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Environmental report
„MP-US / MP-UB (01)“

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1 Life Cycle Assessment „HILTI_MP-US / MP-UB (01)“

1.1 Technical data and material distribution

Table 1.1: Technical data and material distribution

IT- Number	Product name	Pcs. per salespack	Weight [kg]	Material
2288314	Pipe strap MP-US 18 3/8" OC	40	3,38	Steel, Polymer
2288315	Pipe strap MP-US 22 1/2" OC	40	3,61	Steel, Polymer
2288316	Pipe strap MP-US 28 3/4" OC	40	4,43	Steel, Polymer
2288317	Pipe strap MP-US 34 1" OC	20	2,13	Steel, Polymer
2288318	Pipe strap MP-US 43 1-1/4" OC	20	2,70	Steel, Polymer
2288319	Pipe strap MP-US 49 1-1/2" OC	20	2,87	Steel, Polymer
2288370	Pipe strap MP-US 61 2" OC	20	3,24	Steel, Polymer
2288371	Pipe strap MP-US 77 2-1/2" OC	10	1,87	Steel, Polymer
2288372	Pipe strap MP-US 90 3" OC	10	2,05	Steel, Polymer
2288373	Pipe strap MP-US 102 3-1/2" OC	10	3,51	Steel, Polymer
2288769	Pipe strap MP-US 108 4" OC	10	3,93	Steel, Polymer
2288374	Pipe strap MP-US 115 4" OC	10	4,06	Steel, Polymer
2288768	Pipe strap MP-US 133 OC	10	4,53	Steel, Polymer
2288950	Pipe strap MP-US 139 5" OC	10	4,70	Steel, Polymer
2288951	Pipe strap MP-US 159 6" OC	2	1,00	Steel, Polymer
2288376	Pipe strap MP-US 169 6" OC	2	1,04	Steel, Polymer
2288377	Pipe strap MP-US 221 8" OC	2	1,32	Steel, Polymer
2288378	Pipe strap MP-US 275 10" OC	2	2,07	Steel, Polymer
2288379	Pipe strap MP-US 326 12" OC	2	2,37	Steel, Polymer
2288380	U-Bolt MP-UB 21 1/2" M8	40	3,44	Steel, Polymer
2288381	U-Bolt MP-UB 26 3/4" M8	40	3,56	Steel, Polymer
2288382	U-Bolt MP-UB 33 1" M8	20	1,88	Steel, Polymer
2288383	U-Bolt MP-UB 42 1-1/4" M8	20	2,30	Steel, Polymer
2288384	U-Bolt MP-UB 48 1-1/2" M8	20	2,38	Steel, Polymer
2288385	U-Bolt MP-UB 60 2" M10	20	3,92	Steel, Polymer
2288386	U-Bolt MP-UB 76 2-1/2" M10	10	2,35	Steel, Polymer
2288387	U-Bolt MP-UB 89 3" M10	10	2,58	Steel, Polymer
2288388	U-Bolt MP-UB 102 3-1/2" M12	10	3,98	Steel, Polymer
2288389	U-Bolt MP-UB 108 M12	10	4,09	Steel, Polymer
2288390	U-Bolt MP-UB 114 4" M12	10	4,36	Steel, Polymer
2288391	U-Bolt MP-UB 133 M12	10	4,73	Steel, Polymer
2288392	U-Bolt MP-UB 139 5" M12	10	4,83	Steel, Polymer
2288393	U-Bolt MP-UB 159 M12	10	5,23	Steel, Polymer

Table 1.2: Technical data and material distribution

IT- Number	Product name	Pcs. per salespack	Weight [kg]	Material
2288394	U-Bolt MP-UB 168 6" M12	2	5,39	Steel, Polymer
2288395	U-Bolt MP-UB 219 8" M12	2	1,29	Steel, Polymer
2288396	U-Bolt MP-UB 273 10" M12	2	1,54	Steel, Polymer
2288397	U-Bolt MP-UB 324 12" M12	2	1,74	Steel, Polymer
2288398	U-Bolt MP-UB 355 14" M20	2	5,07	Steel, Polymer
2288399	U-Bolt MP-UB 406 16" M20	2	5,57	Steel, Polymer
2288400	U-Bolt MP-UB 457 18" M24	2	8,69	Steel, Polymer
2288401	U-Bolt MP-UB 508 20" M24	2	9,69	Steel, Polymer
2288402	U-Bolt MP-UB 609 24" M24	2	11,19	Steel, Polymer
2288403	U-Bolt MP-UB 21 1/2" M8 OC	40	3,44	Steel, Polymer
2288404	U-Bolt MP-UB 26 3/4" M8 OC	40	3,56	Steel, Polymer
2288405	U-Bolt MP-UB 33 1" M8 OC	20	1,88	Steel, Polymer
2288406	U-Bolt MP-UB 42 1-1/4" M8 OC	20	2,30	Steel, Polymer
2288407	U-Bolt MP-UB 48 1-1/2" M8 OC	20	2,38	Steel, Polymer
2288408	U-Bolt MP-UB 60 2" M10 OC	20	3,92	Steel, Polymer
2288409	U-Bolt MP-UB 76 2-1/2" M10 OC	10	2,35	Steel, Polymer
2288410	U-Bolt MP-UB 89 3" M10 OC	10	2,58	Steel, Polymer
2288411	U-Bolt MP-UB 102 3-1/2" M12 OC	10	3,98	Steel, Polymer
2288412	U-Bolt MP-UB 108 M12 OC	10	4,09	Steel, Polymer
2288413	U-Bolt MP-UB 114 4" M12 OC	10	4,36	Steel, Polymer
2288414	U-Bolt MP-UB 133 M12 OC	10	4,73	Steel, Polymer
2288415	U-Bolt MP-UB 139 5" M12 OC	10	4,83	Steel, Polymer
2288416	U-Bolt MP-UB 159 M12 OC	10	5,23	Steel, Polymer
2288417	U-Bolt MP-UB 168 6" M12 OC	2	5,39	Steel, Polymer
2288418	U-Bolt MP-UB 219 8" M12 OC	2	1,29	Steel, Polymer
2288419	U-Bolt MP-UB 273 10" M12 OC	2	1,54	Steel, Polymer
2288420	U-Bolt MP-UB 324 12" M12 OC	2	1,74	Steel, Polymer
2288421	U-Bolt MP-UB 355 14" M20 OC	2	5,07	Steel, Polymer
2288422	U-Bolt MP-UB 406 16" M20 OC	2	5,57	Steel, Polymer
2288423	U-Bolt MP-UB 457 18" M24 OC	2	8,69	Steel, Polymer
2288424	U-Bolt MP-UB 508 20" M24 OC	2	9,69	Steel, Polymer
2288425	U-Bolt MP-UB 609 24" M24 OC	2	11,19	Steel, Polymer
2288426	U-Bolt MP-UB 1-1/2" OC	20	3,38	Steel, Polymer
2288427	U-Bolt MP-UB 2" OC	20	3,67	Steel, Polymer
2288428	U-Bolt MP-UB 2-1/2" OC	10	3,77	Steel, Polymer
2288429	U-Bolt MP-UB 3" OC	10	4,12	Steel, Polymer
2288430	U-Bolt MP-UB 3-1/2" OC	10	4,38	Steel, Polymer
2288431	U-Bolt MP-UB 4" OC	10	4,80	Steel, Polymer
2288432	U-Bolt MP-UB 5" OC	10	5,36	Steel, Polymer

Table 1.3: Technical data and material distribution

IT- Number	Product name	Pcs. per salespack	Weight [kg]	Material
2288433	U-Bolt MP-UB 6" OC	2	1,22	Steel, Polymer
2288434	U-Bolt MP-UB 8" OC	2	1,43	Steel, Polymer
2288435	U-Bolt MP-UB 10" OC	2	1,72	Steel, Polymer
2288436	U-Bolt MP-UB 12" OC	2	1,99	Steel, Polymer
2288437	U-Bolt MP-UB 14" OC	2	6,57	Steel, Polymer
2288438	U-Bolt MP-UB 16" OC	2	7,57	Steel, Polymer
2288439	U-Bolt MP-UB 18" OC	2	10,69	Steel, Polymer
2288311	U-Bolt MP-UB 20" OC	2	11,69	Steel, Polymer
2288313	U-Bolt MP-UB 24" OC	2	13,69	Steel, Polymer
2288433	U-Bolt MP-UB 6" OC	2	1,22	Steel, Polymer
2288434	U-Bolt MP-UB 8" OC	2	1,43	Steel, Polymer
2288435	U-Bolt MP-UB 10" OC	2	1,72	Steel, Polymer
2288436	U-Bolt MP-UB 12" OC	2	1,99	Steel, Polymer
2288437	U-Bolt MP-UB 14" OC	2	6,57	Steel, Polymer
2288438	U-Bolt MP-UB 16" OC	2	7,57	Steel, Polymer
2288439	U-Bolt MP-UB 18" OC	2	10,69	Steel, Polymer
2288311	U-Bolt MP-UB 20" OC	2	11,69	Steel, Polymer
2288313	U-Bolt MP-UB 24" OC	2	13,69	Steel, Polymer

1.2 Description of the applied method

A life cycle assessment according to DIN EN ISO 14040/44, was performed on a product of HILTI AG (MP-US / MP-UB (01)), which considers the entire life cycle of the product (cradle to grave). The accounting data come from the source: GaBi 9.2, and are evaluated from IPCC 2001, April. 2015.

The entire life cycle of the product is divided into the following stages:

- Raw material,
- Production,
- Use,
- End of life,
- Transportation.

The data of the “Raw material” distribution of the product is derived from a dismantling and disassembling analysis, that was already carried out by an external partner.

Each material, which is defined in the dismantling and disassembling analysis is specifically assigned to one or several “Production” processes in order to describe the process as closely as possible.

The products produce no emissions in the “Use” phase.

In the “End of life” it is assumed, that the entire product is first fed to a reduction process. A Shredder (QZ 1600 HD) from MeWa, is used for separating and crushing the individual materials. The respective credits come from the material recycling of metals, as well as from the energy recovery of the polymers.

The “Transportation” scenario is based on the 2009 Limit Stretch study by PE International, and is evaluated according to the weight of the product. The first transport reflects the transport distances, which are essential for bringing together the individual components (by sea- a container ship for 16 800 km for 30% of the product weight, by road- a truck for 4 716 km for 70% of the product weight).

The second transport reflects the distribution of the product to the various sales companies within the EU (2 300 km by road in a truck for 100% of the product weight). The emissions of both transports are added together in this report.

1.3 Life Cycle Assessment

1.3.1 Pipe strap MP-US 18 3/8" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288314	Pipe strap MP-US 18 3/8" OC	40	3,38	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,789	6,916	1,337	0,000	-3,981	1,517
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,18E-14	6,09E-15	3,90E-14	0,00E+00	-1,36E-14	2,46E-16
Acidification Potential (AP) [kg SO2-eq.]	2,05E-02	1,79E-02	2,77E-03	0,00E+00	-1,24E-02	1,22E-02
Eutrification Potential (EP) [kg $(PO4)^{3}$- eq.]	3,16E-03	1,52E-03	3,07E-04	0,00E+00	-1,16E-03	2,50E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,38E-03	2,62E-03	2,00E-04	0,00E+00	-1,81E-03	-3,39E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	5,84E-07	1,54E-07	4,38E-07	0,00E+00	-1,27E-07	1,19E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,98E+01	8,80E+01	1,52E+01	0,00E+00	-5,40E+01	2,06E+01
Energy (net calorific value) [MJ]	7,99E+01	9,16E+01	2,41E+01	0,00E+00	-5,65E+01	2,07E+01
Energy ren. (net calorafic value) [MJ]	1,02E+01	2,79E+00	1,04E+01	0,00E+00	-4,07E+00	1,07E+00
Water consumption [kg]	3,58E+01	2,77E+01	1,21E+01	0,00E+00	-5,21E+00	1,24E+00
Air pollution [m^3]	3,98E+02	8,17E+02	8,56E+01	0,00E+00	-6,15E+02	1,11E+02
Water pollution [m^3]	6,10E-01	2,70E-01	3,44E-01	0,00E+00	-3,27E-01	3,24E-01
Hazardous waste for disposal [kg]	8,91E-07	3,77E-08	9,89E-09	0,00E+00	-3,92E-08	8,83E-07
Disposed of non-hazardous waste [kg]	2,88E-02	6,57E-02	1,68E-02	0,00E+00	-5,67E-02	3,08E-03
Disposed of radioactive waste [kg]	2,84E-03	2,57E-04	3,55E-03	0,00E+00	-9,92E-04	2,54E-05

evaluated from CML 2001, April. 2015

1.3.2 Pipe strap MP-US 22 1/2" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288315	Pipe strap MP-US 22 1/2" OC	40	3,61	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,047	7,388	1,432	0,000	-4,395	1,621
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,48E-14	6,60E-15	4,18E-14	0,00E+00	-1,39E-14	2,63E-16
Acidification Potential (AP) [kg SO2-eq.]	2,17E-02	1,90E-02	2,97E-03	0,00E+00	-1,33E-02	1,30E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,37E-03	1,62E-03	3,29E-04	0,00E+00	-1,25E-03	2,67E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,58E-03	2,78E-03	2,14E-04	0,00E+00	-1,95E-03	-3,62E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	6,26E-07	1,55E-07	4,69E-07	0,00E+00	-1,26E-07	1,27E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,28E+01	9,20E+01	1,63E+01	0,00E+00	-5,75E+01	2,21E+01
Energy (net calorific value) [MJ]	8,36E+01	9,56E+01	2,59E+01	0,00E+00	-6,00E+01	2,21E+01
Energy ren. (net calorafic value) [MJ]	1,11E+01	2,96E+00	1,11E+01	0,00E+00	-4,17E+00	1,14E+00
Water consumption [kg]	3,69E+01	2,83E+01	1,29E+01	0,00E+00	-5,71E+00	1,33E+00
Air pollution [m^3]	4,18E+02	8,72E+02	9,17E+01	0,00E+00	-6,64E+02	1,18E+02
Water pollution [m^3]	6,61E-01	2,92E-01	3,69E-01	0,00E+00	-3,45E-01	3,46E-01
Hazardous waste for disposal [kg]	9,53E-07	4,09E-08	1,06E-08	0,00E+00	-4,20E-08	9,44E-07
Disposed of non-hazardous waste [kg]	3,09E-02	7,12E-02	1,80E-02	0,00E+00	-6,15E-02	3,29E-03
Disposed of radioactive waste [kg]	3,12E-03	2,78E-04	3,81E-03	0,00E+00	-9,94E-04	2,72E-05

evaluated from CML 2001, April. 2015

1.3.3 Pipe strap MP-US 28 3/4" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288316	Pipe strap MP-US 28 3/4" OC	40	4,43	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	8,737	9,107	1,731	0,000	-4,094	1,993
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,46E-14	7,27E-15	5,03E-14	0,00E+00	-2,33E-14	3,23E-16
Acidification Potential (AP) [kg SO2-eq.]	2,89E-02	2,46E-02	3,57E-03	0,00E+00	-1,53E-02	1,60E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,24E-03	2,02E-03	3,96E-04	0,00E+00	-1,45E-03	3,28E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,83E-03	3,57E-03	2,58E-04	0,00E+00	-2,21E-03	-4,45E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	7,53E-07	2,78E-07	5,64E-07	0,00E+00	-2,45E-07	1,57E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,06E+02	1,33E+02	1,97E+01	0,00E+00	-7,31E+01	2,71E+01
Energy (net calorific value) [MJ]	1,20E+02	1,39E+02	3,12E+01	0,00E+00	-7,77E+01	2,72E+01
Energy ren. (net calorafic value) [MJ]	1,18E+01	3,81E+00	1,34E+01	0,00E+00	-6,75E+00	1,41E+00
Water consumption [kg]	5,81E+01	4,67E+01	1,55E+01	0,00E+00	-5,73E+00	1,63E+00
Air pollution [m^3]	5,81E+02	1,08E+03	1,10E+02	0,00E+00	-7,57E+02	1,46E+02
Water pollution [m^3]	7,29E-01	3,27E-01	4,43E-01	0,00E+00	-4,67E-01	4,25E-01
Hazardous waste for disposal [kg]	1,17E-06	4,50E-08	1,28E-08	0,00E+00	-5,10E-08	1,16E-06
Disposed of non-hazardous waste [kg]	3,70E-02	7,85E-02	2,16E-02	0,00E+00	-6,71E-02	4,05E-03
Disposed of radioactive waste [kg]	3,08E-03	3,07E-04	4,57E-03	0,00E+00	-1,84E-03	3,34E-05

evaluated from CML 2001, April. 2015

1.3.4 Pipe strap MP-US 34 1" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288317	Pipe strap MP-US 34 1" OC	20	2,13	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	3,387	4,362	0,851	0,000	-2,784	0,958
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,18E-14	4,02E-15	2,49E-14	0,00E+00	-7,31E-15	1,55E-16
Acidification Potential (AP) [kg SO2-eq.]	1,25E-02	1,10E-02	1,77E-03	0,00E+00	-8,02E-03	7,70E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,98E-03	9,55E-04	1,95E-04	0,00E+00	-7,52E-04	1,58E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,57E-03	1,62E-03	1,27E-04	0,00E+00	-1,18E-03	-2,14E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,72E-07	7,91E-08	2,79E-07	0,00E+00	-6,13E-08	7,53E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	4,07E+01	5,16E+01	9,66E+00	0,00E+00	-3,36E+01	1,30E+01
Energy (net calorific value) [MJ]	4,70E+01	5,35E+01	1,54E+01	0,00E+00	-3,49E+01	1,31E+01
Energy ren. (net calorafic value) [MJ]	6,78E+00	1,73E+00	6,61E+00	0,00E+00	-2,23E+00	6,76E-01
Water consumption [kg]	2,00E+01	1,50E+01	7,70E+00	0,00E+00	-3,55E+00	7,86E-01
Air pollution [m^3]	2,38E+02	5,14E+02	5,46E+01	0,00E+00	-4,01E+02	7,00E+01
Water pollution [m^3]	4,03E-01	1,77E-01	2,19E-01	0,00E+00	-1,98E-01	2,05E-01
Hazardous waste for disposal [kg]	5,64E-07	2,49E-08	6,29E-09	0,00E+00	-2,49E-08	5,58E-07
Disposed of non-hazardous waste [kg]	1,84E-02	4,34E-02	1,07E-02	0,00E+00	-3,76E-02	1,95E-03
Disposed of radioactive waste [kg]	1,95E-03	1,70E-04	2,26E-03	0,00E+00	-4,99E-04	1,60E-05

evaluated from CML 2001, April. 2015

1.3.5 Pipe strap MP-US 43 1-1/4" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288318	Pipe strap MP-US 43 1-1/4" OC	20	2,70	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	4,899	5,528	1,062	0,000	-2,902	1,212
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,36E-14	4,69E-15	3,09E-14	0,00E+00	-1,22E-14	1,96E-16
Acidification Potential (AP) [kg SO2-eq.]	1,68E-02	1,46E-02	2,20E-03	0,00E+00	-9,66E-03	9,74E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	2,55E-03	1,22E-03	2,43E-04	0,00E+00	-9,10E-04	1,99E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,83E-03	2,12E-03	1,59E-04	0,00E+00	-1,40E-03	-2,70E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,63E-07	1,41E-07	3,47E-07	0,00E+00	-1,20E-07	9,52E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	5,93E+01	7,44E+01	1,21E+01	0,00E+00	-4,36E+01	1,65E+01
Energy (net calorific value) [MJ]	6,74E+01	7,77E+01	1,92E+01	0,00E+00	-4,60E+01	1,65E+01
Energy ren. (net calorafic value) [MJ]	7,74E+00	2,26E+00	8,22E+00	0,00E+00	-3,59E+00	8,55E-01
Water consumption [kg]	3,13E+01	2,46E+01	9,56E+00	0,00E+00	-3,89E+00	9,93E-01
Air pollution [m^3]	3,32E+02	6,54E+02	6,79E+01	0,00E+00	-4,79E+02	8,85E+01
Water pollution [m^3]	4,70E-01	2,09E-01	2,73E-01	0,00E+00	-2,70E-01	2,59E-01
Hazardous waste for disposal [kg]	7,11E-07	2,90E-08	7,85E-09	0,00E+00	-3,12E-08	7,05E-07
Disposed of non-hazardous waste [kg]	2,28E-02	5,06E-02	1,33E-02	0,00E+00	-4,35E-02	2,46E-03
Disposed of radioactive waste [kg]	2,11E-03	1,98E-04	2,81E-03	0,00E+00	-9,22E-04	2,03E-05

evaluated from CML 2001, April. 2015

1.3.6 Pipe strap MP-US 49 1-1/2" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288319	Pipe strap MP-US 49 1-1/2" OC	20	2,87	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,091	5,880	1,132	0,000	-3,211	1,289
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,59E-14	5,07E-15	3,30E-14	0,00E+00	-1,24E-14	2,09E-16
Acidification Potential (AP) [kg SO2-eq.]	1,77E-02	1,54E-02	2,34E-03	0,00E+00	-1,04E-02	1,04E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	2,70E-03	1,30E-03	2,60E-04	0,00E+00	-9,76E-04	2,12E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,98E-03	2,24E-03	1,69E-04	0,00E+00	-1,51E-03	-2,88E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,94E-07	1,42E-07	3,71E-07	0,00E+00	-1,20E-07	1,01E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,15E+01	7,73E+01	1,29E+01	0,00E+00	-4,62E+01	1,75E+01
Energy (net calorific value) [MJ]	7,01E+01	8,06E+01	2,04E+01	0,00E+00	-4,85E+01	1,76E+01
Energy ren. (net calorafic value) [MJ]	8,41E+00	2,39E+00	8,77E+00	0,00E+00	-3,67E+00	9,10E-01
Water consumption [kg]	3,21E+01	2,51E+01	1,02E+01	0,00E+00	-4,26E+00	1,06E+00
Air pollution [m^3]	3,47E+02	6,95E+02	7,24E+01	0,00E+00	-5,15E+02	9,41E+01
Water pollution [m^3]	5,08E-01	2,25E-01	2,91E-01	0,00E+00	-2,84E-01	2,75E-01
Hazardous waste for disposal [kg]	7,57E-07	3,14E-08	8,37E-09	0,00E+00	-3,32E-08	7,50E-07
Disposed of non-hazardous waste [kg]	2,44E-02	5,47E-02	1,42E-02	0,00E+00	-4,71E-02	2,62E-03
Disposed of radioactive waste [kg]	2,32E-03	2,14E-04	3,00E-03	0,00E+00	-9,23E-04	2,16E-05

