

Environmental Product Declaration



In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

Vehicle restraint systems

from

Saferoad RRS GmbH



Programme:	The International EPD® System, www.environdec.com
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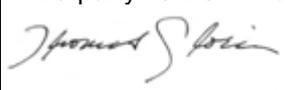
An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com



General information

Programme information

Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
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Accountabilities for PCR, LCA and independent, third-party verification
Product Category Rules (PCR)
CEN standard EN 15804 +A2/AC serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): Construction Products <i>PCR 2019:14 v1.3.4</i>
PCR review was conducted by: The Technical Committee of the International EPD® System. A full list of members available on www.environdec.com . Chair of the PCR review: Claudia A. Peña. The review panel may be contacted via info@environdec.com .
Life Cycle Assessment (LCA)
LCA accountability: <i>Mando Kort, Ecochain Technologies</i>
Third-party verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: <input checked="" type="checkbox"/> EPD verification by individual verifier Third-party verifier: <i>Thomas Gloria, Industrial Ecology Consultants</i>  Approved by: The International EPD® System
Procedure for follow-up of data during EPD validity involves third party verifier: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

Company information

Owner of the EPD:

Saferoad RRS GmbH

Contact:

Thomas Knaus, Thomas.knaus@saferoad-rrs.de

Description of the organisation:

Saferoad offers a comprehensive and innovative range of vehicle restraint systems. Our services include manufacturing, delivery, installation, and repair. Our vehicle restraint systems can be customized to provide optimum solutions and all are designed and tested according to European standards.

Saferoad offers a widespread product range of vehicle restraint systems, which covers all areas of use on roads and motorways and can easily be adapted to local conditions and requirements. With leading brands such as MegaRail, SafeStar, Vik and Birsta, we cover a wide range of containment levels. In end terminals, we offer SafeEnd, as one of the first end-terminals that has been tested in accordance with the coming standard prEN 1317-7. Hence, it represents the next generation of energy absorbing terminals.

Saferoad's ambition is to comply with all relevant environmental legislation and regulations in the countries where it operates and to contribute to a sustainable environment to the best of its ability. Saferoad strives to make the production and products as environmentally friendly as possible.

Saferoad aims to make its processes and products as environmentally friendly as possible and strives to handle, transport and sort hazardous goods and waste in a secure manner. We choose, if possible, sustainable products and resources, and prefer suppliers and sub-contractors with environmentally friendly production and products in order to actively contribute to the environment and be a role model to our partners.

Product-related or management system-related certifications:

ISO 9001:2015 by DEKRA (A22061269) valid to 2026-03-18

Name and location of production site(s):

Inter Metal Sp. z o.o.
ul. Marcinkowskiego 150
88-100 Inowrocław
POLAND

Product information

Product name:

Galvanized steel components for Vehicle restraint systems

Product identification:

EN 1317ff

Product description:

Vehicle restraint systems are part of the road equipment to improve the passive safety in the traffic. On the one hand it prevents vehicles from driving in the opposite lane, off the road, into objects that are

dangerous or into objects that need to be protected. On the other hand, the vehicle restraint system shall protect the passenger from high impact forces. Based on the road and national regulations the best system is chosen for each situation. The components of Saferoad's guard rails consist of steel. Normally the main components are a horizontal beam and a post, that is rammed into the ground and connects to the beam.

Depending on national requirements those beams can be roll formed as the A-profile (Armco Flex-Beam guard rail) also known as 2-wave beams, or as the more edged and angular B-profile (Bethlehem Safety-Beam).

If the requirements are higher Saferoad has also systems with 3-wave beams tested and certified. All parts get assembled at the road construction site and connected with fasteners (bolts, nuts, and washers).

All parts are galvanized according to EN 1461.

There are no substances of very high concern for authorisation.

For more information, visit: <https://www.saferoad-rs.com/>

LCA information

Functional unit / declared unit:

The declared unit used in the LCA study for the product is 1 kilogram of product.

Reference service life:

The RSL for this product is 20 years. After this period, the zinc layer has worn off and needs replacement.

Time representativeness:

The year covered by the data used for the LCA calculation is from 2021.

Database(s) and LCA software used:

For life cycle modelling of the considered product, the Ecolnvent database 3.6 was used. The modelling was done in the LCA software Ecochain Helix version 4.0.

