made between product-specific or industry average EPDs at the design stage of a project, before a building has been specified. Comparisons may be made between product-specific or industry average EPDs at the time of product purchase when product performance and specifications have been established and serve as a functional unit for comparison. Environmental impact results shall be converted to a functional unit basis before any comparison is attempted.

Any comparison of EPDs shall be subject to the requirements of ISO 21930. EPDs are not comparative assertions and are either not comparable or have limited comparability when they have different system boundaries, are based on different product category rules or are missing relevant environmental impacts. Such comparison can be inaccurate, and could lead to erroneous selection of materials or products which are higher-impact, at least in some impact categories.

4.2. Life Cycle Inventory Results

¹ Abiotic Resource Depletion Potential of Non-renewable (fossil) energy resources (ADP_{fossil}, in MJ, LHV) is based on CML-baseline, v4.7 August 2016.

² The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.



Table 10. Resource Use

PARAMETER	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE [MJ, LHV]	4.35E+03	8.45E+01	1.07E+00	0.00E+00	1.07E+01	0.00E+00	0.00E+00	-2.69E+02
PERM [MJ, LHV]	1.47E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT [MJ, LHV]	4.50E+03	8.45E+01	1.07E+00	0.00E+00	1.07E+01	0.00E+00	0.00E+00	-2.69E+02
PENRE [MJ, LHV]	1.17E+04	1.00E+03	6.45E+00	0.00E+00	1.27E+02	0.00E+00	0.00E+00	-1.13E+03
PENRM [MJ, LHV]	3.46E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT [MJ, LHV]	1.20E+04	1.00E+03	6.45E+00	0.00E+00	1.27E+02	0.00E+00	0.00E+00	-1.13E+03
SM [kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW [m ³]	2.16E+00	5.11E-03	1.60E-02	0.00E+00	6.48E-04	0.00E+00	0.00E+00	-7.18E+00

Table 11. Output Flows and Waste Categories

PARAMETER	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD [kg]	1.86E-05	4.76E-08	1.76E-09	0.00E+00	6.03E-09	0.00E+00	0.00E+00	-6.18E-06
NHWD [kg]	2.13E+02	8.56E-02	1.60E+00	0.00E+00	1.08E-02	0.00E+00	0.00E+00	9.01E+00
RWD [kg]	5.64E-02	8.21E-04	1.14E-04	0.00E+00	1.04E-04	0.00E+00	0.00E+00	-2.57E-04
CRU [kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR [kg]	2.67E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E+03	0.00E+00	0.00E+00
MER [kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EEE [MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EET [MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Table 12. Additional Indicators

PARAMETER	A1-A3	A4	A5	C1	C2	C3	C4	D
PM [disease incidence]	4.23E-05	4.69E-06	2.63E-08	0.00E+00	5.95E-07	0.00E+00	0.00E+00	-1.98E-06
IRP ³ [kBq U235 eq]	4.86E+01	9.35E-02	1.54E-02	0.00E+00	1.19E-02	0.00E+00	0.00E+00	1.36E+00
ETP-fw ⁴ [CTUe]	3.90E+03	6.45E+02	5.01E+00	0.00E+00	8.17E+01	0.00E+00	0.00E+00	-3.38E+02
HTP-c ³ [CTUh]	1.66E-07	1.00E-08	1.40E-10	0.00E+00	1.27E-09	0.00E+00	0.00E+00	2.36E-08
HTP-nc ³ [CTUh]	8.61E-06	1.62E-07	8.27E-09	0.00E+00	2.05E-08	0.00E+00	0.00E+00	5.13E-08
SQP ³ [Pt]	3.79E+03	5.70E+00	8.11E-01	0.00E+00	7.22E-01	0.00E+00	0.00E+00	-1.68E+03

³ This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

⁴ The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.



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Table 13. Carbon Emissions and Removals

PARAMETER	A1-A3	A4	A5	C1	C2	C3	C4	D
BCRP [kg CO ₂]	1.80E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BCEP [kg CO ₂]	0.00E+00	0.00E+00	1.80E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BCRK [kg CO ₂]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BCEK [kg CO ₂]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BCEW [kg CO ₂]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CCE [kg CO ₂]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CCR [kg CO ₂]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CWNR [kg CO ₂]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00





STEEL TAPER THREADED PRODUCTS
Taper Threaded Splicing Systems, Terminator Mechanical Anchors,
Ultimate Splicing Systems



According to ISO 14025
and EN 15804+A2

5. LCA Interpretation

The raw material stage (A1) is the dominant contributor to environmental impacts across all products, accounting for 76% of total Global Warming Potential (GWP) as shown in Figure 1. Steel is the primary driver, contributing 74% to GWP total due to its high content in the products (97–99%) and the resource and energy-intensive nature of its production. Transport and electricity used for manufacturing contribute 17% and 5% to GWP total, respectively.