evaluated from CML 2001, April. 2015

1.3.7 Pipe strap MP-US 61 2" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288370	Pipe strap MP-US 61 2" OC	20	3,24	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,502	6,635	1,284	0,000	-3,874	1,456
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,08E-14	5,88E-15	3,75E-14	0,00E+00	-1,28E-14	2,36E-16
Acidification Potential (AP) [kg SO2-eq.]	1,96E-02	1,71E-02	2,66E-03	0,00E+00	-1,19E-02	1,17E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,03E-03	1,46E-03	2,95E-04	0,00E+00	-1,12E-03	2,40E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,30E-03	2,50E-03	1,92E-04	0,00E+00	-1,74E-03	-3,25E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	5,61E-07	1,44E-07	4,21E-07	0,00E+00	-1,18E-07	1,14E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,63E+01	8,37E+01	1,46E+01	0,00E+00	-5,17E+01	1,98E+01
Energy (net calorific value) [MJ]	7,60E+01	8,70E+01	2,32E+01	0,00E+00	-5,41E+01	1,99E+01
Energy ren. (net calorafic value) [MJ]	9,83E+00	2,67E+00	9,96E+00	0,00E+00	-3,84E+00	1,03E+00
Water consumption [kg]	3,38E+01	2,61E+01	1,16E+01	0,00E+00	-5,05E+00	1,19E+00
Air pollution [m^3]	3,79E+02	7,83E+02	8,22E+01	0,00E+00	-5,92E+02	1,06E+02
Water pollution [m^3]	5,89E-01	2,60E-01	3,30E-01	0,00E+00	-3,12E-01	3,11E-01
Hazardous waste for disposal [kg]	8,56E-07	3,64E-08	9,50E-09	0,00E+00	-3,77E-08	8,47E-07
Disposed of non-hazardous waste [kg]	2,77E-02	6,35E-02	1,61E-02	0,00E+00	-5,48E-02	2,96E-03
Disposed of radioactive waste [kg]	2,76E-03	2,48E-04	3,41E-03	0,00E+00	-9,26E-04	2,44E-05

evaluated from CML 2001, April. 2015

1.3.8 Pipe strap MP-US 77 2-1/2" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288371	Pipe strap MP-US 77 2-1/2" OC	10	1,87	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	3,025	3,821	0,744	0,000	-2,378	0,839
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,87E-14	3,48E-15	2,17E-14	0,00E+00	-6,68E-15	1,36E-16
Acidification Potential (AP) [kg SO2-eq.]	1,10E-02	9,73E-03	1,54E-03	0,00E+00	-6,98E-03	6,74E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,73E-03	8,38E-04	1,71E-04	0,00E+00	-6,55E-04	1,38E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,36E-03	1,43E-03	1,11E-04	0,00E+00	-1,02E-03	-1,87E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,25E-07	7,32E-08	2,44E-07	0,00E+00	-5,78E-08	6,59E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,64E+01	4,60E+01	8,44E+00	0,00E+00	-2,95E+01	1,14E+01
Energy (net calorific value) [MJ]	4,19E+01	4,78E+01	1,34E+01	0,00E+00	-3,07E+01	1,14E+01
Energy ren. (net calorafic value) [MJ]	5,86E+00	1,52E+00	5,78E+00	0,00E+00	-2,03E+00	5,92E-01
Water consumption [kg]	1,81E+01	1,37E+01	6,72E+00	0,00E+00	-3,05E+00	6,88E-01
Air pollution [m^3]	2,11E+02	4,50E+02	4,77E+01	0,00E+00	-3,48E+02	6,13E+01
Water pollution [m^3]	3,49E-01	1,53E-01	1,92E-01	0,00E+00	-1,75E-01	1,79E-01
Hazardous waste for disposal [kg]	4,94E-07	2,16E-08	5,50E-09	0,00E+00	-2,18E-08	4,88E-07
Disposed of non-hazardous waste [kg]	1,61E-02	3,76E-02	9,33E-03	0,00E+00	-3,25E-02	1,70E-03
Disposed of radioactive waste [kg]	1,67E-03	1,47E-04	1,98E-03	0,00E+00	-4,65E-04	1,41E-05

evaluated from CML 2001, April. 2015

1.3.9 Pipe strap MP-US 90 3" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288372	Pipe strap MP-US 90 3" OC	10	2,05	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	3,224	4,187	0,817	0,000	-2,700	0,920
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,11E-14	3,88E-15	2,39E-14	0,00E+00	-6,89E-15	1,49E-16
Acidification Potential (AP) [kg SO2-eq.]	1,19E-02	1,06E-02	1,70E-03	0,00E+00	-7,73E-03	7,39E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,89E-03	9,17E-04	1,88E-04	0,00E+00	-7,24E-04	1,51E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,52E-03	1,55E-03	1,22E-04	0,00E+00	-1,14E-03	-2,05E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,58E-07	7,41E-08	2,68E-07	0,00E+00	-5,69E-08	7,23E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,87E+01	4,91E+01	9,28E+00	0,00E+00	-3,22E+01	1,25E+01
Energy (net calorific value) [MJ]	4,48E+01	5,09E+01	1,48E+01	0,00E+00	-3,34E+01	1,26E+01
Energy ren. (net calorafic value) [MJ]	6,55E+00	1,66E+00	6,36E+00	0,00E+00	-2,11E+00	6,49E-01
Water consumption [kg]	1,89E+01	1,42E+01	7,40E+00	0,00E+00	-3,44E+00	7,54E-01
Air pollution [m^3]	2,27E+02	4,93E+02	5,24E+01	0,00E+00	-3,86E+02	6,72E+01
Water pollution [m^3]	3,89E-01	1,70E-01	2,11E-01	0,00E+00	-1,89E-01	1,96E-01
Hazardous waste for disposal [kg]	5,42E-07	2,40E-08	6,05E-09	0,00E+00	-2,39E-08	5,35E-07
Disposed of non-hazardous waste [kg]	1,77E-02	4,18E-02	1,03E-02	0,00E+00	-3,63E-02	1,87E-03
Disposed of radioactive waste [kg]	1,89E-03	1,63E-04	2,18E-03	0,00E+00	-4,67E-04	1,54E-05

evaluated from CML 2001, April. 2015

1.3.10 Pipe strap MP-US 102 3-1/2" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288373	Pipe strap MP-US 102 3-1/2" OC	10	3,51	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	4,844	7,162	1,416	0,000	-5,311	1,577
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,04E-14	7,08E-15	4,16E-14	0,00E+00	-8,55E-15	2,56E-16
Acidification Potential (AP) [kg SO2-eq.]	1,93E-02	1,75E-02	2,95E-03	0,00E+00	-1,38E-02	1,27E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,19E-03	1,56E-03	3,26E-04	0,00E+00	-1,29E-03	2,59E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,77E-03	2,58E-03	2,12E-04	0,00E+00	-2,04E-03	-3,52E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	6,21E-07	8,13E-08	4,66E-07	0,00E+00	-5,00E-08	1,24E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	5,75E+01	7,40E+01	1,61E+01	0,00E+00	-5,39E+01	2,14E+01
Energy (net calorific value) [MJ]	6,81E+01	7,61E+01	2,56E+01	0,00E+00	-5,51E+01	2,15E+01
Energy ren. (net calorafic value) [MJ]	1,21E+01	2,75E+00	1,11E+01	0,00E+00	-2,77E+00	1,11E+00
Water consumption [kg]	2,57E+01	1,81E+01	1,29E+01	0,00E+00	-6,56E+00	1,29E+00
Air pollution [m^3]	3,54E+02	8,39E+02	9,11E+01	0,00E+00	-6,92E+02	1,15E+02
Water pollution [m^3]	7,10E-01	3,09E-01	3,66E-01	0,00E+00	-3,02E-01	3,37E-01
Hazardous waste for disposal [kg]	9,31E-07	4,39E-08	1,05E-08	0,00E+00	-4,13E-08	9,17E-07
Disposed of non-hazardous waste [kg]	3,09E-02	7,64E-02	1,78E-02	0,00E+00	-6,66E-02	3,20E-03
Disposed of radioactive waste [kg]	3,63E-03	2,99E-04	3,78E-03	0,00E+00	-4,78E-04	2,64E-05

evaluated from CML 2001, April. 2015

1.3.11 Pipe strap MP-US 108 4" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288769	Pipe strap MP-US 108 4" OC	10	3,93	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,027	8,033	1,572	0,000	-5,344	1,765
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,14E-14	7,54E-15	4,60E-14	0,00E+00	-1,24E-14	2,86E-16
Acidification Potential (AP) [kg SO2-eq.]	2,26E-02	2,01E-02	3,27E-03	0,00E+00	-1,50E-02	1,42E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,62E-03	1,76E-03	3,62E-04	0,00E+00	-1,40E-03	2,91E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,95E-03	2,96E-03	2,35E-04	0,00E+00	-2,20E-03	-3,94E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	6,89E-07	1,31E-07	5,16E-07	0,00E+00	-9,80E-08	1,39E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,22E+01	9,18E+01	1,78E+01	0,00E+00	-6,15E+01	2,40E+01
Energy (net calorific value) [MJ]	8,39E+01	9,50E+01	2,84E+01	0,00E+00	-6,36E+01	2,41E+01
Energy ren. (net calorafic value) [MJ]	1,28E+01	3,16E+00	1,22E+01	0,00E+00	-3,85E+00	1,25E+00
Water consumption [kg]	3,47E+01	2,58E+01	1,42E+01	0,00E+00	-6,76E+00	1,45E+00
Air pollution [m^3]	4,27E+02	9,45E+02	1,01E+02	0,00E+00	-7,48E+02	1,29E+02
Water pollution [m^3]	7,56E-01	3,31E-01	4,06E-01	0,00E+00	-3,58E-01	3,77E-01
Hazardous waste for disposal [kg]	1,04E-06	4,67E-08	1,16E-08	0,00E+00	-4,60E-08	1,03E-06
Disposed of non-hazardous waste [kg]	3,41E-02	8,14E-02	1,97E-02	0,00E+00	-7,06E-02	3,58E-03
Disposed of radioactive waste [kg]	3,72E-03	3,18E-04	4,19E-03	0,00E+00	-8,19E-04	2,96E-05

evaluated from CML 2001, April. 2015

1.3.12 Pipe strap MP-US 115 4" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288374	Pipe strap MP-US 115 4" OC	10	4,06	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,171	8,299	1,626	0,000	-5,577	1,824
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,32E-14	7,83E-15	4,76E-14	0,00E+00	-1,26E-14	2,96E-16
Acidification Potential (AP) [kg SO2-eq.]	2,33E-02	2,08E-02	3,38E-03	0,00E+00	-1,55E-02	1,47E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,74E-03	1,81E-03	3,74E-04	0,00E+00	-1,45E-03	3,00E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,06E-03	3,05E-03	2,44E-04	0,00E+00	-2,29E-03	-4,07E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	7,12E-07	1,32E-07	5,34E-07	0,00E+00	-9,74E-08	1,43E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,38E+01	9,40E+01	1,85E+01	0,00E+00	-6,34E+01	2,48E+01
Energy (net calorific value) [MJ]	8,60E+01	9,73E+01	2,94E+01	0,00E+00	-6,55E+01	2,49E+01
Energy ren. (net calorafic value) [MJ]	1,33E+01	3,26E+00	1,27E+01	0,00E+00	-3,91E+00	1,29E+00
Water consumption [kg]	3,53E+01	2,61E+01	1,47E+01	0,00E+00	-7,04E+00	1,50E+00
Air pollution [m^3]	4,38E+02	9,76E+02	1,04E+02	0,00E+00	-7,75E+02	1,33E+02
Water pollution [m^3]	7,85E-01	3,43E-01	4,20E-01	0,00E+00	-3,68E-01	3,89E-01
Hazardous waste for disposal [kg]	1,07E-06	4,85E-08	1,20E-08	0,00E+00	-4,75E-08	1,06E-06
Disposed of non-hazardous waste [kg]	3,53E-02	8,45E-02	2,04E-02	0,00E+00	-7,33E-02	3,70E-03
Disposed of radioactive waste [kg]	3,87E-03	3,30E-04	4,33E-03	0,00E+00	-8,20E-04	3,05E-05

evaluated from CML 2001, April. 2015

1.3.13 Pipe strap MP-US 133 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288768	Pipe strap MP-US 133 OC	10	4,53	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,698	9,267	1,821	0,000	-6,427	2,038
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,95E-14	8,87E-15	5,34E-14	0,00E+00	-1,31E-14	3,30E-16
Acidification Potential (AP) [kg SO2-eq.]	2,57E-02	2,30E-02	3,79E-03	0,00E+00	-1,75E-02	1,64E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,16E-03	2,02E-03	4,19E-04	0,00E+00	-1,63E-03	3,35E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,47E-03	3,39E-03	2,73E-04	0,00E+00	-2,58E-03	-4,55E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	7,98E-07	1,34E-07	5,99E-07	0,00E+00	-9,51E-08	1,60E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,00E+01	1,02E+02	2,07E+01	0,00E+00	-7,05E+01	2,77E+01
Energy (net calorific value) [MJ]	9,36E+01	1,05E+02	3,29E+01	0,00E+00	-7,26E+01	2,78E+01
Energy ren. (net calorafic value) [MJ]	1,51E+01	3,61E+00	1,42E+01	0,00E+00	-4,13E+00	1,44E+00
Water consumption [kg]	3,75E+01	2,74E+01	1,65E+01	0,00E+00	-8,05E+00	1,67E+00
Air pollution [m^3]	4,80E+02	1,09E+03	1,17E+02	0,00E+00	-8,74E+02	1,49E+02
Water pollution [m^3]	8,89E-01	3,88E-01	4,70E-01	0,00E+00	-4,04E-01	4,35E-01
Hazardous waste for disposal [kg]	1,20E-06	5,50E-08	1,35E-08	0,00E+00	-5,32E-08	1,19E-06
Disposed of non-hazardous waste [kg]	3,96E-02	9,58E-02	2,29E-02	0,00E+00	-8,32E-02	4,14E-03
Disposed of radioactive waste [kg]	4,44E-03	3,74E-04	4,86E-03	0,00E+00	-8,24E-04	3,41E-05

evaluated from CML 2001, April. 2015

1.3.14 Pipe strap MP-US 139 5" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288950	Pipe strap MP-US 139 5" OC	10	4,70	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,885	9,610	1,890	0,000	-6,728	2,114
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	5,17E-14	9,24E-15	5,54E-14	0,00E+00	-1,33E-14	3,43E-16
Acidification Potential (AP) [kg SO2-eq.]	2,65E-02	2,38E-02	3,93E-03	0,00E+00	-1,82E-02	1,70E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,31E-03	2,10E-03	4,35E-04	0,00E+00	-1,70E-03	3,48E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,62E-03	3,50E-03	2,83E-04	0,00E+00	-2,69E-03	-4,72E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	8,28E-07	1,35E-07	6,21E-07	0,00E+00	-9,43E-08	1,66E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,22E+01	1,05E+02	2,14E+01	0,00E+00	-7,30E+01	2,87E+01
Energy (net calorific value) [MJ]	9,62E+01	1,08E+02	3,41E+01	0,00E+00	-7,51E+01	2,88E+01
Energy ren. (net calorafic value) [MJ]	1,58E+01	3,74E+00	1,47E+01	0,00E+00	-4,20E+00	1,49E+00
Water consumption [kg]	3,83E+01	2,78E+01	1,71E+01	0,00E+00	-8,42E+00	1,73E+00
Air pollution [m^3]	4,94E+02	1,13E+03	1,21E+02	0,00E+00	-9,10E+02	1,54E+02
Water pollution [m^3]	9,26E-01	4,04E-01	4,88E-01	0,00E+00	-4,17E-01	4,51E-01
Hazardous waste for disposal [kg]	1,25E-06	5,72E-08	1,40E-08	0,00E+00	-5,52E-08	1,23E-06
Disposed of non-hazardous waste [kg]	4,11E-02	9,98E-02	2,38E-02	0,00E+00	-8,67E-02	4,29E-03
Disposed of radioactive waste [kg]	4,64E-03	3,90E-04	5,04E-03	0,00E+00	-8,26E-04	3,54E-05

evaluated from CML 2001, April. 2015

1.3.15 Pipe strap MP-US 159 6" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288951	Pipe strap MP-US 159 6" OC	2	1,00	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	1,304	2,047	0,407	0,000	-1,602	0,451
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,21E-14	2,08E-15	1,20E-14	0,00E+00	-2,05E-15	7,31E-17
Acidification Potential (AP) [kg SO2-eq.]	5,38E-03	4,92E-03	8,48E-04	0,00E+00	-4,01E-03	3,63E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	9,07E-04	4,44E-04	9,39E-05	0,00E+00	-3,73E-04	7,42E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-8,15E-04	7,28E-04	6,11E-05	0,00E+00	-5,97E-04	-1,01E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,79E-07	1,78E-08	1,34E-07	0,00E+00	-8,57E-09	3,54E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,54E+01	1,99E+01	4,61E+00	0,00E+00	-1,53E+01	6,13E+00
Energy (net calorific value) [MJ]	1,84E+01	2,04E+01	7,36E+00	0,00E+00	-1,55E+01	6,15E+00
Energy ren. (net calorafic value) [MJ]	3,59E+00	7,78E-01	3,18E+00	0,00E+00	-6,91E-01	3,18E-01
Water consumption [kg]	6,55E+00	4,43E+00	3,70E+00	0,00E+00	-1,96E+00	3,70E-01
Air pollution [m^3]	9,70E+01	2,39E+02	2,62E+01	0,00E+00	-2,02E+02	3,29E+01
Water pollution [m^3]	2,08E-01	9,03E-02	1,05E-01	0,00E+00	-8,36E-02	9,63E-02
Hazardous waste for disposal [kg]	2,67E-07	1,29E-08	3,01E-09	0,00E+00	-1,19E-08	2,62E-07
Disposed of non-hazardous waste [kg]	8,90E-03	2,24E-02	5,13E-03	0,00E+00	-1,96E-02	9,16E-04
Disposed of radioactive waste [kg]	1,09E-03	8,77E-05	1,09E-03	0,00E+00	-9,81E-05	7,55E-06

evaluated from CML 2001, April. 2015

1.3.16 Pipe strap MP-US 169 6" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288376	Pipe strap MP-US 169 6" OC	2	1,04	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	1,345	2,123	0,422	0,000	-1,668	0,468
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,26E-14	2,16E-15	1,24E-14	0,00E+00	-2,10E-15	7,58E-17
Acidification Potential (AP) [kg SO2-eq.]	5,57E-03	5,09E-03	8,80E-04	0,00E+00	-4,16E-03	3,76E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	9,40E-04	4,60E-04	9,74E-05	0,00E+00	-3,87E-04	7,70E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-8,47E-04	7,54E-04	6,34E-05	0,00E+00	-6,20E-04	-1,04E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,85E-07	1,79E-08	1,39E-07	0,00E+00	-8,39E-09	3,67E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,59E+01	2,06E+01	4,79E+00	0,00E+00	-1,58E+01	6,36E+00
Energy (net calorific value) [MJ]	1,90E+01	2,11E+01	7,63E+00	0,00E+00	-1,61E+01	6,38E+00
Energy ren. (net calorafic value) [MJ]	3,73E+00	8,05E-01	3,30E+00	0,00E+00	-7,08E-01	3,30E-01
Water consumption [kg]	6,72E+00	4,53E+00	3,84E+00	0,00E+00	-2,04E+00	3,83E-01
Air pollution [m^3]	1,00E+02	2,48E+02	2,72E+01	0,00E+00	-2,09E+02	3,41E+01
Water pollution [m^3]	2,17E-01	9,38E-02	1,09E-01	0,00E+00	-8,65E-02	9,98E-02
Hazardous waste for disposal [kg]	2,76E-07	1,34E-08	3,13E-09	0,00E+00	-1,23E-08	2,72E-07
Disposed of non-hazardous waste [kg]	9,23E-03	2,33E-02	5,32E-03	0,00E+00	-2,03E-02	9,49E-04
Disposed of radioactive waste [kg]	1,13E-03	9,11E-05	1,13E-03	0,00E+00	-9,84E-05	7,83E-06