Description of system boundaries, cut-off criteria and assumptions:

The EPD considers Cradle to gate with modules C1–C4 and module D. Mentioned in full: Raw material supply (A1), Transport of these materials (A2), the manufacturing of vehicle restraint system (A3), the deconstruction of the vehicle restraint systems (C1), the transport to the waste processor (C2), the waste processing itself (C3), the waste disposal (C4), and finally the benefits and loads beyond the system boundaries (D).

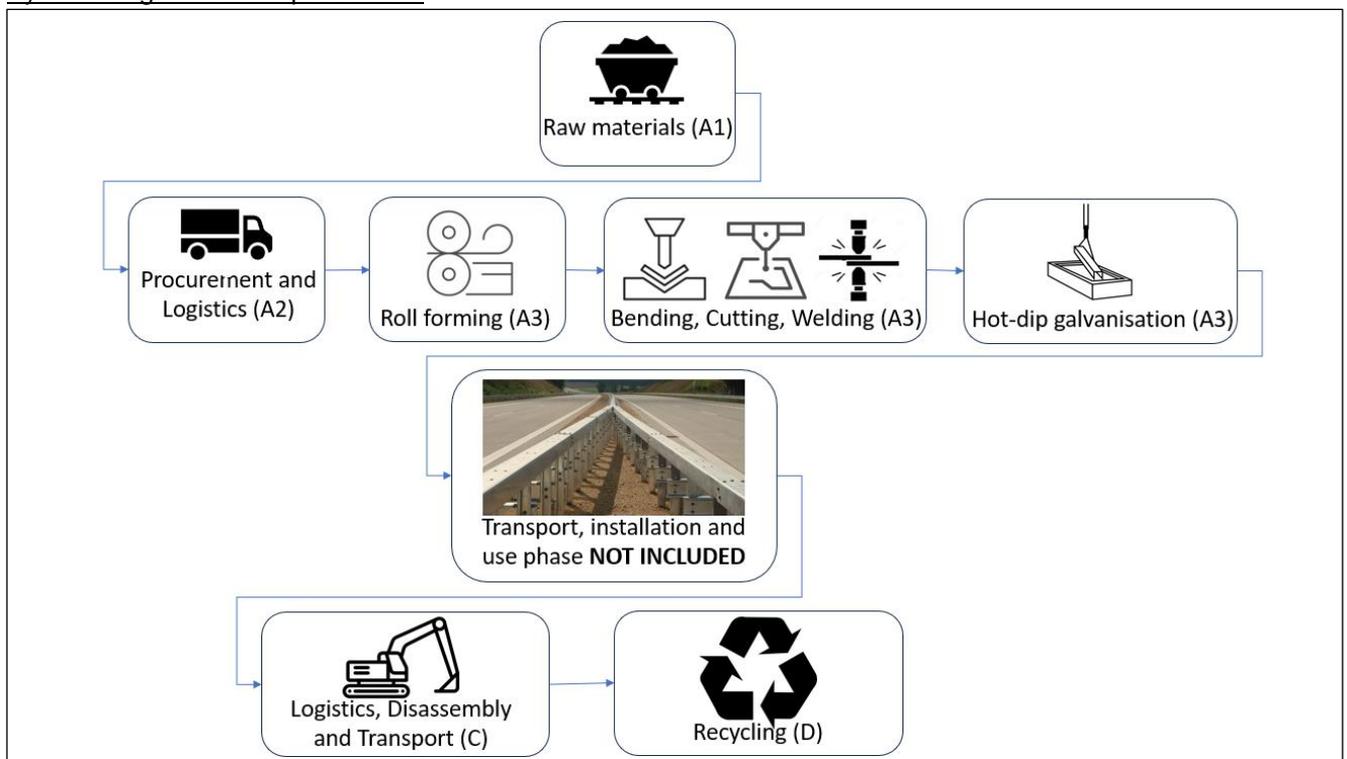
All relevant inputs and outputs - like emissions, energy and materials - have been taken into account in this LCA. And in accordance with EN15804+A2:2019 the total neglected input flows per module do not exceed 5% of energy usage and mass. In this LCA, the waste processes are allocated in the relevant module. In the case of the use of secondary materials or energy recovered from secondary fuels, the system boundary between the system under study and the previous system (providing the secondary materials) is set where outputs of the previous system, e.g. materials, products, building elements or energy, reach the end-of-waste state. All processes were included.