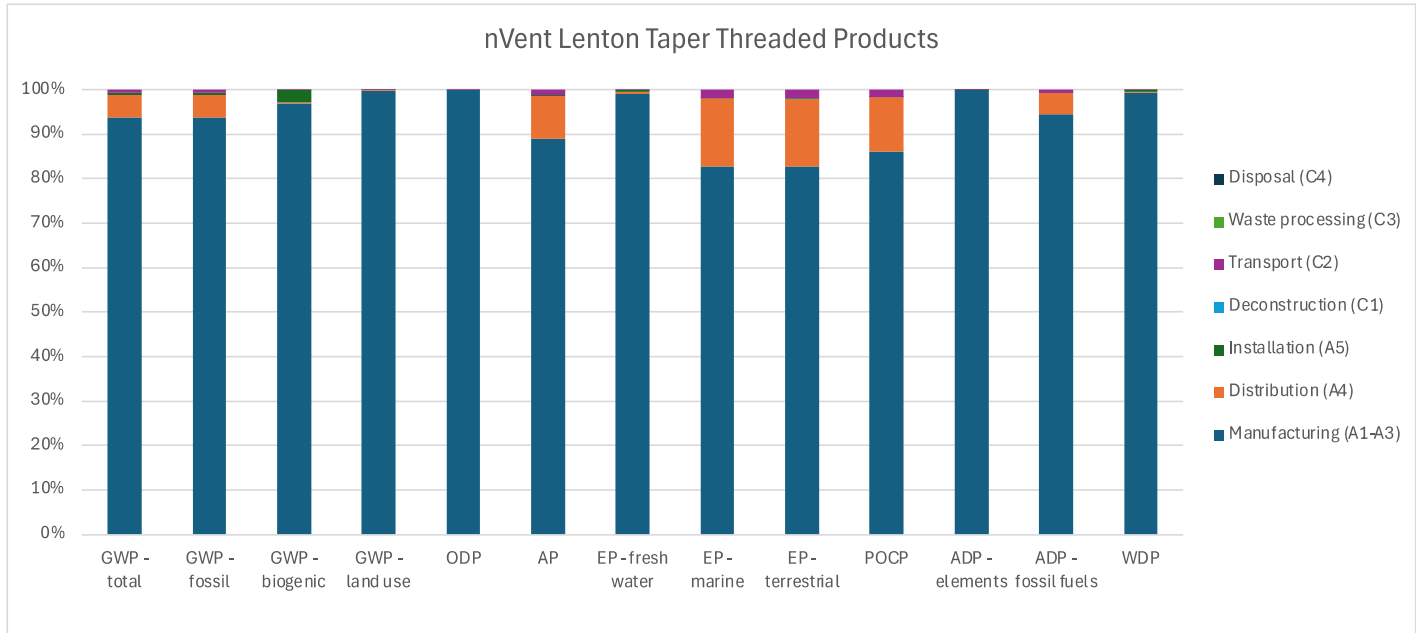


Figure 6: LCIA Results for nVent LENTON Taper Threaded Products





STEEL TAPER THREADED PRODUCTS

Taper Threaded Splicing Systems, Terminator Mechanical Anchors,
Ultimate Splicing Systems



According to ISO 14025
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6. Additional Environmental Information

8.1. Environment and Health During Manufacturing

nVent Promotes a work environment philosophy where safeguarding our people and the environment is integral to our operations. We care about the health and safety of our employees, our customers, the communities in which we operate, and the environment. Consistent with our values, nVent is committed to designing, manufacturing and distributing our products and providing services to our customers in a safe and responsible manner.

8.2. Environment and Health During Installation

nVent products shall be installed and used only as indicated in nVent product instruction sheets and training materials. Instruction sheets are available at www.nVent.com and from your nVent customer service representative.

nVent products must never be used for a purpose other than the purpose for which they were designed or in a manner that exceeds specified load ratings.

All instructions must be completely followed to ensure proper and safe installation and performance.

Improper installation, misuse, misapplication, or other, failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury, and/or death, and void your warranty.

All governing codes and regulations and those required by the job site must be observed.

Always use appropriate safety equipment such as eye protection, hard hat, and gloves as appropriate to the application.

8.3. Environmental Activities and Certifications

For more information on nVent's sustainability activities and certifications, go to <https://www.nvent.com/en-us/about-nvent/sustainability>.

8.4. Further Information

Further information the products covered by this declaration can be found on the nVent LENTON product sites:

- nVent LENTON Taper-Threaded Splicing Systems: <https://www.nvent.com/en-nl/lenton/products/nvent-lenton-taper-threaded-splicing-systems>
- nVent LENTON Taper-Threaded Terminators and Mechanical Anchors: <https://www.nvent.com/en-nl/lenton/products/nvent-lenton-taper-threaded-terminators-and-mechanical-anchors>
- nVent LENTON Ultimate Splicing Systems and Terminators: <https://www.nvent.com/en-nl/lenton/products/nvent-lenton-ultimate-splicing-systems-and-terminators>



9. References

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