evaluated from CML 2001, April. 2015

1.3.17 Pipe strap MP-US 221 8" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288377	Pipe strap MP-US 221 8" OC	2	1,32	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	1,655	2,692	0,537	0,000	-2,168	0,593
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,63E-14	2,77E-15	1,58E-14	0,00E+00	-2,41E-15	9,62E-17
Acidification Potential (AP) [kg SO2-eq.]	6,98E-03	6,41E-03	1,12E-03	0,00E+00	-5,32E-03	4,77E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,19E-03	5,83E-04	1,24E-04	0,00E+00	-4,95E-04	9,77E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,09E-03	9,50E-04	8,07E-05	0,00E+00	-7,94E-04	-1,32E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,36E-07	1,93E-08	1,77E-07	0,00E+00	-7,07E-09	4,66E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,95E+01	2,53E+01	6,08E+00	0,00E+00	-2,00E+01	8,07E+00
Energy (net calorific value) [MJ]	2,35E+01	2,59E+01	9,70E+00	0,00E+00	-2,02E+01	8,10E+00
Energy ren. (net calorafic value) [MJ]	4,80E+00	1,02E+00	4,20E+00	0,00E+00	-8,34E-01	4,19E-01
Water consumption [kg]	8,02E+00	5,28E+00	4,89E+00	0,00E+00	-2,64E+00	4,86E-01
Air pollution [m^3]	1,24E+02	3,15E+02	3,46E+01	0,00E+00	-2,68E+02	4,33E+01
Water pollution [m^3]	2,78E-01	1,20E-01	1,39E-01	0,00E+00	-1,08E-01	1,27E-01
Hazardous waste for disposal [kg]	3,51E-07	1,72E-08	3,97E-09	0,00E+00	-1,56E-08	3,45E-07
Disposed of non-hazardous waste [kg]	1,18E-02	2,99E-02	6,77E-03	0,00E+00	-2,62E-02	1,20E-03
Disposed of radioactive waste [kg]	1,46E-03	1,17E-04	1,44E-03	0,00E+00	-1,01E-04	9,94E-06

evaluated from CML 2001, April. 2015

1.3.18 Pipe strap MP-US 275 10" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288378	Pipe strap MP-US 275 10" OC	2	2,07	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	2,631	4,225	0,842	0,000	-3,367	0,931
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,53E-14	4,33E-15	2,48E-14	0,00E+00	-3,95E-15	1,51E-16
Acidification Potential (AP) [kg SO2-eq.]	1,10E-02	1,01E-02	1,76E-03	0,00E+00	-8,32E-03	7,48E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,87E-03	9,15E-04	1,94E-04	0,00E+00	-7,74E-04	1,53E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,70E-03	1,50E-03	1,26E-04	0,00E+00	-1,24E-03	-2,08E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,70E-07	3,26E-08	2,78E-07	0,00E+00	-1,35E-08	7,31E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,10E+01	4,02E+01	9,54E+00	0,00E+00	-3,14E+01	1,27E+01
Energy (net calorific value) [MJ]	3,73E+01	4,12E+01	1,52E+01	0,00E+00	-3,19E+01	1,27E+01
Energy ren. (net calorafic value) [MJ]	7,49E+00	1,60E+00	6,58E+00	0,00E+00	-1,35E+00	6,57E-01
Water consumption [kg]	1,29E+01	8,60E+00	7,66E+00	0,00E+00	-4,10E+00	7,63E-01
Air pollution [m^3]	1,97E+02	4,94E+02	5,42E+01	0,00E+00	-4,19E+02	6,80E+01
Water pollution [m^3]	4,34E-01	1,88E-01	2,18E-01	0,00E+00	-1,71E-01	1,99E-01
Hazardous waste for disposal [kg]	5,50E-07	2,68E-08	6,23E-09	0,00E+00	-2,45E-08	5,42E-07
Disposed of non-hazardous waste [kg]	1,84E-02	4,67E-02	1,06E-02	0,00E+00	-4,08E-02	1,89E-03
Disposed of radioactive waste [kg]	2,28E-03	1,83E-04	2,25E-03	0,00E+00	-1,74E-04	1,56E-05

evaluated from CML 2001, April. 2015

1.3.19 Pipe strap MP-US 326 12" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288379	Pipe strap MP-US 326 12" OC	2	2,37	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	2,960	4,830	0,963	0,000	-3,897	1,065
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,92E-14	4,98E-15	2,84E-14	0,00E+00	-4,29E-15	1,73E-16
Acidification Potential (AP) [kg SO2-eq.]	1,25E-02	1,15E-02	2,01E-03	0,00E+00	-9,55E-03	8,56E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	2,13E-03	1,05E-03	2,22E-04	0,00E+00	-8,89E-04	1,75E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,95E-03	1,70E-03	1,45E-04	0,00E+00	-1,43E-03	-2,38E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,23E-07	3,41E-08	3,18E-07	0,00E+00	-1,21E-08	8,36E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,49E+01	4,53E+01	1,09E+01	0,00E+00	-3,58E+01	1,45E+01
Energy (net calorific value) [MJ]	4,20E+01	4,63E+01	1,74E+01	0,00E+00	-3,63E+01	1,45E+01
Energy ren. (net calorafic value) [MJ]	8,62E+00	1,82E+00	7,54E+00	0,00E+00	-1,49E+00	7,51E-01
Water consumption [kg]	1,43E+01	9,40E+00	8,78E+00	0,00E+00	-4,74E+00	8,73E-01
Air pollution [m^3]	2,23E+02	5,64E+02	6,20E+01	0,00E+00	-4,81E+02	7,77E+01
Water pollution [m^3]	4,99E-01	2,16E-01	2,50E-01	0,00E+00	-1,94E-01	2,27E-01
Hazardous waste for disposal [kg]	6,29E-07	3,09E-08	7,13E-09	0,00E+00	-2,80E-08	6,20E-07
Disposed of non-hazardous waste [kg]	2,11E-02	5,38E-02	1,21E-02	0,00E+00	-4,70E-02	2,16E-03
Disposed of radioactive waste [kg]	2,63E-03	2,10E-04	2,58E-03	0,00E+00	-1,77E-04	1,78E-05

evaluated from CML 2001, April. 2015

1.3.20 U-Bolt MP-UB 21 1/2" M8

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288380	U-Bolt MP-UB 21 1/2" M8	40	3,44	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,178	7,032	1,379	0,000	-4,779	1,546
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,69E-14	6,67E-15	4,04E-14	0,00E+00	-1,04E-14	2,51E-16
Acidification Potential (AP) [kg SO2-eq.]	1,97E-02	1,75E-02	2,87E-03	0,00E+00	-1,32E-02	1,24E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,17E-03	1,54E-03	3,17E-04	0,00E+00	-1,23E-03	2,54E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,61E-03	2,58E-03	2,07E-04	0,00E+00	-1,94E-03	-3,45E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	6,04E-07	1,08E-07	4,53E-07	0,00E+00	-7,89E-08	1,21E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,19E+01	7,89E+01	1,57E+01	0,00E+00	-5,37E+01	2,10E+01
Energy (net calorific value) [MJ]	7,22E+01	8,16E+01	2,49E+01	0,00E+00	-5,54E+01	2,11E+01
Energy ren. (net calorafic value) [MJ]	1,13E+01	2,75E+00	1,07E+01	0,00E+00	-3,25E+00	1,09E+00
Water consumption [kg]	2,94E+01	2,17E+01	1,25E+01	0,00E+00	-6,02E+00	1,27E+00
Air pollution [m^3]	3,69E+02	8,26E+02	8,85E+01	0,00E+00	-6,59E+02	1,13E+02
Water pollution [m^3]	6,68E-01	2,92E-01	3,56E-01	0,00E+00	-3,10E-01	3,30E-01
Hazardous waste for disposal [kg]	9,11E-07	4,13E-08	1,02E-08	0,00E+00	-4,03E-08	9,00E-07
Disposed of non-hazardous waste [kg]	3,00E-02	7,20E-02	1,73E-02	0,00E+00	-6,25E-02	3,14E-03
Disposed of radioactive waste [kg]	3,31E-03	2,81E-04	3,68E-03	0,00E+00	-6,71E-04	2,59E-05

evaluated from CML 2001, April. 2015

1.3.21 U-Bolt MP-UB 26 3/4" M8

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288381	U-Bolt MP-UB 26 3/4" M8	40	3,56	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,311	7,276	1,428	0,000	-4,993	1,600
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,85E-14	6,93E-15	4,19E-14	0,00E+00	-1,06E-14	2,59E-16
Acidification Potential (AP) [kg SO2-eq.]	2,03E-02	1,81E-02	2,97E-03	0,00E+00	-1,37E-02	1,29E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,27E-03	1,59E-03	3,29E-04	0,00E+00	-1,28E-03	2,63E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,71E-03	2,66E-03	2,14E-04	0,00E+00	-2,02E-03	-3,57E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	6,26E-07	1,09E-07	4,69E-07	0,00E+00	-7,83E-08	1,26E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,35E+01	8,10E+01	1,62E+01	0,00E+00	-5,55E+01	2,18E+01
Energy (net calorific value) [MJ]	7,41E+01	8,37E+01	2,58E+01	0,00E+00	-5,71E+01	2,18E+01
Energy ren. (net calorafic value) [MJ]	1,18E+01	2,84E+00	1,11E+01	0,00E+00	-3,30E+00	1,13E+00
Water consumption [kg]	3,00E+01	2,20E+01	1,29E+01	0,00E+00	-6,27E+00	1,31E+00
Air pollution [m^3]	3,79E+02	8,55E+02	9,17E+01	0,00E+00	-6,84E+02	1,17E+02
Water pollution [m^3]	6,95E-01	3,04E-01	3,69E-01	0,00E+00	-3,19E-01	3,42E-01
Hazardous waste for disposal [kg]	9,43E-07	4,29E-08	1,06E-08	0,00E+00	-4,17E-08	9,31E-07
Disposed of non-hazardous waste [kg]	3,10E-02	7,48E-02	1,79E-02	0,00E+00	-6,50E-02	3,25E-03
Disposed of radioactive waste [kg]	3,46E-03	2,92E-04	3,81E-03	0,00E+00	-6,72E-04	2,68E-05

evaluated from CML 2001, April. 2015

1.3.22 U-Bolt MP-UB 33 1" M8

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288382	U-Bolt MP-UB 33 1" M8	20	1,88	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	2,766	3,842	0,755	0,000	-2,675	0,845
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,06E-14	3,69E-15	2,21E-14	0,00E+00	-5,39E-15	1,37E-16
Acidification Potential (AP) [kg SO2-eq.]	1,06E-02	9,53E-03	1,57E-03	0,00E+00	-7,25E-03	6,79E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,72E-03	8,38E-04	1,74E-04	0,00E+00	-6,78E-04	1,39E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,44E-03	1,40E-03	1,13E-04	0,00E+00	-1,07E-03	-1,89E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,31E-07	5,50E-08	2,48E-07	0,00E+00	-3,87E-08	6,64E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,30E+01	4,22E+01	8,57E+00	0,00E+00	-2,92E+01	1,15E+01
Energy (net calorific value) [MJ]	3,87E+01	4,36E+01	1,36E+01	0,00E+00	-3,01E+01	1,15E+01
Energy ren. (net calorafic value) [MJ]	6,28E+00	1,50E+00	5,88E+00	0,00E+00	-1,70E+00	5,96E-01
Water consumption [kg]	1,54E+01	1,13E+01	6,85E+00	0,00E+00	-3,35E+00	6,93E-01
Air pollution [m^3]	1,98E+02	4,51E+02	4,85E+01	0,00E+00	-3,63E+02	6,17E+01
Water pollution [m^3]	3,69E-01	1,61E-01	1,95E-01	0,00E+00	-1,67E-01	1,80E-01
Hazardous waste for disposal [kg]	4,98E-07	2,28E-08	5,59E-09	0,00E+00	-2,21E-08	4,92E-07
Disposed of non-hazardous waste [kg]	1,64E-02	3,98E-02	9,49E-03	0,00E+00	-3,46E-02	1,72E-03
Disposed of radioactive waste [kg]	1,85E-03	1,55E-04	2,01E-03	0,00E+00	-3,37E-04	1,41E-05

evaluated from CML 2001, April. 2015

1.3.23 U-Bolt MP-UB 42 1-1/4" M8

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288383	U-Bolt MP-UB 42 1-1/4" M8	20	2,30	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	3,232	4,697	0,927	0,000	-3,426	1,034
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,61E-14	4,61E-15	2,72E-14	0,00E+00	-5,87E-15	1,68E-16
Acidification Potential (AP) [kg SO2-eq.]	1,28E-02	1,15E-02	1,93E-03	0,00E+00	-8,99E-03	8,31E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	2,10E-03	1,02E-03	2,14E-04	0,00E+00	-8,39E-04	1,70E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,80E-03	1,70E-03	1,39E-04	0,00E+00	-1,33E-03	-2,31E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,07E-07	5,71E-08	3,05E-07	0,00E+00	-3,67E-08	8,12E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,84E+01	4,93E+01	1,05E+01	0,00E+00	-3,55E+01	1,41E+01
Energy (net calorific value) [MJ]	4,53E+01	5,08E+01	1,68E+01	0,00E+00	-3,63E+01	1,41E+01
Energy ren. (net calorafic value) [MJ]	7,89E+00	1,81E+00	7,23E+00	0,00E+00	-1,89E+00	7,30E-01
Water consumption [kg]	1,74E+01	1,24E+01	8,42E+00	0,00E+00	-4,25E+00	8,47E-01
Air pollution [m^3]	2,35E+02	5,51E+02	5,96E+01	0,00E+00	-4,51E+02	7,55E+01
Water pollution [m^3]	4,62E-01	2,01E-01	2,40E-01	0,00E+00	-2,00E-01	2,21E-01
Hazardous waste for disposal [kg]	6,10E-07	2,85E-08	6,86E-09	0,00E+00	-2,71E-08	6,02E-07
Disposed of non-hazardous waste [kg]	2,02E-02	4,97E-02	1,17E-02	0,00E+00	-4,33E-02	2,10E-03
Disposed of radioactive waste [kg]	2,35E-03	1,94E-04	2,48E-03	0,00E+00	-3,40E-04	1,73E-05

evaluated from CML 2001, April. 2015

1.3.24 U-Bolt MP-UB 48 1-1/2" M8

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288384	U-Bolt MP-UB 48 1-1/2" M8	20	2,38	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	3,321	4,860	0,960	0,000	-3,569	1,070
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,72E-14	4,78E-15	2,82E-14	0,00E+00	-5,96E-15	1,73E-16
Acidification Potential (AP) [kg SO2-eq.]	1,32E-02	1,19E-02	2,00E-03	0,00E+00	-9,32E-03	8,60E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	2,17E-03	1,06E-03	2,21E-04	0,00E+00	-8,70E-04	1,76E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,87E-03	1,75E-03	1,44E-04	0,00E+00	-1,38E-03	-2,39E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,21E-07	5,75E-08	3,16E-07	0,00E+00	-3,63E-08	8,40E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,95E+01	5,07E+01	1,09E+01	0,00E+00	-3,66E+01	1,45E+01
Energy (net calorific value) [MJ]	4,66E+01	5,22E+01	1,73E+01	0,00E+00	-3,75E+01	1,46E+01
Energy ren. (net calorafic value) [MJ]	8,19E+00	1,87E+00	7,49E+00	0,00E+00	-1,92E+00	7,55E-01
Water consumption [kg]	1,78E+01	1,26E+01	8,72E+00	0,00E+00	-4,42E+00	8,77E-01
Air pollution [m^3]	2,42E+02	5,70E+02	6,17E+01	0,00E+00	-4,68E+02	7,81E+01
Water pollution [m^3]	4,79E-01	2,09E-01	2,48E-01	0,00E+00	-2,06E-01	2,28E-01
Hazardous waste for disposal [kg]	6,31E-07	2,96E-08	7,11E-09	0,00E+00	-2,80E-08	6,22E-07
Disposed of non-hazardous waste [kg]	2,09E-02	5,16E-02	1,21E-02	0,00E+00	-4,49E-02	2,17E-03
Disposed of radioactive waste [kg]	2,44E-03	2,02E-04	2,56E-03	0,00E+00	-3,41E-04	1,79E-05

evaluated from CML 2001, April. 2015

1.3.25 U-Bolt MP-UB 60 2" M10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288385	U-Bolt MP-UB 60 2" M10	20	3,92	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,028	7,995	1,591	0,000	-6,320	1,762
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,76E-14	8,16E-15	4,68E-14	0,00E+00	-7,71E-15	2,86E-16
Acidification Potential (AP) [kg SO2-eq.]	2,09E-02	1,91E-02	3,32E-03	0,00E+00	-1,57E-02	1,42E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,54E-03	1,73E-03	3,67E-04	0,00E+00	-1,46E-03	2,90E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,20E-03	2,84E-03	2,39E-04	0,00E+00	-2,34E-03	-3,93E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	6,99E-07	6,51E-08	5,25E-07	0,00E+00	-2,90E-08	1,38E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	5,94E+01	7,69E+01	1,80E+01	0,00E+00	-5,95E+01	2,40E+01
Energy (net calorific value) [MJ]	7,11E+01	7,87E+01	2,88E+01	0,00E+00	-6,04E+01	2,40E+01
Energy ren. (net calorafic value) [MJ]	1,41E+01	3,03E+00	1,24E+01	0,00E+00	-2,62E+00	1,24E+00
Water consumption [kg]	2,49E+01	1,67E+01	1,45E+01	0,00E+00	-7,71E+00	1,44E+00
Air pollution [m^3]	3,75E+02	9,35E+02	1,02E+02	0,00E+00	-7,90E+02	1,29E+02
Water pollution [m^3]	8,18E-01	3,54E-01	4,12E-01	0,00E+00	-3,25E-01	3,76E-01
Hazardous waste for disposal [kg]	1,04E-06	5,05E-08	1,18E-08	0,00E+00	-4,63E-08	1,03E-06
Disposed of non-hazardous waste [kg]	3,48E-02	8,81E-02	2,01E-02	0,00E+00	-7,69E-02	3,58E-03
Disposed of radioactive waste [kg]	4,28E-03	3,44E-04	4,26E-03	0,00E+00	-3,53E-04	2,95E-05

evaluated from CML 2001, April. 2015

1.3.26 U-Bolt MP-UB 76 2-1/2" M10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288386	U-Bolt MP-UB 76 2-1/2" M10	10	2,35	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	2,946	4,792	0,955	0,000	-3,857	1,056
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,89E-14	4,94E-15	2,81E-14	0,00E+00	-4,30E-15	1,71E-16
Acidification Potential (AP) [kg SO2-eq.]	1,24E-02	1,14E-02	1,99E-03	0,00E+00	-9,47E-03	8,49E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	2,12E-03	1,04E-03	2,20E-04	0,00E+00	-8,81E-04	1,74E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,94E-03	1,69E-03	1,44E-04	0,00E+00	-1,41E-03	-2,36E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,20E-07	3,45E-08	3,15E-07	0,00E+00	-1,27E-08	8,30E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,47E+01	4,51E+01	1,08E+01	0,00E+00	-3,56E+01	1,44E+01
Energy (net calorific value) [MJ]	4,18E+01	4,61E+01	1,73E+01	0,00E+00	-3,60E+01	1,44E+01
Energy ren. (net calorafic value) [MJ]	8,54E+00	1,81E+00	7,47E+00	0,00E+00	-1,49E+00	7,45E-01
Water consumption [kg]	1,43E+01	9,41E+00	8,70E+00	0,00E+00	-4,69E+00	8,66E-01
Air pollution [m^3]	2,22E+02	5,60E+02	6,15E+01	0,00E+00	-4,77E+02	7,71E+01
Water pollution [m^3]	4,95E-01	2,14E-01	2,48E-01	0,00E+00	-1,92E-01	2,25E-01
Hazardous waste for disposal [kg]	6,24E-07	3,06E-08	7,07E-09	0,00E+00	-2,78E-08	6,15E-07
Disposed of non-hazardous waste [kg]	2,09E-02	5,33E-02	1,20E-02	0,00E+00	-4,65E-02	2,14E-03
Disposed of radioactive waste [kg]	2,61E-03	2,08E-04	2,56E-03	0,00E+00	-1,80E-04	1,77E-05

evaluated from CML 2001, April. 2015

1.3.27 U-Bolt MP-UB 89 3" M10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288387	U-Bolt MP-UB 89 3" M10	10	2,58	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	3,372	5,264	1,046	0,000	-4,097	1,159
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,09E-14	5,33E-15	3,08E-14	0,00E+00	-5,38E-15	1,88E-16
Acidification Potential (AP) [kg SO2-eq.]	1,39E-02	1,27E-02	2,18E-03	0,00E+00	-1,03E-02	9,32E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	2,33E-03	1,14E-03	2,41E-04	0,00E+00	-9,58E-04	1,91E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,09E-03	1,87E-03	1,57E-04	0,00E+00	-1,53E-03	-2,59E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,59E-07	4,70E-08	3,45E-07	0,00E+00	-2,35E-08	9,11E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,99E+01	5,15E+01	1,19E+01	0,00E+00	-3,93E+01	1,58E+01
Energy (net calorific value) [MJ]	4,76E+01	5,28E+01	1,89E+01	0,00E+00	-4,00E+01	1,58E+01
Energy ren. (net calorafic value) [MJ]	9,19E+00	2,00E+00	8,17E+00	0,00E+00	-1,80E+00	8,18E-01
Water consumption [kg]	1,70E+01	1,16E+01	9,52E+00	0,00E+00	-5,01E+00	9,51E-01
Air pollution [m^3]	2,50E+02	6,16E+02	6,73E+01	0,00E+00	-5,17E+02	8,47E+01
Water pollution [m^3]	5,34E-01	2,32E-01	2,71E-01	0,00E+00	-2,16E-01	2,48E-01
Hazardous waste for disposal [kg]	6,85E-07	3,30E-08	7,74E-09	0,00E+00	-3,05E-08	6,75E-07
Disposed of non-hazardous waste [kg]	2,29E-02	5,75E-02	1,32E-02	0,00E+00	-5,02E-02	2,35E-03
Disposed of radioactive waste [kg]	2,78E-03	2,25E-04	2,80E-03	0,00E+00	-2,62E-04	1,94E-05