The system boundaries that have been adopted are in accordance with modular approach of EN 15804+A2. The allocation has been done based on a bulk method, in which the usages and emissions of a full production year are taken into account. The emissions are divided over internal processes, and thereafter over the full production portfolio. This is done to determine the average emissions per product. The infrastructure emissions in the declared modules are included.

Multiple products coverage:

This EPD can only be used for vehicle restraint systems which originate from the Inter Metal factory, located in Poland (Inowroclaw). The material used for production is mainly hot-rolled steel ordered as coils. The rest of the material is sheets and pipes. Thicknesses are 2-10 mm and the steel grade is S235JR and S355JR. The list of products is attached below in the Annex.

System diagram for the production:



Manufacturing process:

The material used for production is mainly hot-rolled steel ordered as coils. The rest of the material is sheets and pipes. Thicknesses are 2-10 mm and the steel grade is S235JR and S355JR.

Saferoad differentiates between material procurement (coils, zinc, sheets, pipes, fasteners), black material production and galvanization. The first step in black material production is the hot rolling process. An integrated process in the roll formers is punching and cutting. For most parts this is the only process. Some parts, for example, posts with base plates need to be laser cut, assembled, and welded together. Instead of roll forming it is also possible to use cutting, punching, and bending on a bench press as separate processes. Electricity used in this model is based on the AIB, European Residual Mixes, with a CO2 intensity factor of 858.12 gCO2/kWh for Poland.

The galvanization is the final production step. Inter Metal has its own hot-dip galvanization plant. The parts are jigged and dipped in hot zinc according to EN ISO 1461 to protect the parts against corrosion. From there the material is shipped to the customer or to storage hubs all over Europe.

Modules declared, geographical scope, share of specific data (in GWP-GHG results) and data variation (in GWP-GHG results):

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	Poland																
Specific data used	>95% for A1-A3					-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	Not relevant					-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	Not relevant					-	-	-	-	-	-	-	-	-	-	-	-

Geographical scope:
Poland (Inorwoclaw)

Content information

Product components	Weight, kg	Post-consumer material, weight-%	Biogenic material, weight-% and kg C/kg
Steel	0.9661	0.9661	0.00
Zinc	0.0339	0.00	0.00
TOTAL	1.00	0.9661	0.00

Assumptions EoL scenario's

Demolition (Module C1):

Demolition is done by the means of an excavator. No other machines are used. On site the excavator needs 32 Liters of diesel per hour. The performance of a machine is 3.1 km per 8 hour shift. The average vehicle restraint system weights 29 kilograms per meter.

Transport of waste materials (Module C2):

The vehicle restraint systems are transported to the waste processing. The diesel demand per construction site is 160 Liters. A construction site entails 5km of vehicle restraint system with a weight of 29 kg per meter.

Waste processing of the materials (C3):

The material gets 100% processed. Then it is sold to a scrap dealer. A scrap container is next to the construction site where the excavator unloads directly into it. The treatment for sorting and pressing of scrap is used as first process.

Disposal of the materials (C4):

There is no waste of material during the process, therefore disposal is not necessary.

Recycling of the materials (Module D):

The material gets 100% recycled. The scrap metal is thrown in the melting furnace and new steel is produced. Low alloyed steel holds 57% virgin material and 43% recycled material. Therefore, only 57% can be seen as benefit in module D. Therefore, from the 0.966 kg of steel in 1 kg of vehicle restraint system, the yield in module D is 0.55062 kg of pig iron. This recycled pig iron can be used as a raw material for the next life-cycle, implying that the end-of-waste point is reached here. All data in modules C and D comes from the machinist logbook, implying that the values used are representative.

Results of the environmental performance indicators

Impact assessment results are therefore relative statements and do not make any predictions about effects on impact endpoints, exceeding of thresholds, safety margins or risks.

Mandatory impact category indicators according to EN 15804

Results per functional or declared unit							
Indicator	Unit	A1-A3	C1	C2	C3	C4	D
GWP-fossil	kg CO ₂ eq.	1.95E+00	9.39E-03	1.91E-02	8.59E-02	0.00E+00	-9.41E-01
GWP-biogenic	kg CO ₂ eq.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GWP-luluc	kg CO ₂ eq.	1.44E-03	7.40E-07	6.75E-06	3.61E-05	0.00E+00	-1.81E-04
GWP-total	kg CO ₂ eq.	1.96E+00	9.39E-03	1.91E-02	8.59E-02	0.00E+00	-9.41E-01
ODP	kg CFC 11 eq.	1.28E-07	2.03E-09	4.40E-09	1.59E-08	0.00E+00	-3.89E-08
AP	mol H ⁺ eq.	1.02E-02	9.82E-05	1.09E-04	9.16E-04	0.00E+00	-4.09E-03
EP-freshwater	kg P eq.	1.13E-04	3.42E-08	1.57E-07	1.84E-06	0.00E+00	-4.62E-05
EP-marine	kg N eq.	2.17E-03	4.33E-05	3.89E-05	3.35E-04	0.00E+00	-7.93E-04
EP-terrestrial	mol N eq.	2.33E-02	4.76E-04	4.29E-04	3.71E-03	0.00E+00	-8.60E-03
POCP	kg NMVOC eq.	9.53E-03	1.31E-04	1.23E-04	1.02E-03	0.00E+00	-4.95E-03
ADP-minerals&metals*	kg Sb eq.	7.69E-04	1.44E-08	4.94E-07	1.49E-06	0.00E+00	-2.00E-06
ADP-fossil*	MJ	2.24E+01	1.29E-01	2.93E-01	1.14E+00	0.00E+00	-9.32E+00
WDP*	m ³	6.30E-01	1.73E-04	8.99E-04	4.79E-03	0.00E+00	1.68E-02
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						

* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

Additional mandatory and voluntary impact category indicators

Results per functional or declared unit							
Indicator	Unit	A1-A3	C1	C2	C3	C4	D
GWP-GHG ¹	kg CO ₂ eq.	1.96E+00	9.39E-03	1.91E-02	8.60E-02	0.00E+00	-9.41E-01

Electricity used in this model is based on the AIB, European Residual Mixes 2022, with a CO₂ intensity factor of 858.12 gCO₂/kWh for Poland.

In this GWP-GHG factor, scrap contributes less than 10% to the cradle-to-gate result.

Resource use indicators

Results per functional or declared unit							
Indicator	Unit	A1-A3	C1	C2	C3	C4	D
PERE	MJ	1.90E+00	6.99E-04	4.20E-03	5.27E-02	0.00E+00	-1.76E-01
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	1.90E+00	6.99E-04	4.20E-03	5.27E-02	0.00E+00	-1.76E-01
PENRE	MJ	2.38E+01	1.37E-01	3.11E-01	1.21E+00	0.00E+00	-9.82E+00
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	2.38E+01	1.37E-01	3.11E-01	1.21E+00	0.00E+00	-9.82E+00
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m ³	1.95E-02	6.65E-06	3.32E-05	1.74E-04	0.00E+00	-1.06E-04
Acronyms	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water						

Disclaimer

Use of results of modules A1-A3 without considering the results of modules C is discouraged.

¹ This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO₂ is set to zero.

Waste indicators

Results per functional or declared unit							
Indicator	Unit	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed	kg	1.97E-04	3.52E-07	7.49E-07	3.19E-06	0.00E+00	-9.69E-05
Non-hazardous waste disposed	kg	7.98E-01	1.53E-04	1.82E-02	1.18E-02	0.00E+00	-7.00E-02
Radioactive waste disposed	kg	5.66E-05	8.97E-07	1.99E-06	7.12E-06	0.00E+00	-9.41E-06

Output flow indicators

Results per functional or declared unit							
Indicator	Unit	A1-A3	C1	C2	C3	C4	D
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Material for recycling	kg	0.00E+00	0.00E+00	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	0.00E+00	0.00E+00
Exported energy, electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy, thermal	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

References

General Programme Instructions of the International EPD® System. Version 4.0. PCR 2019:14. Construction products. Version 1.3.4

ISO 14040: Environmental management - Life cycle assessment – Principles and Framework, International Organization for Standardization, ISO14040:2006.

ISO 14044: Environmental management - Life cycle assessment - Requirements and guidelines, International Organization for Standardization, ISO14044:2006.

ISO 14025: Environmental labels and declarations -- Type III environmental declarations -- Principles and procedures, International Organization for Standardization, ISO14025:2006.

European Committee for Standardization, EN 15804+A2:2019/AC:2021 Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products

The LCA project report: 'LCA report for Saferoad InterMetal's vehicle restraint system' – 21-09-2023, Ecochain Technologies B.V.