evaluated from CML 2001, April. 2015

1.3.28 U-Bolt MP-UB 102 3-1/2" M12

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288388	U-Bolt MP-UB 102 3-1/2" M12	10	3,98	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	4,924	8,114	1,620	0,000	-6,599	1,789
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,94E-14	8,40E-15	4,77E-14	0,00E+00	-6,97E-15	2,90E-16
Acidification Potential (AP) [kg SO2-eq.]	2,09E-02	1,93E-02	3,38E-03	0,00E+00	-1,61E-02	1,44E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,58E-03	1,76E-03	3,74E-04	0,00E+00	-1,50E-03	2,94E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,29E-03	2,86E-03	2,43E-04	0,00E+00	-2,40E-03	-3,99E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	7,12E-07	5,39E-08	5,35E-07	0,00E+00	-1,68E-08	1,41E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	5,79E+01	7,54E+01	1,84E+01	0,00E+00	-6,01E+01	2,43E+01
Energy (net calorific value) [MJ]	6,99E+01	7,70E+01	2,93E+01	0,00E+00	-6,08E+01	2,44E+01
Energy ren. (net calorafic value) [MJ]	1,46E+01	3,05E+00	1,27E+01	0,00E+00	-2,43E+00	1,26E+00
Water consumption [kg]	2,36E+01	1,53E+01	1,48E+01	0,00E+00	-8,01E+00	1,47E+00
Air pollution [m^3]	3,72E+02	9,48E+02	1,04E+02	0,00E+00	-8,11E+02	1,31E+02
Water pollution [m^3]	8,42E-01	3,64E-01	4,20E-01	0,00E+00	-3,24E-01	3,82E-01
Hazardous waste for disposal [kg]	1,06E-06	5,20E-08	1,20E-08	0,00E+00	-4,71E-08	1,04E-06
Disposed of non-hazardous waste [kg]	3,55E-02	9,07E-02	2,04E-02	0,00E+00	-7,93E-02	3,63E-03
Disposed of radioactive waste [kg]	4,45E-03	3,54E-04	4,34E-03	0,00E+00	-2,73E-04	3,00E-05

evaluated from CML 2001, April. 2015

1.3.29 U-Bolt MP-UB 108 M12

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288389	U-Bolt MP-UB 108 M12	10	4,09	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,046	8,338	1,665	0,000	-6,795	1,838
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	5,09E-14	8,65E-15	4,90E-14	0,00E+00	-7,09E-15	2,98E-16
Acidification Potential (AP) [kg SO2-eq.]	2,15E-02	1,98E-02	3,47E-03	0,00E+00	-1,65E-02	1,48E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,67E-03	1,80E-03	3,84E-04	0,00E+00	-1,54E-03	3,03E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,39E-03	2,93E-03	2,50E-04	0,00E+00	-2,47E-03	-4,10E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	7,32E-07	5,45E-08	5,49E-07	0,00E+00	-1,63E-08	1,44E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	5,94E+01	7,72E+01	1,89E+01	0,00E+00	-6,17E+01	2,50E+01
Energy (net calorific value) [MJ]	7,16E+01	7,89E+01	3,01E+01	0,00E+00	-6,24E+01	2,51E+01
Energy ren. (net calorafic value) [MJ]	1,50E+01	3,14E+00	1,30E+01	0,00E+00	-2,48E+00	1,30E+00
Water consumption [kg]	2,41E+01	1,56E+01	1,52E+01	0,00E+00	-8,24E+00	1,51E+00
Air pollution [m^3]	3,81E+02	9,74E+02	1,07E+02	0,00E+00	-8,34E+02	1,34E+02
Water pollution [m^3]	8,66E-01	3,74E-01	4,32E-01	0,00E+00	-3,32E-01	3,92E-01
Hazardous waste for disposal [kg]	1,09E-06	5,35E-08	1,23E-08	0,00E+00	-4,84E-08	1,07E-06
Disposed of non-hazardous waste [kg]	3,65E-02	9,33E-02	2,10E-02	0,00E+00	-8,15E-02	3,73E-03
Disposed of radioactive waste [kg]	4,58E-03	3,64E-04	4,46E-03	0,00E+00	-2,74E-04	3,08E-05

evaluated from CML 2001, April. 2015

1.3.30 U-Bolt MP-UB 114 4" M12

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288390	U-Bolt MP-UB 114 4" M12	10	4,36	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,789	8,897	1,765	0,000	-6,833	1,959
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	5,17E-14	8,95E-15	5,19E-14	0,00E+00	-9,52E-15	3,18E-16
Acidification Potential (AP) [kg SO2-eq.]	2,36E-02	2,15E-02	3,68E-03	0,00E+00	-1,73E-02	1,57E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,95E-03	1,93E-03	4,07E-04	0,00E+00	-1,61E-03	3,22E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,51E-03	3,18E-03	2,65E-04	0,00E+00	-2,57E-03	-4,37E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	7,75E-07	8,55E-08	5,82E-07	0,00E+00	-4,60E-08	1,54E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,85E+01	8,85E+01	2,00E+01	0,00E+00	-6,66E+01	2,66E+01
Energy (net calorific value) [MJ]	8,16E+01	9,08E+01	3,19E+01	0,00E+00	-6,78E+01	2,67E+01
Energy ren. (net calorafic value) [MJ]	1,54E+01	3,39E+00	1,38E+01	0,00E+00	-3,16E+00	1,38E+00
Water consumption [kg]	2,97E+01	2,04E+01	1,61E+01	0,00E+00	-8,38E+00	1,61E+00
Air pollution [m^3]	4,28E+02	1,04E+03	1,14E+02	0,00E+00	-8,70E+02	1,43E+02
Water pollution [m^3]	8,97E-01	3,89E-01	4,57E-01	0,00E+00	-3,67E-01	4,18E-01
Hazardous waste for disposal [kg]	1,16E-06	5,54E-08	1,31E-08	0,00E+00	-5,14E-08	1,14E-06
Disposed of non-hazardous waste [kg]	3,86E-02	9,66E-02	2,22E-02	0,00E+00	-8,42E-02	3,98E-03
Disposed of radioactive waste [kg]	4,65E-03	3,77E-04	4,72E-03	0,00E+00	-4,85E-04	3,28E-05

evaluated from CML 2001, April. 2015

1.3.31 U-Bolt MP-UB 133 M12

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288391	U-Bolt MP-UB 133 M12	10	4,73	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,199	9,650	1,917	0,000	-7,494	2,126
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	5,66E-14	9,76E-15	5,64E-14	0,00E+00	-9,94E-15	3,45E-16
Acidification Potential (AP) [kg SO2-eq.]	2,55E-02	2,32E-02	4,00E-03	0,00E+00	-1,88E-02	1,71E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,28E-03	2,09E-03	4,42E-04	0,00E+00	-1,76E-03	3,50E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,83E-03	3,44E-03	2,88E-04	0,00E+00	-2,80E-03	-4,75E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	8,42E-07	8,73E-08	6,32E-07	0,00E+00	-4,42E-08	1,67E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,33E+01	9,47E+01	2,17E+01	0,00E+00	-7,21E+01	2,89E+01
Energy (net calorific value) [MJ]	8,75E+01	9,72E+01	3,46E+01	0,00E+00	-7,33E+01	2,90E+01
Energy ren. (net calorafic value) [MJ]	1,68E+01	3,67E+00	1,50E+01	0,00E+00	-3,32E+00	1,50E+00
Water consumption [kg]	3,14E+01	2,14E+01	1,74E+01	0,00E+00	-9,18E+00	1,74E+00
Air pollution [m^3]	4,60E+02	1,13E+03	1,23E+02	0,00E+00	-9,48E+02	1,55E+02
Water pollution [m^3]	9,79E-01	4,24E-01	4,97E-01	0,00E+00	-3,96E-01	4,54E-01
Hazardous waste for disposal [kg]	1,26E-06	6,05E-08	1,42E-08	0,00E+00	-5,58E-08	1,24E-06
Disposed of non-hazardous waste [kg]	4,19E-02	1,05E-01	2,41E-02	0,00E+00	-9,19E-02	4,32E-03
Disposed of radioactive waste [kg]	5,09E-03	4,12E-04	5,13E-03	0,00E+00	-4,88E-04	3,56E-05

evaluated from CML 2001, April. 2015

1.3.32 U-Bolt MP-UB 139 5" M12

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288392	U-Bolt MP-UB 139 5" M12	10	4,83	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,310	9,854	1,958	0,000	-7,673	2,171
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	5,79E-14	9,98E-15	5,76E-14	0,00E+00	-1,01E-14	3,52E-16
Acidification Potential (AP) [kg SO2-eq.]	2,60E-02	2,37E-02	4,08E-03	0,00E+00	-1,93E-02	1,74E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,37E-03	2,14E-03	4,52E-04	0,00E+00	-1,79E-03	3,57E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,91E-03	3,51E-03	2,94E-04	0,00E+00	-2,87E-03	-4,85E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	8,60E-07	8,78E-08	6,46E-07	0,00E+00	-4,37E-08	1,71E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,46E+01	9,65E+01	2,22E+01	0,00E+00	-7,36E+01	2,95E+01
Energy (net calorific value) [MJ]	8,91E+01	9,89E+01	3,54E+01	0,00E+00	-7,48E+01	2,96E+01
Energy ren. (net calorafic value) [MJ]	1,72E+01	3,75E+00	1,53E+01	0,00E+00	-3,37E+00	1,53E+00
Water consumption [kg]	3,19E+01	2,17E+01	1,78E+01	0,00E+00	-9,39E+00	1,78E+00
Air pollution [m^3]	4,69E+02	1,15E+03	1,26E+02	0,00E+00	-9,69E+02	1,59E+02
Water pollution [m^3]	1,00E+00	4,34E-01	5,07E-01	0,00E+00	-4,04E-01	4,63E-01
Hazardous waste for disposal [kg]	1,28E-06	6,18E-08	1,45E-08	0,00E+00	-5,70E-08	1,26E-06
Disposed of non-hazardous waste [kg]	4,28E-02	1,08E-01	2,47E-02	0,00E+00	-9,40E-02	4,41E-03
Disposed of radioactive waste [kg]	5,21E-03	4,21E-04	5,24E-03	0,00E+00	-4,89E-04	3,64E-05

evaluated from CML 2001, April. 2015

1.3.33 U-Bolt MP-UB 159 M12

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288393	U-Bolt MP-UB 159 M12	10	5,23	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,754	10,670	2,122	0,000	-8,389	2,351
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	6,32E-14	1,09E-14	6,24E-14	0,00E+00	-1,05E-14	3,81E-16
Acidification Potential (AP) [kg SO2-eq.]	2,80E-02	2,56E-02	4,42E-03	0,00E+00	-2,09E-02	1,89E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,72E-03	2,31E-03	4,89E-04	0,00E+00	-1,95E-03	3,87E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-4,26E-03	3,79E-03	3,19E-04	0,00E+00	-3,12E-03	-5,25E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	9,33E-07	8,98E-08	7,00E-07	0,00E+00	-4,18E-08	1,85E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,98E+01	1,03E+02	2,41E+01	0,00E+00	-7,95E+01	3,20E+01
Energy (net calorific value) [MJ]	9,55E+01	1,06E+02	3,84E+01	0,00E+00	-8,08E+01	3,21E+01
Energy ren. (net calorafic value) [MJ]	1,87E+01	4,05E+00	1,66E+01	0,00E+00	-3,55E+00	1,66E+00
Water consumption [kg]	3,37E+01	2,27E+01	1,93E+01	0,00E+00	-1,02E+01	1,93E+00
Air pollution [m^3]	5,03E+02	1,25E+03	1,37E+02	0,00E+00	-1,05E+03	1,72E+02
Water pollution [m^3]	1,09E+00	4,72E-01	5,50E-01	0,00E+00	-4,35E-01	5,02E-01
Hazardous waste for disposal [kg]	1,39E-06	6,73E-08	1,57E-08	0,00E+00	-6,18E-08	1,37E-06
Disposed of non-hazardous waste [kg]	4,64E-02	1,17E-01	2,67E-02	0,00E+00	-1,02E-01	4,77E-03
Disposed of radioactive waste [kg]	5,69E-03	4,58E-04	5,68E-03	0,00E+00	-4,92E-04	3,94E-05

evaluated from CML 2001, April. 2015

1.3.34 U-Bolt MP-UB 168 6" M12

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288394	U-Bolt MP-UB 168 6" M12	2	5,39	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,164	10,974	2,204	0,000	-9,436	2,421
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	7,01E-14	1,17E-14	6,50E-14	0,00E+00	-7,04E-15	3,93E-16
Acidification Potential (AP) [kg SO2-eq.]	2,75E-02	2,56E-02	4,61E-03	0,00E+00	-2,22E-02	1,95E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,80E-03	2,37E-03	5,09E-04	0,00E+00	-2,06E-03	3,99E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-4,59E-03	3,81E-03	3,31E-04	0,00E+00	-3,32E-03	-5,41E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	9,70E-07	3,94E-08	7,28E-07	0,00E+00	1,22E-08	1,90E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,20E+01	9,45E+01	2,50E+01	0,00E+00	-8,04E+01	3,29E+01
Energy (net calorific value) [MJ]	8,82E+01	9,60E+01	3,99E+01	0,00E+00	-8,07E+01	3,30E+01
Energy ren. (net calorafic value) [MJ]	2,04E+01	4,07E+00	1,73E+01	0,00E+00	-2,67E+00	1,71E+00
Water consumption [kg]	2,70E+01	1,62E+01	2,01E+01	0,00E+00	-1,13E+01	1,99E+00
Air pollution [m^3]	4,78E+02	1,28E+03	1,42E+02	0,00E+00	-1,12E+03	1,77E+02
Water pollution [m^3]	1,17E+00	5,05E-01	5,72E-01	0,00E+00	-4,22E-01	5,17E-01
Hazardous waste for disposal [kg]	1,43E-06	7,24E-08	1,63E-08	0,00E+00	-6,40E-08	1,41E-06
Disposed of non-hazardous waste [kg]	4,84E-02	1,26E-01	2,78E-02	0,00E+00	-1,11E-01	4,92E-03
Disposed of radioactive waste [kg]	6,32E-03	4,93E-04	5,92E-03	0,00E+00	-1,33E-04	4,06E-05

evaluated from CML 2001, April. 2015

1.3.35 U-Bolt MP-UB 219 8" M12

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288395	U-Bolt MP-UB 219 8" M12	2	1,29	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	1,623	2,635	0,525	0,000	-2,117	0,581
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,59E-14	2,71E-15	1,55E-14	0,00E+00	-2,38E-15	9,41E-17
Acidification Potential (AP) [kg SO2-eq.]	6,84E-03	6,28E-03	1,10E-03	0,00E+00	-5,20E-03	4,67E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,16E-03	5,70E-04	1,21E-04	0,00E+00	-4,84E-04	9,56E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,06E-03	9,30E-04	7,89E-05	0,00E+00	-7,76E-04	-1,30E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,31E-07	1,92E-08	1,73E-07	0,00E+00	-7,20E-09	4,56E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,91E+01	2,48E+01	5,95E+00	0,00E+00	-1,96E+01	7,90E+00
Energy (net calorific value) [MJ]	2,30E+01	2,54E+01	9,49E+00	0,00E+00	-1,98E+01	7,92E+00
Energy ren. (net calorafic value) [MJ]	4,69E+00	9,94E-01	4,11E+00	0,00E+00	-8,21E-01	4,10E-01
Water consumption [kg]	7,89E+00	5,21E+00	4,78E+00	0,00E+00	-2,57E+00	4,76E-01
Air pollution [m^3]	1,22E+02	3,08E+02	3,38E+01	0,00E+00	-2,62E+02	4,24E+01
Water pollution [m^3]	2,72E-01	1,18E-01	1,36E-01	0,00E+00	-1,06E-01	1,24E-01
Hazardous waste for disposal [kg]	3,43E-07	1,68E-08	3,89E-09	0,00E+00	-1,53E-08	3,38E-07
Disposed of non-hazardous waste [kg]	1,15E-02	2,93E-02	6,62E-03	0,00E+00	-2,56E-02	1,18E-03
Disposed of radioactive waste [kg]	1,43E-03	1,14E-04	1,41E-03	0,00E+00	-1,00E-04	9,72E-06

evaluated from CML 2001, April. 2015

1.3.36 U-Bolt MP-UB 273 10" M12

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288396	U-Bolt MP-UB 273 10" M12	2	1,54	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	2,047	3,152	0,626	0,000	-2,425	0,694
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,83E-14	3,17E-15	1,84E-14	0,00E+00	-3,35E-15	1,13E-16
Acidification Potential (AP) [kg SO2-eq.]	8,35E-03	7,61E-03	1,30E-03	0,00E+00	-6,14E-03	5,58E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,40E-03	6,84E-04	1,44E-04	0,00E+00	-5,72E-04	1,14E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,24E-03	1,13E-03	9,39E-05	0,00E+00	-9,13E-04	-1,55E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,75E-07	3,00E-08	2,06E-07	0,00E+00	-1,60E-08	5,45E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,42E+01	3,13E+01	7,09E+00	0,00E+00	-2,36E+01	9,44E+00
Energy (net calorific value) [MJ]	2,89E+01	3,21E+01	1,13E+01	0,00E+00	-2,40E+01	9,47E+00
Energy ren. (net calorafic value) [MJ]	5,47E+00	1,20E+00	4,89E+00	0,00E+00	-1,11E+00	4,90E-01
Water consumption [kg]	1,05E+01	7,19E+00	5,69E+00	0,00E+00	-2,97E+00	5,69E-01
Air pollution [m^3]	1,51E+02	3,69E+02	4,03E+01	0,00E+00	-3,08E+02	5,07E+01
Water pollution [m^3]	3,18E-01	1,38E-01	1,62E-01	0,00E+00	-1,30E-01	1,48E-01
Hazardous waste for disposal [kg]	4,10E-07	1,97E-08	4,63E-09	0,00E+00	-1,82E-08	4,04E-07
Disposed of non-hazardous waste [kg]	1,37E-02	3,43E-02	7,88E-03	0,00E+00	-2,99E-02	1,41E-03
Disposed of radioactive waste [kg]	1,65E-03	1,34E-04	1,67E-03	0,00E+00	-1,70E-04	1,16E-05

evaluated from CML 2001, April. 2015

1.3.37 U-Bolt MP-UB 324 12" M12

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288397	U-Bolt MP-UB 324 12" M12	2	1,74	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	2,266	3,555	0,707	0,000	-2,779	0,783
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,09E-14	3,61E-15	2,08E-14	0,00E+00	-3,58E-15	1,27E-16
Acidification Potential (AP) [kg SO2-eq.]	9,35E-03	8,54E-03	1,47E-03	0,00E+00	-6,96E-03	6,29E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,58E-03	7,71E-04	1,63E-04	0,00E+00	-6,48E-04	1,29E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,41E-03	1,26E-03	1,06E-04	0,00E+00	-1,04E-03	-1,75E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,10E-07	3,10E-08	2,33E-07	0,00E+00	-1,51E-08	6,15E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,68E+01	3,46E+01	8,01E+00	0,00E+00	-2,65E+01	1,07E+01
Energy (net calorific value) [MJ]	3,20E+01	3,55E+01	1,28E+01	0,00E+00	-2,70E+01	1,07E+01
Energy ren. (net calorafic value) [MJ]	6,22E+00	1,35E+00	5,52E+00	0,00E+00	-1,20E+00	5,53E-01
Water consumption [kg]	1,14E+01	7,72E+00	6,43E+00	0,00E+00	-3,40E+00	6,42E-01
Air pollution [m^3]	1,69E+02	4,16E+02	4,55E+01	0,00E+00	-3,50E+02	5,72E+01
Water pollution [m^3]	3,62E-01	1,57E-01	1,83E-01	0,00E+00	-1,45E-01	1,67E-01
Hazardous waste for disposal [kg]	4,63E-07	2,23E-08	5,23E-09	0,00E+00	-2,06E-08	4,56E-07
Disposed of non-hazardous waste [kg]	1,55E-02	3,89E-02	8,90E-03	0,00E+00	-3,40E-02	1,59E-03
Disposed of radioactive waste [kg]	1,88E-03	1,52E-04	1,89E-03	0,00E+00	-1,72E-04	1,31E-05

evaluated from CML 2001, April. 2015

1.3.38 U-Bolt MP-UB 355 14" M20

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288398	U-Bolt MP-UB 355 14" M20	2	5,07	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,853	10,328	2,073	0,000	-8,827	2,279
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	6,56E-14	1,10E-14	6,11E-14	0,00E+00	-6,87E-15	3,69E-16
Acidification Potential (AP) [kg SO2-eq.]	2,59E-02	2,41E-02	4,33E-03	0,00E+00	-2,08E-02	1,83E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,52E-03	2,23E-03	4,79E-04	0,00E+00	-1,93E-03	3,75E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-4,31E-03	3,59E-03	3,12E-04	0,00E+00	-3,12E-03	-5,09E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	9,12E-07	4,05E-08	6,85E-07	0,00E+00	7,84E-09	1,79E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,84E+01	8,97E+01	2,35E+01	0,00E+00	-7,58E+01	3,10E+01
Energy (net calorific value) [MJ]	8,36E+01	9,12E+01	3,75E+01	0,00E+00	-7,61E+01	3,11E+01
Energy ren. (net calorafic value) [MJ]	1,91E+01	3,84E+00	1,62E+01	0,00E+00	-2,58E+00	1,61E+00
Water consumption [kg]	2,59E+01	1,57E+01	1,89E+01	0,00E+00	-1,06E+01	1,87E+00
Air pollution [m^3]	4,52E+02	1,20E+03	1,34E+02	0,00E+00	-1,05E+03	1,66E+02
Water pollution [m^3]	1,10E+00	4,74E-01	5,38E-01	0,00E+00	-3,99E-01	4,86E-01
Hazardous waste for disposal [kg]	1,35E-06	6,80E-08	1,53E-08	0,00E+00	-6,02E-08	1,33E-06
Disposed of non-hazardous waste [kg]	4,55E-02	1,18E-01	2,62E-02	0,00E+00	-1,04E-01	4,63E-03
Disposed of radioactive waste [kg]	5,91E-03	4,63E-04	5,56E-03	0,00E+00	-1,50E-04	3,82E-05

evaluated from CML 2001, April. 2015

1.3.39 U-Bolt MP-UB 406 16" M20

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288399	U-Bolt MP-UB 406 16" M20	2	5,57	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,407	11,346	2,278	0,000	-9,720	2,503
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	7,22E-14	1,21E-14	6,72E-14	0,00E+00	-7,44E-15	4,06E-16
Acidification Potential (AP) [kg SO2-eq.]	2,85E-02	2,65E-02	4,76E-03	0,00E+00	-2,29E-02	2,01E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,97E-03	2,45E-03	5,26E-04	0,00E+00	-2,13E-03	4,12E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-4,74E-03	3,94E-03	3,43E-04	0,00E+00	-3,43E-03	-5,59E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,00E-06	4,30E-08	7,53E-07	0,00E+00	1,02E-08	1,97E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,49E+01	9,82E+01	2,58E+01	0,00E+00	-8,32E+01	3,40E+01
Energy (net calorific value) [MJ]	9,16E+01	9,99E+01	4,12E+01	0,00E+00	-8,36E+01	3,42E+01
Energy ren. (net calorafic value) [MJ]	2,10E+01	4,21E+00	1,79E+01	0,00E+00	-2,81E+00	1,77E+00
Water consumption [kg]	2,82E+01	1,71E+01	2,08E+01	0,00E+00	-1,17E+01	2,05E+00
Air pollution [m^3]	4,96E+02	1,32E+03	1,47E+02	0,00E+00	-1,16E+03	1,83E+02
Water pollution [m^3]	1,21E+00	5,21E-01	5,92E-01	0,00E+00	-4,37E-01	5,34E-01
Hazardous waste for disposal [kg]	1,48E-06	7,48E-08	1,69E-08	0,00E+00	-6,62E-08	1,46E-06
Disposed of non-hazardous waste [kg]	5,00E-02	1,30E-01	2,88E-02	0,00E+00	-1,14E-01	5,08E-03
Disposed of radioactive waste [kg]	6,51E-03	5,09E-04	6,11E-03	0,00E+00	-1,54E-04	4,19E-05

evaluated from CML 2001, April. 2015

1.3.40 U-Bolt MP-UB 457 18" M24

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288400	U-Bolt MP-UB 457 18" M24	2	8,69	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	10,289	17,707	3,547	0,000	-14,871	3,905
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,11E-13	1,86E-14	1,05E-13	0,00E+00	-1,30E-14	6,33E-16
Acidification Potential (AP) [kg SO2-eq.]	4,49E-02	4,16E-02	7,41E-03	0,00E+00	-3,55E-02	3,14E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	7,77E-03	3,82E-03	8,19E-04	0,00E+00	-3,30E-03	6,43E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-7,31E-03	6,18E-03	5,33E-04	0,00E+00	-5,31E-03	-8,72E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,56E-06	8,67E-08	1,17E-06	0,00E+00	-4,51E-09	3,07E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,21E+02	1,58E+02	4,02E+01	0,00E+00	-1,30E+02	5,31E+01
Energy (net calorific value) [MJ]	1,47E+02	1,61E+02	6,41E+01	0,00E+00	-1,31E+02	5,33E+01
Energy ren. (net calorafic value) [MJ]	3,24E+01	6,61E+00	2,78E+01	0,00E+00	-4,74E+00	2,76E+00
Water consumption [kg]	4,69E+01	2,93E+01	3,24E+01	0,00E+00	-1,79E+01	3,20E+00
Air pollution [m^3]	7,88E+02	2,07E+03	2,29E+02	0,00E+00	-1,79E+03	2,85E+02
Water pollution [m^3]	1,87E+00	8,06E-01	9,21E-01	0,00E+00	-6,92E-01	8,34E-01
Hazardous waste for disposal [kg]	2,31E-06	1,15E-07	2,63E-08	0,00E+00	-1,03E-07	2,27E-06
Disposed of non-hazardous waste [kg]	7,78E-02	2,01E-01	4,48E-02	0,00E+00	-1,76E-01	7,93E-03
Disposed of radioactive waste [kg]	9,99E-03	7,86E-04	9,51E-03	0,00E+00	-3,79E-04	6,54E-05

evaluated from CML 2001, April. 2015

1.3.41 U-Bolt MP-UB 508 20" M24

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288401	U-Bolt MP-UB 508 20" M24	2	9,69	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	11,397	19,743	3,957	0,000	-16,658	4,355
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,24E-13	2,08E-14	1,17E-13	0,00E+00	-1,41E-14	7,06E-16
Acidification Potential (AP) [kg SO2-eq.]	5,00E-02	4,63E-02	8,26E-03	0,00E+00	-3,96E-02	3,50E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	8,66E-03	4,26E-03	9,14E-04	0,00E+00	-3,68E-03	7,17E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-8,17E-03	6,88E-03	5,95E-04	0,00E+00	-5,93E-03	-9,72E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,74E-06	9,17E-08	1,31E-06	0,00E+00	2,32E-10	3,42E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,34E+02	1,75E+02	4,48E+01	0,00E+00	-1,45E+02	5,92E+01
Energy (net calorific value) [MJ]	1,63E+02	1,78E+02	7,15E+01	0,00E+00	-1,46E+02	5,94E+01
Energy ren. (net calorafic value) [MJ]	3,62E+01	7,36E+00	3,10E+01	0,00E+00	-5,19E+00	3,07E+00
Water consumption [kg]	5,15E+01	3,20E+01	3,61E+01	0,00E+00	-2,01E+01	3,57E+00
Air pollution [m^3]	8,75E+02	2,30E+03	2,55E+02	0,00E+00	-2,00E+03	3,18E+02
Water pollution [m^3]	2,09E+00	9,01E-01	1,03E+00	0,00E+00	-7,69E-01	9,30E-01
Hazardous waste for disposal [kg]	2,58E-06	1,29E-07	2,93E-08	0,00E+00	-1,15E-07	2,53E-06
Disposed of non-hazardous waste [kg]	8,69E-02	2,25E-01	4,99E-02	0,00E+00	-1,97E-01	8,84E-03
Disposed of radioactive waste [kg]	1,12E-02	8,79E-04	1,06E-02	0,00E+00	-3,87E-04	7,29E-05

evaluated from CML 2001, April. 2015

1.3.42 U-Bolt MP-UB 609 24" M24

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288402	U-Bolt MP-UB 609 24" M24	2	11,19	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	13,060	22,797	4,572	0,000	-19,338	5,029
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,44E-13	2,41E-14	1,35E-13	0,00E+00	-1,59E-14	8,15E-16
Acidification Potential (AP) [kg SO2-eq.]	5,75E-02	5,34E-02	9,55E-03	0,00E+00	-4,58E-02	4,04E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,00E-02	4,92E-03	1,06E-03	0,00E+00	-4,26E-03	8,28E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-9,47E-03	7,94E-03	6,87E-04	0,00E+00	-6,86E-03	-1,12E-02
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,01E-06	9,91E-08	1,51E-06	0,00E+00	7,34E-09	3,95E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,53E+02	2,00E+02	5,18E+01	0,00E+00	-1,67E+02	6,84E+01
Energy (net calorific value) [MJ]	1,86E+02	2,04E+02	8,27E+01	0,00E+00	-1,68E+02	6,86E+01
Energy ren. (net calorafic value) [MJ]	4,20E+01	8,49E+00	3,58E+01	0,00E+00	-5,87E+00	3,55E+00
Water consumption [kg]	5,85E+01	3,60E+01	4,17E+01	0,00E+00	-2,33E+01	4,12E+00
Air pollution [m^3]	1,01E+03	2,66E+03	2,95E+02	0,00E+00	-2,31E+03	3,67E+02
Water pollution [m^3]	2,42E+00	1,04E+00	1,19E+00	0,00E+00	-8,84E-01	1,07E+00
Hazardous waste for disposal [kg]	2,98E-06	1,49E-07	3,39E-08	0,00E+00	-1,33E-07	2,93E-06
Disposed of non-hazardous waste [kg]	1,00E-01	2,60E-01	5,77E-02	0,00E+00	-2,28E-01	1,02E-02
Disposed of radioactive waste [kg]	1,30E-02	1,02E-03	1,23E-02	0,00E+00	-3,99E-04	8,42E-05

evaluated from CML 2001, April. 2015

1.3.43 U-Bolt MP-UB 21 1/2" M8 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288403	U-Bolt MP-UB 21 1/2" M8 OC	40	3,44	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,178	7,032	1,379	0,000	-4,779	1,546
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,69E-14	6,67E-15	4,04E-14	0,00E+00	-1,04E-14	2,51E-16
Acidification Potential (AP) [kg SO2-eq.]	1,97E-02	1,75E-02	2,87E-03	0,00E+00	-1,32E-02	1,24E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,17E-03	1,54E-03	3,17E-04	0,00E+00	-1,23E-03	2,54E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,61E-03	2,58E-03	2,07E-04	0,00E+00	-1,94E-03	-3,45E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	6,04E-07	1,08E-07	4,53E-07	0,00E+00	-7,89E-08	1,21E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,19E+01	7,89E+01	1,57E+01	0,00E+00	-5,37E+01	2,10E+01
Energy (net calorific value) [MJ]	7,22E+01	8,16E+01	2,49E+01	0,00E+00	-5,54E+01	2,11E+01
Energy ren. (net calorafic value) [MJ]	1,13E+01	2,75E+00	1,07E+01	0,00E+00	-3,25E+00	1,09E+00
Water consumption [kg]	2,94E+01	2,17E+01	1,25E+01	0,00E+00	-6,02E+00	1,27E+00
Air pollution [m^3]	3,69E+02	8,26E+02	8,85E+01	0,00E+00	-6,59E+02	1,13E+02
Water pollution [m^3]	6,68E-01	2,92E-01	3,56E-01	0,00E+00	-3,10E-01	3,30E-01
Hazardous waste for disposal [kg]	9,11E-07	4,13E-08	1,02E-08	0,00E+00	-4,03E-08	9,00E-07
Disposed of non-hazardous waste [kg]	3,00E-02	7,20E-02	1,73E-02	0,00E+00	-6,25E-02	3,14E-03
Disposed of radioactive waste [kg]	3,31E-03	2,81E-04	3,68E-03	0,00E+00	-6,71E-04	2,59E-05

evaluated from CML 2001, April. 2015

1.3.44 U-Bolt MP-UB 26 3/4" M8 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288404	U-Bolt MP-UB 26 3/4" M8 OC	40	3,56	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,311	7,276	1,428	0,000	-4,993	1,600
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,85E-14	6,93E-15	4,19E-14	0,00E+00	-1,06E-14	2,59E-16
Acidification Potential (AP) [kg SO2-eq.]	2,03E-02	1,81E-02	2,97E-03	0,00E+00	-1,37E-02	1,29E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,27E-03	1,59E-03	3,29E-04	0,00E+00	-1,28E-03	2,63E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,71E-03	2,66E-03	2,14E-04	0,00E+00	-2,02E-03	-3,57E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	6,26E-07	1,09E-07	4,69E-07	0,00E+00	-7,83E-08	1,26E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,35E+01	8,10E+01	1,62E+01	0,00E+00	-5,55E+01	2,18E+01
Energy (net calorific value) [MJ]	7,41E+01	8,37E+01	2,58E+01	0,00E+00	-5,71E+01	2,18E+01
Energy ren. (net calorafic value) [MJ]	1,18E+01	2,84E+00	1,11E+01	0,00E+00	-3,30E+00	1,13E+00
Water consumption [kg]	3,00E+01	2,20E+01	1,29E+01	0,00E+00	-6,27E+00	1,31E+00
Air pollution [m^3]	3,79E+02	8,55E+02	9,17E+01	0,00E+00	-6,84E+02	1,17E+02
Water pollution [m^3]	6,95E-01	3,04E-01	3,69E-01	0,00E+00	-3,19E-01	3,42E-01
Hazardous waste for disposal [kg]	9,43E-07	4,29E-08	1,06E-08	0,00E+00	-4,17E-08	9,31E-07
Disposed of non-hazardous waste [kg]	3,10E-02	7,48E-02	1,79E-02	0,00E+00	-6,50E-02	3,25E-03
Disposed of radioactive waste [kg]	3,46E-03	2,92E-04	3,81E-03	0,00E+00	-6,72E-04	2,68E-05

evaluated from CML 2001, April. 2015

1.3.45 U-Bolt MP-UB 33 1" M8 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288405	U-Bolt MP-UB 33 1" M8 OC	20	1,88	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	2,766	3,842	0,755	0,000	-2,675	0,845
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,06E-14	3,69E-15	2,21E-14	0,00E+00	-5,39E-15	1,37E-16
Acidification Potential (AP) [kg SO2-eq.]	1,06E-02	9,53E-03	1,57E-03	0,00E+00	-7,25E-03	6,79E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,72E-03	8,38E-04	1,74E-04	0,00E+00	-6,78E-04	1,39E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,44E-03	1,40E-03	1,13E-04	0,00E+00	-1,07E-03	-1,89E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,31E-07	5,50E-08	2,48E-07	0,00E+00	-3,87E-08	6,64E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,30E+01	4,22E+01	8,57E+00	0,00E+00	-2,92E+01	1,15E+01
Energy (net calorific value) [MJ]	3,87E+01	4,36E+01	1,36E+01	0,00E+00	-3,01E+01	1,15E+01
Energy ren. (net calorafic value) [MJ]	6,28E+00	1,50E+00	5,88E+00	0,00E+00	-1,70E+00	5,96E-01
Water consumption [kg]	1,54E+01	1,13E+01	6,85E+00	0,00E+00	-3,35E+00	6,93E-01
Air pollution [m^3]	1,98E+02	4,51E+02	4,85E+01	0,00E+00	-3,63E+02	6,17E+01
Water pollution [m^3]	3,69E-01	1,61E-01	1,95E-01	0,00E+00	-1,67E-01	1,80E-01
Hazardous waste for disposal [kg]	4,98E-07	2,28E-08	5,59E-09	0,00E+00	-2,21E-08	4,92E-07
Disposed of non-hazardous waste [kg]	1,64E-02	3,98E-02	9,49E-03	0,00E+00	-3,46E-02	1,72E-03
Disposed of radioactive waste [kg]	1,85E-03	1,55E-04	2,01E-03	0,00E+00	-3,37E-04	1,41E-05

evaluated from CML 2001, April. 2015

1.3.46 U-Bolt MP-UB 42 1-1/4" M8 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288406	U-Bolt MP-UB 42 1-1/4" M8 OC	20	2,30	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	3,232	4,697	0,927	0,000	-3,426	1,034
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,61E-14	4,61E-15	2,72E-14	0,00E+00	-5,87E-15	1,68E-16
Acidification Potential (AP) [kg SO2-eq.]	1,28E-02	1,15E-02	1,93E-03	0,00E+00	-8,99E-03	8,31E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	2,10E-03	1,02E-03	2,14E-04	0,00E+00	-8,39E-04	1,70E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,80E-03	1,70E-03	1,39E-04	0,00E+00	-1,33E-03	-2,31E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,07E-07	5,71E-08	3,05E-07	0,00E+00	-3,67E-08	8,12E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,84E+01	4,93E+01	1,05E+01	0,00E+00	-3,55E+01	1,41E+01
Energy (net calorific value) [MJ]	4,53E+01	5,08E+01	1,68E+01	0,00E+00	-3,63E+01	1,41E+01
Energy ren. (net calorafic value) [MJ]	7,89E+00	1,81E+00	7,23E+00	0,00E+00	-1,89E+00	7,30E-01
Water consumption [kg]	1,74E+01	1,24E+01	8,42E+00	0,00E+00	-4,25E+00	8,47E-01
Air pollution [m^3]	2,35E+02	5,51E+02	5,96E+01	0,00E+00	-4,51E+02	7,55E+01
Water pollution [m^3]	4,62E-01	2,01E-01	2,40E-01	0,00E+00	-2,00E-01	2,21E-01
Hazardous waste for disposal [kg]	6,10E-07	2,85E-08	6,86E-09	0,00E+00	-2,71E-08	6,02E-07
Disposed of non-hazardous waste [kg]	2,02E-02	4,97E-02	1,17E-02	0,00E+00	-4,33E-02	2,10E-03
Disposed of radioactive waste [kg]	2,35E-03	1,94E-04	2,48E-03	0,00E+00	-3,40E-04	1,73E-05

evaluated from CML 2001, April. 2015

1.3.47 U-Bolt MP-UB 48 1-1/2" M8 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288407	U-Bolt MP-UB 48 1-1/2" M8 OC	20	2,38	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	3,321	4,860	0,960	0,000	-3,569	1,070
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,72E-14	4,78E-15	2,82E-14	0,00E+00	-5,96E-15	1,73E-16
Acidification Potential (AP) [kg SO2-eq.]	1,32E-02	1,19E-02	2,00E-03	0,00E+00	-9,32E-03	8,60E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	2,17E-03	1,06E-03	2,21E-04	0,00E+00	-8,70E-04	1,76E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,87E-03	1,75E-03	1,44E-04	0,00E+00	-1,38E-03	-2,39E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,21E-07	5,75E-08	3,16E-07	0,00E+00	-3,63E-08	8,40E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,95E+01	5,07E+01	1,09E+01	0,00E+00	-3,66E+01	1,45E+01
Energy (net calorific value) [MJ]	4,66E+01	5,22E+01	1,73E+01	0,00E+00	-3,75E+01	1,46E+01
Energy ren. (net calorafic value) [MJ]	8,19E+00	1,87E+00	7,49E+00	0,00E+00	-1,92E+00	7,55E-01
Water consumption [kg]	1,78E+01	1,26E+01	8,72E+00	0,00E+00	-4,42E+00	8,77E-01
Air pollution [m^3]	2,42E+02	5,70E+02	6,17E+01	0,00E+00	-4,68E+02	7,81E+01
Water pollution [m^3]	4,79E-01	2,09E-01	2,48E-01	0,00E+00	-2,06E-01	2,28E-01
Hazardous waste for disposal [kg]	6,31E-07	2,96E-08	7,11E-09	0,00E+00	-2,80E-08	6,22E-07
Disposed of non-hazardous waste [kg]	2,09E-02	5,16E-02	1,21E-02	0,00E+00	-4,49E-02	2,17E-03
Disposed of radioactive waste [kg]	2,44E-03	2,02E-04	2,56E-03	0,00E+00	-3,41E-04	1,79E-05

evaluated from CML 2001, April. 2015

1.3.48 U-Bolt MP-UB 60 2" M10 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288408	U-Bolt MP-UB 60 2" M10 OC	20	3,92	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,028	7,995	1,591	0,000	-6,320	1,762
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,76E-14	8,16E-15	4,68E-14	0,00E+00	-7,71E-15	2,86E-16
Acidification Potential (AP) [kg SO2-eq.]	2,09E-02	1,91E-02	3,32E-03	0,00E+00	-1,57E-02	1,42E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,54E-03	1,73E-03	3,67E-04	0,00E+00	-1,46E-03	2,90E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,20E-03	2,84E-03	2,39E-04	0,00E+00	-2,34E-03	-3,93E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	6,99E-07	6,51E-08	5,25E-07	0,00E+00	-2,90E-08	1,38E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	5,94E+01	7,69E+01	1,80E+01	0,00E+00	-5,95E+01	2,40E+01
Energy (net calorific value) [MJ]	7,11E+01	7,87E+01	2,88E+01	0,00E+00	-6,04E+01	2,40E+01
Energy ren. (net calorafic value) [MJ]	1,41E+01	3,03E+00	1,24E+01	0,00E+00	-2,62E+00	1,24E+00
Water consumption [kg]	2,49E+01	1,67E+01	1,45E+01	0,00E+00	-7,71E+00	1,44E+00
Air pollution [m^3]	3,75E+02	9,35E+02	1,02E+02	0,00E+00	-7,90E+02	1,29E+02
Water pollution [m^3]	8,18E-01	3,54E-01	4,12E-01	0,00E+00	-3,25E-01	3,76E-01
Hazardous waste for disposal [kg]	1,04E-06	5,05E-08	1,18E-08	0,00E+00	-4,63E-08	1,03E-06
Disposed of non-hazardous waste [kg]	3,48E-02	8,81E-02	2,01E-02	0,00E+00	-7,69E-02	3,58E-03
Disposed of radioactive waste [kg]	4,28E-03	3,44E-04	4,26E-03	0,00E+00	-3,53E-04	2,95E-05

evaluated from CML 2001, April. 2015

1.3.49 U-Bolt MP-UB 76 2-1/2" M10 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288409	U-Bolt MP-UB 76 2-1/2" M10 OC	10	2,35	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	2,946	4,792	0,955	0,000	-3,857	1,056
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,89E-14	4,94E-15	2,81E-14	0,00E+00	-4,30E-15	1,71E-16
Acidification Potential (AP) [kg SO2-eq.]	1,24E-02	1,14E-02	1,99E-03	0,00E+00	-9,47E-03	8,49E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	2,12E-03	1,04E-03	2,20E-04	0,00E+00	-8,81E-04	1,74E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,94E-03	1,69E-03	1,44E-04	0,00E+00	-1,41E-03	-2,36E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,20E-07	3,45E-08	3,15E-07	0,00E+00	-1,27E-08	8,30E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,47E+01	4,51E+01	1,08E+01	0,00E+00	-3,56E+01	1,44E+01
Energy (net calorific value) [MJ]	4,18E+01	4,61E+01	1,73E+01	0,00E+00	-3,60E+01	1,44E+01
Energy ren. (net calorafic value) [MJ]	8,54E+00	1,81E+00	7,47E+00	0,00E+00	-1,49E+00	7,45E-01
Water consumption [kg]	1,43E+01	9,41E+00	8,70E+00	0,00E+00	-4,69E+00	8,66E-01
Air pollution [m^3]	2,22E+02	5,60E+02	6,15E+01	0,00E+00	-4,77E+02	7,71E+01
Water pollution [m^3]	4,95E-01	2,14E-01	2,48E-01	0,00E+00	-1,92E-01	2,25E-01
Hazardous waste for disposal [kg]	6,24E-07	3,06E-08	7,07E-09	0,00E+00	-2,78E-08	6,15E-07
Disposed of non-hazardous waste [kg]	2,09E-02	5,33E-02	1,20E-02	0,00E+00	-4,65E-02	2,14E-03
Disposed of radioactive waste [kg]	2,61E-03	2,08E-04	2,56E-03	0,00E+00	-1,80E-04	1,77E-05