Ecochain 4.0, 2023, web: <http://app.Ecochain.com>.

Pursuant to § 37 of the Regulation of the Minister of Economy on detailed conditions for the operation of the power system of 4 May 2007. (Dz. U. Nr 93 z 2007 r., poz. 623).

European Residual Mixes, Results of the calculation of residual Mixes for the calendar year 2022, Version 1.0, 2023-06-01, AIB Association of issuing bodies.

Annex

This EPD represents the average production of 1 kg of vehicle restraint system. When analyzing a specific product and its environmental impact, the table below shows the weights per meter of vehicle restraint system, by which the results for 1 kg should be multiplied to be able to convert to 1 meter of specific vehicle restraint system. Depending on national requirements those beams can be roll formed as the A-profile (Armco Flex-Beam guard rail) also known as 2-wave beams, or as the more edged and angular B-profile (Bethlehem Safety-Beam).

Vehicle restraint system	Profile A 3 wave pipe [kg/m]	Profile B [kg/m]
MegaRail ea 1.33	21.67	20.51
SafeLine ea	21.67	20.51
Eco-Safe 1.33 Bw	26.53	25.25
ESP Plus W1	43.23	41.93
MegaRail bk	69.48	66.92
Super Rail Eco HS Bw	76.94	75.66
Super Rail Eco HS	83.83	82.55
Super-Rail Pro Bw	110.13	108.84
MegaRail ep	13.78	
SafeLine ep	13.78	
Vik ep CC4	16.46	
MegaRail es	19.71	18.43
MegaRail ec 2.2	23.35	22.07
SafeLine ec	23.35	22.07
Super Rail ES 1.33	27.07	25.78
Super Rail ES 1.0	31.90	30.61
SN2W2	48.00	
Birsta W3+ c/c4	15.20	

MegaRail ea 3.0	15.40	14.30
Vik CC4-W3	16.80	
SafeLine CC4	16.80	
MegaRail xo	17.48	
SafeLine-R N2-W3-CC4	18.05	
Birsta W3+ c/c2	18.10	
MegaRail eb	18.80	17.52
MegaRail e	19.76	18.50
Vik CC2-W3	20.55	
Eco-Safe 2.0	20.60	19.35
Birsta S c/c1	21.60	
Eco-Safe 1.33	24.60	23.35
Phoenix N2	25.00	
Birsta W2 c/c4	11.20	
SafeLine- M N2-W4-CC6	12.41	
MegaRail en	13.23	
SafeLine en	13.23	
Vik 2 mm CC4	13.24	
MegaRail ea 4.0	14.23	13.07
SafeLine-M N2-W4-CC3	14.62	
Birsta W2 c/c2	15.00	
Vik ep CC6	15.59	
Vik 2 mm CC2	16.20	

SafeLine-R N2-W4-CC6	16.64	
Birsta W3 c/c2	18.10	
ESP 2.0	20.49	
Vik CC2	21.08	
MegaRail sl	21.46	20.18
Birsta 2P	22.00	
Birsta 1P N2	22.00	
ESP Plus 2.0	28.61	27.47
Birsta 2Pdu	35.00	
Vik Midtdeler	35.59	
SN2	37.50	
Birsta S c/c5	12.10	
Birsta W3 c/c4	15.20	
ESP 4.0	16.53	15.25
Eco-Safe 4.0	16.60	15.35
Vik CC4	17.07	
Birsta K c/c2	17.80	
MegaRail xt 4.0	19.92	
ESP 4.0 UFS	27.99	26.71
Birsta K c/c4	14.90	
MegaRail ex	14.87	
MegaRail bs	24.39	23.11
Eco-Safe 1.33 Bw	26.53	25.25

Super Rail ES 1.0	31.90	30.61
MegaRail ep	13.78	
SafeLine-M H1-W3-CC3	14.62	
Vik ep CC4	16.46	
MegaRail eb	18.80	17.52
MegaRail ec 3.3	23.35	22.07
MegaRail ed	23.35	22.07
SafeLine ec	23.35	22.07
MegaRail xp	23.50	
Eco-Safe 1.33	24.60	23.35
MegaRail em	16.35	15.58
MegaRail xo	17.48	
Eco-Safe 2.0	20.60	19.35
MegaRail sl	21.46	20.18
MegaRail xt	22.44	
Super Rail ES 1.33	27.07	25.78
EDSP 1.33	31.60	30.32
Birsta 1P H1	22.00	
EDSP 2.0	26.25	24.96
EDSP 1.33 Bw	29.46	28.18
DDSP 4.0	35.72	33.15
Eco-Safe 1.33 Bw	26.53	25.25
Super Rail ES 1.0	31.90	30.61