evaluated from CML 2001, April. 2015

1.3.50 U-Bolt MP-UB 89 3" M10 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288410	U-Bolt MP-UB 89 3" M10 OC	10	2,58	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	3,372	5,264	1,046	0,000	-4,097	1,159
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,09E-14	5,33E-15	3,08E-14	0,00E+00	-5,38E-15	1,88E-16
Acidification Potential (AP) [kg SO2-eq.]	1,39E-02	1,27E-02	2,18E-03	0,00E+00	-1,03E-02	9,32E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	2,33E-03	1,14E-03	2,41E-04	0,00E+00	-9,58E-04	1,91E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,09E-03	1,87E-03	1,57E-04	0,00E+00	-1,53E-03	-2,59E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,59E-07	4,70E-08	3,45E-07	0,00E+00	-2,35E-08	9,11E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,99E+01	5,15E+01	1,19E+01	0,00E+00	-3,93E+01	1,58E+01
Energy (net calorific value) [MJ]	4,76E+01	5,28E+01	1,89E+01	0,00E+00	-4,00E+01	1,58E+01
Energy ren. (net calorafic value) [MJ]	9,19E+00	2,00E+00	8,17E+00	0,00E+00	-1,80E+00	8,18E-01
Water consumption [kg]	1,70E+01	1,16E+01	9,52E+00	0,00E+00	-5,01E+00	9,51E-01
Air pollution [m^3]	2,50E+02	6,16E+02	6,73E+01	0,00E+00	-5,17E+02	8,47E+01
Water pollution [m^3]	5,34E-01	2,32E-01	2,71E-01	0,00E+00	-2,16E-01	2,48E-01
Hazardous waste for disposal [kg]	6,85E-07	3,30E-08	7,74E-09	0,00E+00	-3,05E-08	6,75E-07
Disposed of non-hazardous waste [kg]	2,29E-02	5,75E-02	1,32E-02	0,00E+00	-5,02E-02	2,35E-03
Disposed of radioactive waste [kg]	2,78E-03	2,25E-04	2,80E-03	0,00E+00	-2,62E-04	1,94E-05

evaluated from CML 2001, April. 2015

1.3.51 U-Bolt MP-UB 102 3-1/2" M12 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288411	U-Bolt MP-UB 102 3-1/2" M12 OC	10	3,98	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	4,924	8,114	1,620	0,000	-6,599	1,789
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,94E-14	8,40E-15	4,77E-14	0,00E+00	-6,97E-15	2,90E-16
Acidification Potential (AP) [kg SO2-eq.]	2,09E-02	1,93E-02	3,38E-03	0,00E+00	-1,61E-02	1,44E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,58E-03	1,76E-03	3,74E-04	0,00E+00	-1,50E-03	2,94E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,29E-03	2,86E-03	2,43E-04	0,00E+00	-2,40E-03	-3,99E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	7,12E-07	5,39E-08	5,35E-07	0,00E+00	-1,68E-08	1,41E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	5,79E+01	7,54E+01	1,84E+01	0,00E+00	-6,01E+01	2,43E+01
Energy (net calorific value) [MJ]	6,99E+01	7,70E+01	2,93E+01	0,00E+00	-6,08E+01	2,44E+01
Energy ren. (net calorafic value) [MJ]	1,46E+01	3,05E+00	1,27E+01	0,00E+00	-2,43E+00	1,26E+00
Water consumption [kg]	2,36E+01	1,53E+01	1,48E+01	0,00E+00	-8,01E+00	1,47E+00
Air pollution [m^3]	3,72E+02	9,48E+02	1,04E+02	0,00E+00	-8,11E+02	1,31E+02
Water pollution [m^3]	8,42E-01	3,64E-01	4,20E-01	0,00E+00	-3,24E-01	3,82E-01
Hazardous waste for disposal [kg]	1,06E-06	5,20E-08	1,20E-08	0,00E+00	-4,71E-08	1,04E-06
Disposed of non-hazardous waste [kg]	3,55E-02	9,07E-02	2,04E-02	0,00E+00	-7,93E-02	3,63E-03
Disposed of radioactive waste [kg]	4,45E-03	3,54E-04	4,34E-03	0,00E+00	-2,73E-04	3,00E-05

evaluated from CML 2001, April. 2015

1.3.52 U-Bolt MP-UB 108 M12 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288412	U-Bolt MP-UB 108 M12 OC	10	4,09	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,046	8,338	1,665	0,000	-6,795	1,838
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	5,09E-14	8,65E-15	4,90E-14	0,00E+00	-7,09E-15	2,98E-16
Acidification Potential (AP) [kg SO2-eq.]	2,15E-02	1,98E-02	3,47E-03	0,00E+00	-1,65E-02	1,48E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,67E-03	1,80E-03	3,84E-04	0,00E+00	-1,54E-03	3,03E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,39E-03	2,93E-03	2,50E-04	0,00E+00	-2,47E-03	-4,10E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	7,32E-07	5,45E-08	5,49E-07	0,00E+00	-1,63E-08	1,44E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	5,94E+01	7,72E+01	1,89E+01	0,00E+00	-6,17E+01	2,50E+01
Energy (net calorific value) [MJ]	7,16E+01	7,89E+01	3,01E+01	0,00E+00	-6,24E+01	2,51E+01
Energy ren. (net calorafic value) [MJ]	1,50E+01	3,14E+00	1,30E+01	0,00E+00	-2,48E+00	1,30E+00
Water consumption [kg]	2,41E+01	1,56E+01	1,52E+01	0,00E+00	-8,24E+00	1,51E+00
Air pollution [m^3]	3,81E+02	9,74E+02	1,07E+02	0,00E+00	-8,34E+02	1,34E+02
Water pollution [m^3]	8,66E-01	3,74E-01	4,32E-01	0,00E+00	-3,32E-01	3,92E-01
Hazardous waste for disposal [kg]	1,09E-06	5,35E-08	1,23E-08	0,00E+00	-4,84E-08	1,07E-06
Disposed of non-hazardous waste [kg]	3,65E-02	9,33E-02	2,10E-02	0,00E+00	-8,15E-02	3,73E-03
Disposed of radioactive waste [kg]	4,58E-03	3,64E-04	4,46E-03	0,00E+00	-2,74E-04	3,08E-05

evaluated from CML 2001, April. 2015

1.3.53 U-Bolt MP-UB 114 4" M12 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288413	U-Bolt MP-UB 114 4" M12 OC	10	4,36	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,789	8,897	1,765	0,000	-6,833	1,959
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	5,17E-14	8,95E-15	5,19E-14	0,00E+00	-9,52E-15	3,18E-16
Acidification Potential (AP) [kg SO2-eq.]	2,36E-02	2,15E-02	3,68E-03	0,00E+00	-1,73E-02	1,57E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,95E-03	1,93E-03	4,07E-04	0,00E+00	-1,61E-03	3,22E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,51E-03	3,18E-03	2,65E-04	0,00E+00	-2,57E-03	-4,37E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	7,75E-07	8,55E-08	5,82E-07	0,00E+00	-4,60E-08	1,54E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,85E+01	8,85E+01	2,00E+01	0,00E+00	-6,66E+01	2,66E+01
Energy (net calorific value) [MJ]	8,16E+01	9,08E+01	3,19E+01	0,00E+00	-6,78E+01	2,67E+01
Energy ren. (net calorafic value) [MJ]	1,54E+01	3,39E+00	1,38E+01	0,00E+00	-3,16E+00	1,38E+00
Water consumption [kg]	2,97E+01	2,04E+01	1,61E+01	0,00E+00	-8,38E+00	1,61E+00
Air pollution [m^3]	4,28E+02	1,04E+03	1,14E+02	0,00E+00	-8,70E+02	1,43E+02
Water pollution [m^3]	8,97E-01	3,89E-01	4,57E-01	0,00E+00	-3,67E-01	4,18E-01
Hazardous waste for disposal [kg]	1,16E-06	5,54E-08	1,31E-08	0,00E+00	-5,14E-08	1,14E-06
Disposed of non-hazardous waste [kg]	3,86E-02	9,66E-02	2,22E-02	0,00E+00	-8,42E-02	3,98E-03
Disposed of radioactive waste [kg]	4,65E-03	3,77E-04	4,72E-03	0,00E+00	-4,85E-04	3,28E-05

evaluated from CML 2001, April. 2015

1.3.54 U-Bolt MP-UB 133 M12 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288414	U-Bolt MP-UB 133 M12 OC	10	4,73	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,199	9,650	1,917	0,000	-7,494	2,126
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	5,66E-14	9,76E-15	5,64E-14	0,00E+00	-9,94E-15	3,45E-16
Acidification Potential (AP) [kg SO2-eq.]	2,55E-02	2,32E-02	4,00E-03	0,00E+00	-1,88E-02	1,71E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,28E-03	2,09E-03	4,42E-04	0,00E+00	-1,76E-03	3,50E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,83E-03	3,44E-03	2,88E-04	0,00E+00	-2,80E-03	-4,75E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	8,42E-07	8,73E-08	6,32E-07	0,00E+00	-4,42E-08	1,67E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,33E+01	9,47E+01	2,17E+01	0,00E+00	-7,21E+01	2,89E+01
Energy (net calorific value) [MJ]	8,75E+01	9,72E+01	3,46E+01	0,00E+00	-7,33E+01	2,90E+01
Energy ren. (net calorafic value) [MJ]	1,68E+01	3,67E+00	1,50E+01	0,00E+00	-3,32E+00	1,50E+00
Water consumption [kg]	3,14E+01	2,14E+01	1,74E+01	0,00E+00	-9,18E+00	1,74E+00
Air pollution [m^3]	4,60E+02	1,13E+03	1,23E+02	0,00E+00	-9,48E+02	1,55E+02
Water pollution [m^3]	9,79E-01	4,24E-01	4,97E-01	0,00E+00	-3,96E-01	4,54E-01
Hazardous waste for disposal [kg]	1,26E-06	6,05E-08	1,42E-08	0,00E+00	-5,58E-08	1,24E-06
Disposed of non-hazardous waste [kg]	4,19E-02	1,05E-01	2,41E-02	0,00E+00	-9,19E-02	4,32E-03
Disposed of radioactive waste [kg]	5,09E-03	4,12E-04	5,13E-03	0,00E+00	-4,88E-04	3,56E-05

evaluated from CML 2001, April. 2015

1.3.55 U-Bolt MP-UB 139 5" M12 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288415	U-Bolt MP-UB 139 5" M12 OC	10	4,83	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,310	9,854	1,958	0,000	-7,673	2,171
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	5,79E-14	9,98E-15	5,76E-14	0,00E+00	-1,01E-14	3,52E-16
Acidification Potential (AP) [kg SO2-eq.]	2,60E-02	2,37E-02	4,08E-03	0,00E+00	-1,93E-02	1,74E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,37E-03	2,14E-03	4,52E-04	0,00E+00	-1,79E-03	3,57E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,91E-03	3,51E-03	2,94E-04	0,00E+00	-2,87E-03	-4,85E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	8,60E-07	8,78E-08	6,46E-07	0,00E+00	-4,37E-08	1,71E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,46E+01	9,65E+01	2,22E+01	0,00E+00	-7,36E+01	2,95E+01
Energy (net calorific value) [MJ]	8,91E+01	9,89E+01	3,54E+01	0,00E+00	-7,48E+01	2,96E+01
Energy ren. (net calorafic value) [MJ]	1,72E+01	3,75E+00	1,53E+01	0,00E+00	-3,37E+00	1,53E+00
Water consumption [kg]	3,19E+01	2,17E+01	1,78E+01	0,00E+00	-9,39E+00	1,78E+00
Air pollution [m^3]	4,69E+02	1,15E+03	1,26E+02	0,00E+00	-9,69E+02	1,59E+02
Water pollution [m^3]	1,00E+00	4,34E-01	5,07E-01	0,00E+00	-4,04E-01	4,63E-01
Hazardous waste for disposal [kg]	1,28E-06	6,18E-08	1,45E-08	0,00E+00	-5,70E-08	1,26E-06
Disposed of non-hazardous waste [kg]	4,28E-02	1,08E-01	2,47E-02	0,00E+00	-9,40E-02	4,41E-03
Disposed of radioactive waste [kg]	5,21E-03	4,21E-04	5,24E-03	0,00E+00	-4,89E-04	3,64E-05

evaluated from CML 2001, April. 2015

1.3.56 U-Bolt MP-UB 159 M12 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288416	U-Bolt MP-UB 159 M12 OC	10	5,23	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,754	10,670	2,122	0,000	-8,389	2,351
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	6,32E-14	1,09E-14	6,24E-14	0,00E+00	-1,05E-14	3,81E-16
Acidification Potential (AP) [kg SO2-eq.]	2,80E-02	2,56E-02	4,42E-03	0,00E+00	-2,09E-02	1,89E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,72E-03	2,31E-03	4,89E-04	0,00E+00	-1,95E-03	3,87E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-4,26E-03	3,79E-03	3,19E-04	0,00E+00	-3,12E-03	-5,25E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	9,33E-07	8,98E-08	7,00E-07	0,00E+00	-4,18E-08	1,85E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,98E+01	1,03E+02	2,41E+01	0,00E+00	-7,95E+01	3,20E+01
Energy (net calorific value) [MJ]	9,55E+01	1,06E+02	3,84E+01	0,00E+00	-8,08E+01	3,21E+01
Energy ren. (net calorafic value) [MJ]	1,87E+01	4,05E+00	1,66E+01	0,00E+00	-3,55E+00	1,66E+00
Water consumption [kg]	3,37E+01	2,27E+01	1,93E+01	0,00E+00	-1,02E+01	1,93E+00
Air pollution [m^3]	5,03E+02	1,25E+03	1,37E+02	0,00E+00	-1,05E+03	1,72E+02
Water pollution [m^3]	1,09E+00	4,72E-01	5,50E-01	0,00E+00	-4,35E-01	5,02E-01
Hazardous waste for disposal [kg]	1,39E-06	6,73E-08	1,57E-08	0,00E+00	-6,18E-08	1,37E-06
Disposed of non-hazardous waste [kg]	4,64E-02	1,17E-01	2,67E-02	0,00E+00	-1,02E-01	4,77E-03
Disposed of radioactive waste [kg]	5,69E-03	4,58E-04	5,68E-03	0,00E+00	-4,92E-04	3,94E-05

evaluated from CML 2001, April. 2015

1.3.57 U-Bolt MP-UB 168 6" M12 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288417	U-Bolt MP-UB 168 6" M12 OC	2	5,39	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,164	10,974	2,204	0,000	-9,436	2,421
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	7,01E-14	1,17E-14	6,50E-14	0,00E+00	-7,04E-15	3,93E-16
Acidification Potential (AP) [kg SO2-eq.]	2,75E-02	2,56E-02	4,61E-03	0,00E+00	-2,22E-02	1,95E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,80E-03	2,37E-03	5,09E-04	0,00E+00	-2,06E-03	3,99E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-4,59E-03	3,81E-03	3,31E-04	0,00E+00	-3,32E-03	-5,41E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	9,70E-07	3,94E-08	7,28E-07	0,00E+00	1,22E-08	1,90E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,20E+01	9,45E+01	2,50E+01	0,00E+00	-8,04E+01	3,29E+01
Energy (net calorific value) [MJ]	8,82E+01	9,60E+01	3,99E+01	0,00E+00	-8,07E+01	3,30E+01
Energy ren. (net calorafic value) [MJ]	2,04E+01	4,07E+00	1,73E+01	0,00E+00	-2,67E+00	1,71E+00
Water consumption [kg]	2,70E+01	1,62E+01	2,01E+01	0,00E+00	-1,13E+01	1,99E+00
Air pollution [m^3]	4,78E+02	1,28E+03	1,42E+02	0,00E+00	-1,12E+03	1,77E+02
Water pollution [m^3]	1,17E+00	5,05E-01	5,72E-01	0,00E+00	-4,22E-01	5,17E-01
Hazardous waste for disposal [kg]	1,43E-06	7,24E-08	1,63E-08	0,00E+00	-6,40E-08	1,41E-06
Disposed of non-hazardous waste [kg]	4,84E-02	1,26E-01	2,78E-02	0,00E+00	-1,11E-01	4,92E-03
Disposed of radioactive waste [kg]	6,32E-03	4,93E-04	5,92E-03	0,00E+00	-1,33E-04	4,06E-05

evaluated from CML 2001, April. 2015

1.3.58 U-Bolt MP-UB 219 8" M12 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288418	U-Bolt MP-UB 219 8" M12 OC	2	1,29	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	1,623	2,635	0,525	0,000	-2,117	0,581
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,59E-14	2,71E-15	1,55E-14	0,00E+00	-2,38E-15	9,41E-17
Acidification Potential (AP) [kg SO2-eq.]	6,84E-03	6,28E-03	1,10E-03	0,00E+00	-5,20E-03	4,67E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,16E-03	5,70E-04	1,21E-04	0,00E+00	-4,84E-04	9,56E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,06E-03	9,30E-04	7,89E-05	0,00E+00	-7,76E-04	-1,30E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,31E-07	1,92E-08	1,73E-07	0,00E+00	-7,20E-09	4,56E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,91E+01	2,48E+01	5,95E+00	0,00E+00	-1,96E+01	7,90E+00
Energy (net calorific value) [MJ]	2,30E+01	2,54E+01	9,49E+00	0,00E+00	-1,98E+01	7,92E+00
Energy ren. (net calorafic value) [MJ]	4,69E+00	9,94E-01	4,11E+00	0,00E+00	-8,21E-01	4,10E-01
Water consumption [kg]	7,89E+00	5,21E+00	4,78E+00	0,00E+00	-2,57E+00	4,76E-01
Air pollution [m^3]	1,22E+02	3,08E+02	3,38E+01	0,00E+00	-2,62E+02	4,24E+01
Water pollution [m^3]	2,72E-01	1,18E-01	1,36E-01	0,00E+00	-1,06E-01	1,24E-01
Hazardous waste for disposal [kg]	3,43E-07	1,68E-08	3,89E-09	0,00E+00	-1,53E-08	3,38E-07
Disposed of non-hazardous waste [kg]	1,15E-02	2,93E-02	6,62E-03	0,00E+00	-2,56E-02	1,18E-03
Disposed of radioactive waste [kg]	1,43E-03	1,14E-04	1,41E-03	0,00E+00	-1,00E-04	9,72E-06

evaluated from CML 2001, April. 2015

1.3.59 U-Bolt MP-UB 273 10" M12 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288419	U-Bolt MP-UB 273 10" M12 OC	2	1,54	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	2,047	3,152	0,626	0,000	-2,425	0,694
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,83E-14	3,17E-15	1,84E-14	0,00E+00	-3,35E-15	1,13E-16
Acidification Potential (AP) [kg SO2-eq.]	8,35E-03	7,61E-03	1,30E-03	0,00E+00	-6,14E-03	5,58E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,40E-03	6,84E-04	1,44E-04	0,00E+00	-5,72E-04	1,14E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,24E-03	1,13E-03	9,39E-05	0,00E+00	-9,13E-04	-1,55E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,75E-07	3,00E-08	2,06E-07	0,00E+00	-1,60E-08	5,45E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,42E+01	3,13E+01	7,09E+00	0,00E+00	-2,36E+01	9,44E+00
Energy (net calorific value) [MJ]	2,89E+01	3,21E+01	1,13E+01	0,00E+00	-2,40E+01	9,47E+00
Energy ren. (net calorafic value) [MJ]	5,47E+00	1,20E+00	4,89E+00	0,00E+00	-1,11E+00	4,90E-01
Water consumption [kg]	1,05E+01	7,19E+00	5,69E+00	0,00E+00	-2,97E+00	5,69E-01
Air pollution [m^3]	1,51E+02	3,69E+02	4,03E+01	0,00E+00	-3,08E+02	5,07E+01
Water pollution [m^3]	3,18E-01	1,38E-01	1,62E-01	0,00E+00	-1,30E-01	1,48E-01
Hazardous waste for disposal [kg]	4,10E-07	1,97E-08	4,63E-09	0,00E+00	-1,82E-08	4,04E-07
Disposed of non-hazardous waste [kg]	1,37E-02	3,43E-02	7,88E-03	0,00E+00	-2,99E-02	1,41E-03
Disposed of radioactive waste [kg]	1,65E-03	1,34E-04	1,67E-03	0,00E+00	-1,70E-04	1,16E-05

evaluated from CML 2001, April. 2015

1.3.60 U-Bolt MP-UB 324 12" M12 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288420	U-Bolt MP-UB 324 12" M12 OC	2	1,74	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	2,266	3,555	0,707	0,000	-2,779	0,783
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,09E-14	3,61E-15	2,08E-14	0,00E+00	-3,58E-15	1,27E-16
Acidification Potential (AP) [kg SO2-eq.]	9,35E-03	8,54E-03	1,47E-03	0,00E+00	-6,96E-03	6,29E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,58E-03	7,71E-04	1,63E-04	0,00E+00	-6,48E-04	1,29E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,41E-03	1,26E-03	1,06E-04	0,00E+00	-1,04E-03	-1,75E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,10E-07	3,10E-08	2,33E-07	0,00E+00	-1,51E-08	6,15E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,68E+01	3,46E+01	8,01E+00	0,00E+00	-2,65E+01	1,07E+01
Energy (net calorific value) [MJ]	3,20E+01	3,55E+01	1,28E+01	0,00E+00	-2,70E+01	1,07E+01
Energy ren. (net calorafic value) [MJ]	6,22E+00	1,35E+00	5,52E+00	0,00E+00	-1,20E+00	5,53E-01
Water consumption [kg]	1,14E+01	7,72E+00	6,43E+00	0,00E+00	-3,40E+00	6,42E-01
Air pollution [m^3]	1,69E+02	4,16E+02	4,55E+01	0,00E+00	-3,50E+02	5,72E+01
Water pollution [m^3]	3,62E-01	1,57E-01	1,83E-01	0,00E+00	-1,45E-01	1,67E-01
Hazardous waste for disposal [kg]	4,63E-07	2,23E-08	5,23E-09	0,00E+00	-2,06E-08	4,56E-07
Disposed of non-hazardous waste [kg]	1,55E-02	3,89E-02	8,90E-03	0,00E+00	-3,40E-02	1,59E-03
Disposed of radioactive waste [kg]	1,88E-03	1,52E-04	1,89E-03	0,00E+00	-1,72E-04	1,31E-05

evaluated from CML 2001, April. 2015

1.3.61 U-Bolt MP-UB 355 14" M20 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288421	U-Bolt MP-UB 355 14" M20 OC	2	5,07	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,853	10,328	2,073	0,000	-8,827	2,279
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	6,56E-14	1,10E-14	6,11E-14	0,00E+00	-6,87E-15	3,69E-16
Acidification Potential (AP) [kg SO2-eq.]	2,59E-02	2,41E-02	4,33E-03	0,00E+00	-2,08E-02	1,83E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,52E-03	2,23E-03	4,79E-04	0,00E+00	-1,93E-03	3,75E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-4,31E-03	3,59E-03	3,12E-04	0,00E+00	-3,12E-03	-5,09E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	9,12E-07	4,05E-08	6,85E-07	0,00E+00	7,84E-09	1,79E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,84E+01	8,97E+01	2,35E+01	0,00E+00	-7,58E+01	3,10E+01
Energy (net calorific value) [MJ]	8,36E+01	9,12E+01	3,75E+01	0,00E+00	-7,61E+01	3,11E+01
Energy ren. (net calorafic value) [MJ]	1,91E+01	3,84E+00	1,62E+01	0,00E+00	-2,58E+00	1,61E+00
Water consumption [kg]	2,59E+01	1,57E+01	1,89E+01	0,00E+00	-1,06E+01	1,87E+00
Air pollution [m^3]	4,52E+02	1,20E+03	1,34E+02	0,00E+00	-1,05E+03	1,66E+02
Water pollution [m^3]	1,10E+00	4,74E-01	5,38E-01	0,00E+00	-3,99E-01	4,86E-01
Hazardous waste for disposal [kg]	1,35E-06	6,80E-08	1,53E-08	0,00E+00	-6,02E-08	1,33E-06
Disposed of non-hazardous waste [kg]	4,55E-02	1,18E-01	2,62E-02	0,00E+00	-1,04E-01	4,63E-03
Disposed of radioactive waste [kg]	5,91E-03	4,63E-04	5,56E-03	0,00E+00	-1,50E-04	3,82E-05

evaluated from CML 2001, April. 2015

1.3.62 U-Bolt MP-UB 406 16" M20 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288422	U-Bolt MP-UB 406 16" M20 OC	2	5,57	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,407	11,346	2,278	0,000	-9,720	2,503
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	7,22E-14	1,21E-14	6,72E-14	0,00E+00	-7,44E-15	4,06E-16
Acidification Potential (AP) [kg SO2-eq.]	2,85E-02	2,65E-02	4,76E-03	0,00E+00	-2,29E-02	2,01E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,97E-03	2,45E-03	5,26E-04	0,00E+00	-2,13E-03	4,12E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-4,74E-03	3,94E-03	3,43E-04	0,00E+00	-3,43E-03	-5,59E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,00E-06	4,30E-08	7,53E-07	0,00E+00	1,02E-08	1,97E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,49E+01	9,82E+01	2,58E+01	0,00E+00	-8,32E+01	3,40E+01
Energy (net calorific value) [MJ]	9,16E+01	9,99E+01	4,12E+01	0,00E+00	-8,36E+01	3,42E+01
Energy ren. (net calorafic value) [MJ]	2,10E+01	4,21E+00	1,79E+01	0,00E+00	-2,81E+00	1,77E+00
Water consumption [kg]	2,82E+01	1,71E+01	2,08E+01	0,00E+00	-1,17E+01	2,05E+00
Air pollution [m^3]	4,96E+02	1,32E+03	1,47E+02	0,00E+00	-1,16E+03	1,83E+02
Water pollution [m^3]	1,21E+00	5,21E-01	5,92E-01	0,00E+00	-4,37E-01	5,34E-01
Hazardous waste for disposal [kg]	1,48E-06	7,48E-08	1,69E-08	0,00E+00	-6,62E-08	1,46E-06
Disposed of non-hazardous waste [kg]	5,00E-02	1,30E-01	2,88E-02	0,00E+00	-1,14E-01	5,08E-03
Disposed of radioactive waste [kg]	6,51E-03	5,09E-04	6,11E-03	0,00E+00	-1,54E-04	4,19E-05

evaluated from CML 2001, April. 2015

1.3.63 U-Bolt MP-UB 457 18" M24 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288423	U-Bolt MP-UB 457 18" M24 OC	2	8,69	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	10,289	17,707	3,547	0,000	-14,871	3,905
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,11E-13	1,86E-14	1,05E-13	0,00E+00	-1,30E-14	6,33E-16
Acidification Potential (AP) [kg SO2-eq.]	4,49E-02	4,16E-02	7,41E-03	0,00E+00	-3,55E-02	3,14E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	7,77E-03	3,82E-03	8,19E-04	0,00E+00	-3,30E-03	6,43E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-7,31E-03	6,18E-03	5,33E-04	0,00E+00	-5,31E-03	-8,72E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,56E-06	8,67E-08	1,17E-06	0,00E+00	-4,51E-09	3,07E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,21E+02	1,58E+02	4,02E+01	0,00E+00	-1,30E+02	5,31E+01
Energy (net calorific value) [MJ]	1,47E+02	1,61E+02	6,41E+01	0,00E+00	-1,31E+02	5,33E+01
Energy ren. (net calorafic value) [MJ]	3,24E+01	6,61E+00	2,78E+01	0,00E+00	-4,74E+00	2,76E+00
Water consumption [kg]	4,69E+01	2,93E+01	3,24E+01	0,00E+00	-1,79E+01	3,20E+00
Air pollution [m^3]	7,88E+02	2,07E+03	2,29E+02	0,00E+00	-1,79E+03	2,85E+02
Water pollution [m^3]	1,87E+00	8,06E-01	9,21E-01	0,00E+00	-6,92E-01	8,34E-01
Hazardous waste for disposal [kg]	2,31E-06	1,15E-07	2,63E-08	0,00E+00	-1,03E-07	2,27E-06
Disposed of non-hazardous waste [kg]	7,78E-02	2,01E-01	4,48E-02	0,00E+00	-1,76E-01	7,93E-03
Disposed of radioactive waste [kg]	9,99E-03	7,86E-04	9,51E-03	0,00E+00	-3,79E-04	6,54E-05

evaluated from CML 2001, April. 2015

1.3.64 U-Bolt MP-UB 508 20" M24 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288424	U-Bolt MP-UB 508 20" M24 OC	2	9,69	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	11,397	19,743	3,957	0,000	-16,658	4,355
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,24E-13	2,08E-14	1,17E-13	0,00E+00	-1,41E-14	7,06E-16
Acidification Potential (AP) [kg SO2-eq.]	5,00E-02	4,63E-02	8,26E-03	0,00E+00	-3,96E-02	3,50E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	8,66E-03	4,26E-03	9,14E-04	0,00E+00	-3,68E-03	7,17E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-8,17E-03	6,88E-03	5,95E-04	0,00E+00	-5,93E-03	-9,72E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,74E-06	9,17E-08	1,31E-06	0,00E+00	2,32E-10	3,42E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,34E+02	1,75E+02	4,48E+01	0,00E+00	-1,45E+02	5,92E+01
Energy (net calorific value) [MJ]	1,63E+02	1,78E+02	7,15E+01	0,00E+00	-1,46E+02	5,94E+01
Energy ren. (net calorafic value) [MJ]	3,62E+01	7,36E+00	3,10E+01	0,00E+00	-5,19E+00	3,07E+00
Water consumption [kg]	5,15E+01	3,20E+01	3,61E+01	0,00E+00	-2,01E+01	3,57E+00
Air pollution [m^3]	8,75E+02	2,30E+03	2,55E+02	0,00E+00	-2,00E+03	3,18E+02
Water pollution [m^3]	2,09E+00	9,01E-01	1,03E+00	0,00E+00	-7,69E-01	9,30E-01
Hazardous waste for disposal [kg]	2,58E-06	1,29E-07	2,93E-08	0,00E+00	-1,15E-07	2,53E-06
Disposed of non-hazardous waste [kg]	8,69E-02	2,25E-01	4,99E-02	0,00E+00	-1,97E-01	8,84E-03
Disposed of radioactive waste [kg]	1,12E-02	8,79E-04	1,06E-02	0,00E+00	-3,87E-04	7,29E-05

evaluated from CML 2001, April. 2015

1.3.65 U-Bolt MP-UB 609 24" M24 OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288425	U-Bolt MP-UB 609 24" M24 OC	2	11,19	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	13,060	22,797	4,572	0,000	-19,338	5,029
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,44E-13	2,41E-14	1,35E-13	0,00E+00	-1,59E-14	8,15E-16
Acidification Potential (AP) [kg SO2-eq.]	5,75E-02	5,34E-02	9,55E-03	0,00E+00	-4,58E-02	4,04E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,00E-02	4,92E-03	1,06E-03	0,00E+00	-4,26E-03	8,28E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-9,47E-03	7,94E-03	6,87E-04	0,00E+00	-6,86E-03	-1,12E-02
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,01E-06	9,91E-08	1,51E-06	0,00E+00	7,34E-09	3,95E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,53E+02	2,00E+02	5,18E+01	0,00E+00	-1,67E+02	6,84E+01
Energy (net calorific value) [MJ]	1,86E+02	2,04E+02	8,27E+01	0,00E+00	-1,68E+02	6,86E+01
Energy ren. (net calorafic value) [MJ]	4,20E+01	8,49E+00	3,58E+01	0,00E+00	-5,87E+00	3,55E+00
Water consumption [kg]	5,85E+01	3,60E+01	4,17E+01	0,00E+00	-2,33E+01	4,12E+00
Air pollution [m^3]	1,01E+03	2,66E+03	2,95E+02	0,00E+00	-2,31E+03	3,67E+02
Water pollution [m^3]	2,42E+00	1,04E+00	1,19E+00	0,00E+00	-8,84E-01	1,07E+00
Hazardous waste for disposal [kg]	2,98E-06	1,49E-07	3,39E-08	0,00E+00	-1,33E-07	2,93E-06
Disposed of non-hazardous waste [kg]	1,00E-01	2,60E-01	5,77E-02	0,00E+00	-2,28E-01	1,02E-02
Disposed of radioactive waste [kg]	1,30E-02	1,02E-03	1,23E-02	0,00E+00	-3,99E-04	8,42E-05

evaluated from CML 2001, April. 2015

1.3.66 U-Bolt MP-UB 1-1/2" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288426	U-Bolt MP-UB 1-1/2" OC	20	3,38	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	4,427	6,892	1,369	0,000	-5,352	1,518
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,04E-14	6,97E-15	4,03E-14	0,00E+00	-7,10E-15	2,46E-16
Acidification Potential (AP) [kg SO2-eq.]	1,82E-02	1,66E-02	2,85E-03	0,00E+00	-1,35E-02	1,22E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,06E-03	1,50E-03	3,16E-04	0,00E+00	-1,25E-03	2,50E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,73E-03	2,45E-03	2,06E-04	0,00E+00	-2,00E-03	-3,39E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	6,01E-07	6,24E-08	4,51E-07	0,00E+00	-3,16E-08	1,19E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	5,24E+01	6,77E+01	1,55E+01	0,00E+00	-5,15E+01	2,06E+01
Energy (net calorific value) [MJ]	6,25E+01	6,94E+01	2,47E+01	0,00E+00	-5,23E+01	2,07E+01
Energy ren. (net calorafic value) [MJ]	1,20E+01	2,62E+00	1,07E+01	0,00E+00	-2,37E+00	1,07E+00
Water consumption [kg]	2,24E+01	1,53E+01	1,25E+01	0,00E+00	-6,55E+00	1,24E+00
Air pollution [m^3]	3,28E+02	8,06E+02	8,81E+01	0,00E+00	-6,77E+02	1,11E+02
Water pollution [m^3]	6,99E-01	3,03E-01	3,55E-01	0,00E+00	-2,83E-01	3,24E-01
Hazardous waste for disposal [kg]	8,97E-07	4,32E-08	1,01E-08	0,00E+00	-3,99E-08	8,83E-07
Disposed of non-hazardous waste [kg]	2,99E-02	7,53E-02	1,72E-02	0,00E+00	-6,56E-02	3,08E-03
Disposed of radioactive waste [kg]	3,63E-03	2,94E-04	3,66E-03	0,00E+00	-3,49E-04	2,54E-05

evaluated from CML 2001, April. 2015

1.3.67 U-Bolt MP-UB 2" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288427	U-Bolt MP-UB 2" OC	20	3,67	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	4,752	7,488	1,489	0,000	-5,875	1,650
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,43E-14	7,62E-15	4,38E-14	0,00E+00	-7,43E-15	2,68E-16
Acidification Potential (AP) [kg SO2-eq.]	1,97E-02	1,80E-02	3,10E-03	0,00E+00	-1,47E-02	1,33E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,32E-03	1,62E-03	3,43E-04	0,00E+00	-1,37E-03	2,72E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,98E-03	2,66E-03	2,24E-04	0,00E+00	-2,19E-03	-3,68E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	6,54E-07	6,38E-08	4,91E-07	0,00E+00	-3,02E-08	1,30E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	5,61E+01	7,27E+01	1,69E+01	0,00E+00	-5,58E+01	2,24E+01
Energy (net calorific value) [MJ]	6,72E+01	7,44E+01	2,69E+01	0,00E+00	-5,67E+01	2,25E+01
Energy ren. (net calorafic value) [MJ]	1,31E+01	2,84E+00	1,16E+01	0,00E+00	-2,51E+00	1,16E+00
Water consumption [kg]	2,38E+01	1,61E+01	1,36E+01	0,00E+00	-7,18E+00	1,35E+00
Air pollution [m^3]	3,54E+02	8,76E+02	9,59E+01	0,00E+00	-7,38E+02	1,20E+02
Water pollution [m^3]	7,63E-01	3,31E-01	3,86E-01	0,00E+00	-3,05E-01	3,52E-01
Hazardous waste for disposal [kg]	9,75E-07	4,72E-08	1,10E-08	0,00E+00	-4,34E-08	9,60E-07
Disposed of non-hazardous waste [kg]	3,26E-02	8,22E-02	1,88E-02	0,00E+00	-7,17E-02	3,35E-03
Disposed of radioactive waste [kg]	3,98E-03	3,21E-04	3,99E-03	0,00E+00	-3,51E-04	2,76E-05

evaluated from CML 2001, April. 2015

1.3.68 U-Bolt MP-UB 2-1/2" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288428	U-Bolt MP-UB 2-1/2" OC	10	3,77	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	4,517	7,677	1,536	0,000	-6,389	1,693
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,77E-14	8,05E-15	4,53E-14	0,00E+00	-5,91E-15	2,75E-16
Acidification Potential (AP) [kg SO2-eq.]	1,96E-02	1,81E-02	3,21E-03	0,00E+00	-1,53E-02	1,36E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,37E-03	1,66E-03	3,55E-04	0,00E+00	-1,43E-03	2,79E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,16E-03	2,69E-03	2,31E-04	0,00E+00	-2,29E-03	-3,78E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	6,76E-07	4,14E-08	5,07E-07	0,00E+00	-5,94E-09	1,33E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	5,30E+01	6,92E+01	1,74E+01	0,00E+00	-5,66E+01	2,30E+01
Energy (net calorific value) [MJ]	6,43E+01	7,05E+01	2,78E+01	0,00E+00	-5,71E+01	2,31E+01
Energy ren. (net calorafic value) [MJ]	1,40E+01	2,87E+00	1,20E+01	0,00E+00	-2,13E+00	1,19E+00
Water consumption [kg]	2,09E+01	1,32E+01	1,40E+01	0,00E+00	-7,72E+00	1,39E+00
Air pollution [m^3]	3,45E+02	8,96E+02	9,90E+01	0,00E+00	-7,74E+02	1,24E+02
Water pollution [m^3]	8,06E-01	3,48E-01	3,99E-01	0,00E+00	-3,02E-01	3,61E-01
Hazardous waste for disposal [kg]	1,00E-06	4,98E-08	1,14E-08	0,00E+00	-4,47E-08	9,85E-07
Disposed of non-hazardous waste [kg]	3,37E-02	8,68E-02	1,94E-02	0,00E+00	-7,59E-02	3,44E-03
Disposed of radioactive waste [kg]	4,30E-03	3,39E-04	4,12E-03	0,00E+00	-1,91E-04	2,84E-05

evaluated from CML 2001, April. 2015

1.3.69 U-Bolt MP-UB 3" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288429	U-Bolt MP-UB 3" OC	10	4,12	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	4,904	8,388	1,679	0,000	-7,013	1,850
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	5,23E-14	8,81E-15	4,95E-14	0,00E+00	-6,31E-15	3,00E-16
Acidification Potential (AP) [kg SO2-eq.]	2,13E-02	1,97E-02	3,51E-03	0,00E+00	-1,68E-02	1,49E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,68E-03	1,81E-03	3,88E-04	0,00E+00	-1,56E-03	3,04E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,46E-03	2,93E-03	2,52E-04	0,00E+00	-2,51E-03	-4,13E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	7,39E-07	4,32E-08	5,55E-07	0,00E+00	-4,29E-09	1,45E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	5,75E+01	7,51E+01	1,90E+01	0,00E+00	-6,18E+01	2,52E+01
Energy (net calorific value) [MJ]	6,99E+01	7,66E+01	3,04E+01	0,00E+00	-6,23E+01	2,52E+01
Energy ren. (net calorafic value) [MJ]	1,53E+01	3,13E+00	1,32E+01	0,00E+00	-2,28E+00	1,31E+00
Water consumption [kg]	2,25E+01	1,41E+01	1,53E+01	0,00E+00	-8,47E+00	1,52E+00
Air pollution [m^3]	3,75E+02	9,78E+02	1,08E+02	0,00E+00	-8,47E+02	1,35E+02
Water pollution [m^3]	8,83E-01	3,81E-01	4,36E-01	0,00E+00	-3,29E-01	3,95E-01
Hazardous waste for disposal [kg]	1,09E-06	5,46E-08	1,24E-08	0,00E+00	-4,88E-08	1,08E-06
Disposed of non-hazardous waste [kg]	3,68E-02	9,51E-02	2,12E-02	0,00E+00	-8,32E-02	3,76E-03
Disposed of radioactive waste [kg]	4,71E-03	3,72E-04	4,50E-03	0,00E+00	-1,94E-04	3,10E-05

evaluated from CML 2001, April. 2015

1.3.70 U-Bolt MP-UB 3-1/2" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288430	U-Bolt MP-UB 3-1/2" OC	10	4,38	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	5,200	8,931	1,789	0,000	-7,490	1,970
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	5,58E-14	9,40E-15	5,27E-14	0,00E+00	-6,61E-15	3,19E-16
Acidification Potential (AP) [kg SO2-eq.]	2,27E-02	2,10E-02	3,74E-03	0,00E+00	-1,79E-02	1,58E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	3,92E-03	1,93E-03	4,13E-04	0,00E+00	-1,66E-03	3,24E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,69E-03	3,12E-03	2,69E-04	0,00E+00	-2,68E-03	-4,40E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	7,87E-07	4,45E-08	5,91E-07	0,00E+00	-3,03E-09	1,55E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,10E+01	7,97E+01	2,03E+01	0,00E+00	-6,58E+01	2,68E+01
Energy (net calorific value) [MJ]	7,41E+01	8,12E+01	3,23E+01	0,00E+00	-6,63E+01	2,69E+01
Energy ren. (net calorafic value) [MJ]	1,63E+01	3,33E+00	1,40E+01	0,00E+00	-2,40E+00	1,39E+00
Water consumption [kg]	2,38E+01	1,49E+01	1,63E+01	0,00E+00	-9,04E+00	1,61E+00
Air pollution [m^3]	3,98E+02	1,04E+03	1,15E+02	0,00E+00	-9,03E+02	1,44E+02
Water pollution [m^3]	9,42E-01	4,06E-01	4,64E-01	0,00E+00	-3,49E-01	4,20E-01
Hazardous waste for disposal [kg]	1,17E-06	5,82E-08	1,32E-08	0,00E+00	-5,20E-08	1,15E-06
Disposed of non-hazardous waste [kg]	3,93E-02	1,01E-01	2,26E-02	0,00E+00	-8,87E-02	4,00E-03
Disposed of radioactive waste [kg]	5,03E-03	3,96E-04	4,80E-03	0,00E+00	-1,96E-04	3,30E-05