MegaRail ep	13.78	
Vik ep CC4	16.46	
MegaRail eb	18.80	17.52
MegaRail ec 3.3	23.35	22.07
Eco-Safe 1.33	24.60	23.35
SafeLine-M L1-W4-CC3	14.62	
MegaRail xo	17.48	
Eco-Safe 2.0	20.60	19.35
MegaRail sl	21.46	20.18
Super Rail ES 1.33	27.07	25.78
Birsta 1P L1	22.00	
Vik SVV2	64.34	
Super Rail Eco HS Bw	76.94	75.66
SafeStar 222b	30.05	
SafeStar 221	32.24	
SafeStar 221b	39.92	
Ørsta Brurekkverk	46.42	
SafeLine Brurekkverk	48.19	
Sicuro Arc	62.32	
MegaRail sk	64.78	62.21
MegaRail bk	69.48	66.92
Super Rail Eco HS	83.83	82.55
SafeStar 232	29.11	

SafeStar 231	30.34	
SafeStar 233b	33.90	
Birsta WP	35.00	
SafeStar 231b	35.80	
SafeStar 232b	44.66	
Birsta 3PH2g	52.00	
Birsta W (bridge)	52.00	
Birsta 3PH2b	52.00	
MegaRail bw	59.49	58.21
MegaRail bw Asphalt	59.94	58.66
MegaRail ec 4.4	23.35	22.07
SafeLine ec	23.35	22.07
SafeStar 241	24.99	
MegaRail dx	29.95	
MegaRail dp	30.88	28.60
MegaRail dc	36.30	33.74
MegaRail s	37.93	36.65
Super Rail Eco	39.50	38.13
Super Rail Eco 1A	39.50	38.13
Super Rail Eco MÜF	39.50	38.13
SafeStar 241d	43.00	
Vik Veg H2	45.80	
Super Rail Eco Bw	47.34	45.93

Super Rail Eco doppelt	54.23	51.50
Vik SVV1	60.76	
MegaRail db	61.00	58.43
Super Rail Eco Bw doppelt	63.16	60.34
Super Rail Bw	71.15	69.87
Super Rail	72.45	71.16
Super Rail doppelt	126.99	124.42
MegaRail ew	20.44	19.23
MegaRail ek	23.28	22.00
MegaRail xp	23.50	
SafeLine-R H2-W5-CC2	24.00	
MegaRail d	38.48	35.91
SafeStar 261	23.26	
DDSP 2.0 ++	42.09	39.52
DDSP 1.33 + Schlupflasche	44.24	41.67
Super Rail Eco HS Bw	76.94	75.66
MegaRail sk	64.78	62.21
MegaRail bk	69.48	66.92
Super Rail Eco HS	83.83	82.55
MegaRail ec 4.4	23.35	22.07
SafeLine ec	23.35	22.07
MegaRail s	37.93	36.65
Super Rail Eco	39.50	38.13

Super Rail Eco doppelt	54.23	51.50
Super Rail	72.45	71.16
Super Rail doppelt	126.99	124.42
SafeStar 331b	49.20	
Birsta 3PH3b	88.00	
SafeStar 351	46.95	
SafeStar 351b	55.77	
SafeStar 351d	70.95	
SNH4A	150.00	
Super-Rail Pro Bw	110.13	108.84
Birsta 3PH4g	87.50	
Birsta 3PH4b	89.00	
SafeStar 441b (RRS H4.4)	60.62	
MegaRail sk	64.78	62.21
MegaRail bk	69.48	66.92
Super-Rail Pro	96.13	94.85
Super Rail doppelt	126.99	124.42
Super Rail Plus Bw	91.88	90.59
Super Rail	72.45	71.16
MegaRail s zweifach	75.86	73.30
Super-Rail Pro Bw	110.13	108.84
MegaRail sk	64.78	62.21
MegaRail bk	69.48	66.92

Super-Rail Pro	96.13	94.85
Super Rail doppelt	126.99	124.42
Super Rail	72.45	71.16
MegaRail s zweifach	75.86	73.30