evaluated from CML 2001, April. 2015

1.3.71 U-Bolt MP-UB 4" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288431	U-Bolt MP-UB 4" OC	10	4,80	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,279	9,797	1,947	0,000	-7,623	2,158
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	5,75E-14	9,92E-15	5,73E-14	0,00E+00	-1,00E-14	3,50E-16
Acidification Potential (AP) [kg SO2-eq.]	2,58E-02	2,36E-02	4,06E-03	0,00E+00	-1,91E-02	1,73E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,34E-03	2,13E-03	4,49E-04	0,00E+00	-1,78E-03	3,55E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,89E-03	3,49E-03	2,92E-04	0,00E+00	-2,85E-03	-4,82E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	8,55E-07	8,77E-08	6,42E-07	0,00E+00	-4,39E-08	1,70E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,42E+01	9,60E+01	2,21E+01	0,00E+00	-7,31E+01	2,93E+01
Energy (net calorific value) [MJ]	8,86E+01	9,84E+01	3,52E+01	0,00E+00	-7,44E+01	2,94E+01
Energy ren. (net calorafic value) [MJ]	1,71E+01	3,73E+00	1,52E+01	0,00E+00	-3,36E+00	1,52E+00
Water consumption [kg]	3,17E+01	2,16E+01	1,77E+01	0,00E+00	-9,33E+00	1,77E+00
Air pollution [m^3]	4,66E+02	1,15E+03	1,25E+02	0,00E+00	-9,63E+02	1,58E+02
Water pollution [m^3]	9,94E-01	4,31E-01	5,04E-01	0,00E+00	-4,02E-01	4,61E-01
Hazardous waste for disposal [kg]	1,28E-06	6,14E-08	1,44E-08	0,00E+00	-5,67E-08	1,26E-06
Disposed of non-hazardous waste [kg]	4,26E-02	1,07E-01	2,45E-02	0,00E+00	-9,34E-02	4,38E-03
Disposed of radioactive waste [kg]	5,17E-03	4,18E-04	5,21E-03	0,00E+00	-4,89E-04	3,61E-05

evaluated from CML 2001, April. 2015

1.3.72 U-Bolt MP-UB 5" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288432	U-Bolt MP-UB 5" OC	10	5,36	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	6,902	10,941	2,177	0,000	-8,627	2,411
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	6,49E-14	1,12E-14	6,41E-14	0,00E+00	-1,07E-14	3,91E-16
Acidification Potential (AP) [kg SO2-eq.]	2,87E-02	2,62E-02	4,54E-03	0,00E+00	-2,15E-02	1,94E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	4,84E-03	2,37E-03	5,02E-04	0,00E+00	-2,00E-03	3,97E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-4,37E-03	3,88E-03	3,27E-04	0,00E+00	-3,20E-03	-5,38E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	9,57E-07	9,05E-08	7,18E-07	0,00E+00	-4,12E-08	1,89E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,15E+01	1,06E+02	2,47E+01	0,00E+00	-8,15E+01	3,28E+01
Energy (net calorific value) [MJ]	9,76E+01	1,08E+02	3,93E+01	0,00E+00	-8,27E+01	3,29E+01
Energy ren. (net calorafic value) [MJ]	1,93E+01	4,15E+00	1,70E+01	0,00E+00	-3,61E+00	1,70E+00
Water consumption [kg]	3,44E+01	2,31E+01	1,98E+01	0,00E+00	-1,05E+01	1,98E+00
Air pollution [m^3]	5,15E+02	1,28E+03	1,40E+02	0,00E+00	-1,08E+03	1,76E+02
Water pollution [m^3]	1,12E+00	4,84E-01	5,64E-01	0,00E+00	-4,45E-01	5,15E-01
Hazardous waste for disposal [kg]	1,42E-06	6,91E-08	1,61E-08	0,00E+00	-6,34E-08	1,40E-06
Disposed of non-hazardous waste [kg]	4,76E-02	1,20E-01	2,74E-02	0,00E+00	-1,05E-01	4,89E-03
Disposed of radioactive waste [kg]	5,84E-03	4,70E-04	5,83E-03	0,00E+00	-4,93E-04	4,04E-05

evaluated from CML 2001, April. 2015

1.3.73 U-Bolt MP-UB 6" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288433	U-Bolt MP-UB 6" OC	2	1,22	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	1,548	2,496	0,497	0,000	-1,996	0,550
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,50E-14	2,56E-15	1,46E-14	0,00E+00	-2,30E-15	8,92E-17
Acidification Potential (AP) [kg SO2-eq.]	6,49E-03	5,96E-03	1,04E-03	0,00E+00	-4,92E-03	4,42E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,10E-03	5,41E-04	1,15E-04	0,00E+00	-4,58E-04	9,05E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,00E-03	8,83E-04	7,47E-05	0,00E+00	-7,34E-04	-1,23E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,19E-07	1,88E-08	1,64E-07	0,00E+00	-7,52E-09	4,32E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,83E+01	2,37E+01	5,64E+00	0,00E+00	-1,85E+01	7,48E+00
Energy (net calorific value) [MJ]	2,19E+01	2,42E+01	8,99E+00	0,00E+00	-1,88E+01	7,50E+00
Energy ren. (net calorafic value) [MJ]	4,43E+00	9,43E-01	3,89E+00	0,00E+00	-7,90E-01	3,88E-01
Water consumption [kg]	7,57E+00	5,02E+00	4,53E+00	0,00E+00	-2,43E+00	4,51E-01
Air pollution [m^3]	1,16E+02	2,92E+02	3,20E+01	0,00E+00	-2,48E+02	4,02E+01
Water pollution [m^3]	2,57E-01	1,11E-01	1,29E-01	0,00E+00	-1,01E-01	1,17E-01
Hazardous waste for disposal [kg]	3,25E-07	1,59E-08	3,68E-09	0,00E+00	-1,45E-08	3,20E-07
Disposed of non-hazardous waste [kg]	1,09E-02	2,77E-02	6,27E-03	0,00E+00	-2,42E-02	1,12E-03
Disposed of radioactive waste [kg]	1,35E-03	1,08E-04	1,33E-03	0,00E+00	-9,99E-05	9,21E-06

evaluated from CML 2001, April. 2015

1.3.74 U-Bolt MP-UB 8" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288434	U-Bolt MP-UB 8" OC	2	1,43	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	1,779	2,920	0,583	0,000	-2,367	0,644
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,77E-14	3,02E-15	1,72E-14	0,00E+00	-2,54E-15	1,04E-16
Acidification Potential (AP) [kg SO2-eq.]	7,54E-03	6,94E-03	1,22E-03	0,00E+00	-5,78E-03	5,17E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,29E-03	6,32E-04	1,34E-04	0,00E+00	-5,38E-04	1,06E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,18E-03	1,03E-03	8,75E-05	0,00E+00	-8,63E-04	-1,44E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,56E-07	1,99E-08	1,92E-07	0,00E+00	-6,54E-09	5,06E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,09E+01	2,72E+01	6,60E+00	0,00E+00	-2,16E+01	8,75E+00
Energy (net calorific value) [MJ]	2,52E+01	2,78E+01	1,05E+01	0,00E+00	-2,19E+01	8,78E+00
Energy ren. (net calorafic value) [MJ]	5,23E+00	1,10E+00	4,56E+00	0,00E+00	-8,85E-01	4,54E-01
Water consumption [kg]	8,54E+00	5,58E+00	5,31E+00	0,00E+00	-2,87E+00	5,28E-01
Air pollution [m^3]	1,34E+02	3,41E+02	3,75E+01	0,00E+00	-2,91E+02	4,70E+01
Water pollution [m^3]	3,03E-01	1,31E-01	1,51E-01	0,00E+00	-1,17E-01	1,37E-01
Hazardous waste for disposal [kg]	3,81E-07	1,87E-08	4,31E-09	0,00E+00	-1,70E-08	3,75E-07
Disposed of non-hazardous waste [kg]	1,28E-02	3,26E-02	7,35E-03	0,00E+00	-2,85E-02	1,31E-03
Disposed of radioactive waste [kg]	1,60E-03	1,27E-04	1,56E-03	0,00E+00	-1,02E-04	1,08E-05

evaluated from CML 2001, April. 2015

1.3.75 U-Bolt MP-UB 10" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288435	U-Bolt MP-UB 10" OC	2	1,72	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	2,094	3,500	0,699	0,000	-2,876	0,772
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,15E-14	3,64E-15	2,06E-14	0,00E+00	-2,86E-15	1,25E-16
Acidification Potential (AP) [kg SO2-eq.]	8,98E-03	8,28E-03	1,46E-03	0,00E+00	-6,96E-03	6,20E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,54E-03	7,57E-04	1,61E-04	0,00E+00	-6,47E-04	1,27E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,43E-03	1,23E-03	1,05E-04	0,00E+00	-1,04E-03	-1,72E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,08E-07	2,13E-08	2,31E-07	0,00E+00	-5,19E-09	6,06E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,46E+01	3,21E+01	7,92E+00	0,00E+00	-2,59E+01	1,05E+01
Energy (net calorific value) [MJ]	2,98E+01	3,27E+01	1,26E+01	0,00E+00	-2,61E+01	1,05E+01
Energy ren. (net calorafic value) [MJ]	6,32E+00	1,31E+00	5,47E+00	0,00E+00	-1,01E+00	5,45E-01
Water consumption [kg]	9,87E+00	6,34E+00	6,38E+00	0,00E+00	-3,48E+00	6,33E-01
Air pollution [m^3]	1,59E+02	4,09E+02	4,51E+01	0,00E+00	-3,51E+02	5,63E+01
Water pollution [m^3]	3,65E-01	1,58E-01	1,81E-01	0,00E+00	-1,39E-01	1,65E-01
Hazardous waste for disposal [kg]	4,56E-07	2,26E-08	5,18E-09	0,00E+00	-2,03E-08	4,49E-07
Disposed of non-hazardous waste [kg]	1,53E-02	3,93E-02	8,82E-03	0,00E+00	-3,44E-02	1,57E-03
Disposed of radioactive waste [kg]	1,94E-03	1,54E-04	1,87E-03	0,00E+00	-1,04E-04	1,29E-05

evaluated from CML 2001, April. 2015

1.3.76 U-Bolt MP-UB 12" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288436	U-Bolt MP-UB 12" OC	2	1,99	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	2,536	4,050	0,806	0,000	-3,213	0,892
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,42E-14	4,14E-15	2,37E-14	0,00E+00	-3,85E-15	1,45E-16
Acidification Potential (AP) [kg SO2-eq.]	1,06E-02	9,69E-03	1,68E-03	0,00E+00	-7,96E-03	7,17E-03
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,79E-03	8,78E-04	1,86E-04	0,00E+00	-7,41E-04	1,47E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,62E-03	1,43E-03	1,21E-04	0,00E+00	-1,19E-03	-1,99E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,54E-07	3,22E-08	2,66E-07	0,00E+00	-1,39E-08	7,01E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,99E+01	3,88E+01	9,14E+00	0,00E+00	-3,01E+01	1,21E+01
Energy (net calorific value) [MJ]	3,59E+01	3,97E+01	1,46E+01	0,00E+00	-3,06E+01	1,22E+01
Energy ren. (net calorafic value) [MJ]	7,15E+00	1,53E+00	6,30E+00	0,00E+00	-1,31E+00	6,30E-01
Water consumption [kg]	1,25E+01	8,37E+00	7,34E+00	0,00E+00	-3,92E+00	7,32E-01
Air pollution [m^3]	1,90E+02	4,73E+02	5,19E+01	0,00E+00	-4,01E+02	6,52E+01
Water pollution [m^3]	4,15E-01	1,80E-01	2,09E-01	0,00E+00	-1,64E-01	1,91E-01
Hazardous waste for disposal [kg]	5,27E-07	2,56E-08	5,97E-09	0,00E+00	-2,35E-08	5,19E-07
Disposed of non-hazardous waste [kg]	1,76E-02	4,47E-02	1,02E-02	0,00E+00	-3,90E-02	1,81E-03
Disposed of radioactive waste [kg]	2,17E-03	1,75E-04	2,16E-03	0,00E+00	-1,74E-04	1,49E-05

evaluated from CML 2001, April. 2015

1.3.77 U-Bolt MP-UB 14" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288437	U-Bolt MP-UB 14" OC	2	6,57	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	7,515	13,382	2,688	0,000	-11,507	2,953
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	8,55E-14	1,43E-14	7,93E-14	0,00E+00	-8,58E-15	4,79E-16
Acidification Potential (AP) [kg SO2-eq.]	3,35E-02	3,12E-02	5,62E-03	0,00E+00	-2,70E-02	2,37E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	5,86E-03	2,89E-03	6,21E-04	0,00E+00	-2,51E-03	4,86E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-5,60E-03	4,64E-03	4,04E-04	0,00E+00	-4,05E-03	-6,59E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,18E-06	4,79E-08	8,88E-07	0,00E+00	1,50E-08	2,32E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,78E+01	1,15E+02	3,04E+01	0,00E+00	-9,81E+01	4,02E+01
Energy (net calorific value) [MJ]	1,08E+02	1,17E+02	4,86E+01	0,00E+00	-9,85E+01	4,03E+01
Energy ren. (net calorafic value) [MJ]	2,49E+01	4,96E+00	2,11E+01	0,00E+00	-3,26E+00	2,08E+00
Water consumption [kg]	3,29E+01	1,97E+01	2,45E+01	0,00E+00	-1,38E+01	2,42E+00
Air pollution [m^3]	5,83E+02	1,56E+03	1,73E+02	0,00E+00	-1,37E+03	2,16E+02
Water pollution [m^3]	1,43E+00	6,16E-01	6,98E-01	0,00E+00	-5,14E-01	6,30E-01
Hazardous waste for disposal [kg]	1,75E-06	8,83E-08	1,99E-08	0,00E+00	-7,81E-08	1,72E-06
Disposed of non-hazardous waste [kg]	5,91E-02	1,54E-01	3,39E-02	0,00E+00	-1,35E-01	5,99E-03
Disposed of radioactive waste [kg]						

evaluated from CML 2001, April. 2015

1.3.78 U-Bolt MP-UB 16" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288438	U-Bolt MP-UB 16" OC	2	7,57	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	8,624	15,418	3,098	0,000	-13,294	3,402
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	9,87E-14	1,65E-14	9,14E-14	0,00E+00	-9,72E-15	5,52E-16
Acidification Potential (AP) [kg SO2-eq.]	3,85E-02	3,59E-02	6,47E-03	0,00E+00	-3,12E-02	2,73E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	6,74E-03	3,32E-03	7,16E-04	0,00E+00	-2,90E-03	5,60E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-6,46E-03	5,34E-03	4,66E-04	0,00E+00	-4,67E-03	-7,59E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,36E-06	5,29E-08	1,02E-06	0,00E+00	1,97E-08	2,67E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,01E+02	1,32E+02	3,51E+01	0,00E+00	-1,13E+02	4,63E+01
Energy (net calorific value) [MJ]	1,23E+02	1,34E+02	5,60E+01	0,00E+00	-1,13E+02	4,64E+01
Energy ren. (net calorafic value) [MJ]	2,87E+01	5,71E+00	2,43E+01	0,00E+00	-3,71E+00	2,40E+00
Water consumption [kg]	3,75E+01	2,24E+01	2,83E+01	0,00E+00	-1,60E+01	2,79E+00
Air pollution [m^3]	6,69E+02	1,80E+03	2,00E+02	0,00E+00	-1,58E+03	2,48E+02
Water pollution [m^3]	1,65E+00	7,10E-01	8,05E-01	0,00E+00	-5,91E-01	7,26E-01
Hazardous waste for disposal [kg]	2,01E-06	1,02E-07	2,29E-08	0,00E+00	-9,00E-08	1,98E-06
Disposed of non-hazardous waste [kg]	6,81E-02	1,78E-01	3,91E-02	0,00E+00	-1,56E-01	6,91E-03
Disposed of radioactive waste [kg]	8,89E-03	6,94E-04	8,31E-03	0,00E+00	-1,70E-04	5,70E-05

evaluated from CML 2001, April. 2015

1.3.79 U-Bolt MP-UB 18" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288439	U-Bolt MP-UB 18" OC	2	10,69	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	12,506	21,779	4,367	0,000	-18,444	4,804
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,37E-13	2,30E-14	1,29E-13	0,00E+00	-1,53E-14	7,79E-16
Acidification Potential (AP) [kg SO2-eq.]	5,50E-02	5,10E-02	9,12E-03	0,00E+00	-4,38E-02	3,86E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	9,55E-03	4,70E-03	1,01E-03	0,00E+00	-4,07E-03	7,91E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-9,03E-03	7,59E-03	6,57E-04	0,00E+00	-6,55E-03	-1,07E-02
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,92E-06	9,66E-08	1,44E-06	0,00E+00	4,97E-09	3,77E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,46E+02	1,92E+02	4,95E+01	0,00E+00	-1,60E+02	6,53E+01
Energy (net calorific value) [MJ]	1,78E+02	1,95E+02	7,89E+01	0,00E+00	-1,61E+02	6,55E+01
Energy ren. (net calorafic value) [MJ]	4,01E+01	8,11E+00	3,42E+01	0,00E+00	-5,65E+00	3,39E+00
Water consumption [kg]	5,62E+01	3,46E+01	3,98E+01	0,00E+00	-2,22E+01	3,94E+00
Air pollution [m^3]	9,62E+02	2,54E+03	2,82E+02	0,00E+00	-2,21E+03	3,51E+02
Water pollution [m^3]	2,31E+00	9,95E-01	1,13E+00	0,00E+00	-8,46E-01	1,03E+00
Hazardous waste for disposal [kg]	2,84E-06	1,43E-07	3,23E-08	0,00E+00	-1,27E-07	2,80E-06
Disposed of non-hazardous waste [kg]	9,59E-02	2,49E-01	5,51E-02	0,00E+00	-2,18E-01	9,75E-03
Disposed of radioactive waste [kg]	1,24E-02	9,71E-04	1,17E-02	0,00E+00	-3,95E-04	8,05E-05

evaluated from CML 2001, April. 2015

1.3.80 U-Bolt MP-UB 20" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288311	U-Bolt MP-UB 20" OC	2	11,69	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	13,614	23,815	4,777	0,000	-20,231	5,254
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,51E-13	2,52E-14	1,41E-13	0,00E+00	-1,64E-14	8,52E-16
Acidification Potential (AP) [kg SO2-eq.]	6,00E-02	5,58E-02	9,98E-03	0,00E+00	-4,79E-02	4,22E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,04E-02	5,14E-03	1,10E-03	0,00E+00	-4,45E-03	8,65E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-9,90E-03	8,29E-03	7,18E-04	0,00E+00	-7,17E-03	-1,17E-02
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,10E-06	1,02E-07	1,58E-06	0,00E+00	9,71E-09	4,13E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,59E+02	2,09E+02	5,41E+01	0,00E+00	-1,75E+02	7,14E+01
Energy (net calorific value) [MJ]	1,94E+02	2,12E+02	8,64E+01	0,00E+00	-1,76E+02	7,17E+01
Energy ren. (net calorafic value) [MJ]	4,39E+01	8,86E+00	3,74E+01	0,00E+00	-6,10E+00	3,71E+00
Water consumption [kg]	6,09E+01	3,73E+01	4,36E+01	0,00E+00	-2,44E+01	4,31E+00
Air pollution [m^3]	1,05E+03	2,78E+03	3,08E+02	0,00E+00	-2,42E+03	3,84E+02
Water pollution [m^3]	2,53E+00	1,09E+00	1,24E+00	0,00E+00	-9,23E-01	1,12E+00
Hazardous waste for disposal [kg]	3,11E-06	1,56E-07	3,54E-08	0,00E+00	-1,39E-07	3,06E-06
Disposed of non-hazardous waste [kg]	1,05E-01	2,72E-01	6,03E-02	0,00E+00	-2,38E-01	1,07E-02
Disposed of radioactive waste [kg]	1,36E-02	1,06E-03	1,28E-02	0,00E+00	-4,03E-04	8,80E-05

evaluated from CML 2001, April. 2015

1.3.81 U-Bolt MP-UB 24" OC

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2288313	U-Bolt MP-UB 24" OC	2	13,69	Steel, Polymer

Enviromental impact category	Total	Raw material	Produc-tion	Use	End of life	Transpor-tation
Global Warming Potential (GWP 100 years) [kg CO2-eq.]	15,832	27,888	5,596	0,000	-23,805	6,152
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,77E-13	2,96E-14	1,65E-13	0,00E+00	-1,87E-14	9,98E-16
Acidification Potential (AP) [kg SO2-eq.]	7,01E-02	6,52E-02	1,17E-02	0,00E+00	-5,62E-02	4,94E-02
Eutrification Potential (EP) [kg $(PO4)^{3-}$ eq.]	1,22E-02	6,02E-03	1,29E-03	0,00E+00	-5,22E-03	1,01E-02
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,16E-02	9,69E-03	8,42E-04	0,00E+00	-8,42E-03	-1,37E-02
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,46E-06	1,11E-07	1,85E-06	0,00E+00	1,92E-08	4,83E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,85E+02	2,43E+02	6,34E+01	0,00E+00	-2,05E+02	8,37E+01
Energy (net calorific value) [MJ]	2,26E+02	2,47E+02	1,01E+02	0,00E+00	-2,06E+02	8,39E+01
Energy ren. (net calorafic value) [MJ]	5,16E+01	1,04E+01	4,39E+01	0,00E+00	-7,00E+00	4,34E+00
Water consumption [kg]	7,02E+01	4,27E+01	5,11E+01	0,00E+00	-2,86E+01	5,04E+00
Air pollution [m^3]	1,22E+03	3,25E+03	3,61E+02	0,00E+00	-2,84E+03	4,49E+02
Water pollution [m^3]	2,97E+00	1,28E+00	1,45E+00	0,00E+00	-1,08E+00	1,31E+00
Hazardous waste for disposal [kg]	3,64E-06	1,83E-07	4,14E-08	0,00E+00	-1,63E-07	3,58E-06
Disposed of non-hazardous waste [kg]	1,23E-01	3,20E-01	7,06E-02	0,00E+00	-2,80E-01	1,25E-02
Disposed of radioactive waste [kg]	1,59E-02	1,25E-03	1,50E-02	0,00E+00	-4,19E-04	1,03E-04

evaluated from CML 2001, April. 2015