

Product Environmental Profile

Maquet Volista StandOP

Surgical Light

Maquet Volista StandOP

Product Environmental Profile

Product description

The profile has been achieved with the most representative configuration among our sales. Maquet Volista StandOP surgical light 400/600 DF, with adjustable color temperature & Volista VisioNIR, AIM and boost mode, a SA suspension 850/1000, a power supply VPS 2 COM and a recessed touchscreen.

Use

The cupolas are adjusted to 100,000 Lux minimum and operate 10 hours per day, 300 days per year during 10 years.

What is a Product Environmental Profile?

Our Product Environmental Profile is part of our Life Cycle Assessment (also known as life cycle analysis). This is a methodology for assessing environmental impacts associated with all the stages of the life cycle of a commercial product, process, or service. For instance, in the case of a manufactured product, environmental impacts are assessed from raw material extraction and processing (cradle), through the product's manufacture, distribution and use, to the recycling or final disposal of the materials composing it.



In 2020, a product improvement project has been implemented and has allowed to reduce CO₂ emissions of the Maquet Volista StandOP by 3%.

Manufacturing

More of 99% of components are considered for each configurations, the total mass of the model is >95% of the real mass.


The following tab summarizes the distance between suppliers and the Getinge French assembling plant.



			
France	1,000 km (621 mi)	-	French assembling plant 
Europe	3,500 km (2,174 mi)	-	
North Africa	1,000 km (621 mi)	+ 7,000 km (4,349 mi)	
Africa	1,000 km (621 mi)	+ 12,000 km (7,456 mi)	
Asia	1,000 km (621 mi)	+ 19,000 km (11,806 mi)	
North America	1,000 km (621 mi)	+ 14,000 km (8,699 mi)	
South America	1,000 km (621 mi)	+ 14,000 km (8,699 mi)	
Middle East	1,000 km (621 mi)	+ 8,000 km (4,970 mi)	
Oceania	1,000 km (621 mi)	+ 19,000 km (11,806 mi)	

Distribution

The following tab summarizes distances between Getinge French assembling plant and customers. The distribution is done at 90% by boat and 10% by plane.

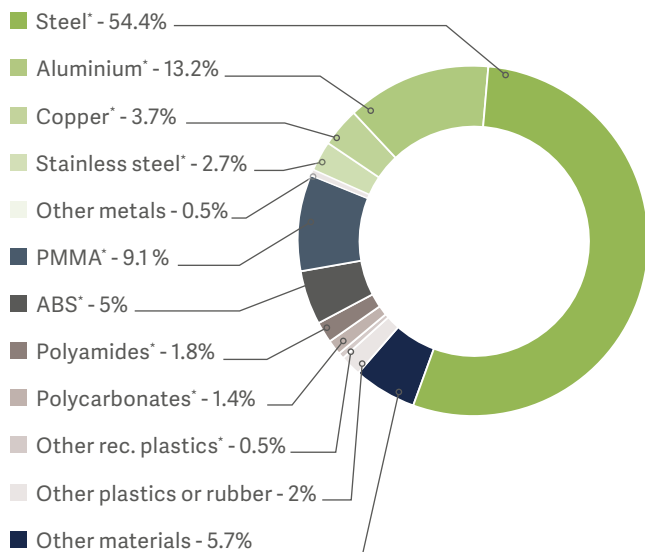
French assembling plant	Truck	OR	Truck + Ship		OR	Truck + Plane		Region
			Truck	Ship		Truck	Plane	
	1,000 km (621 mi)		-	-		-	-	France
	3,500 km (2,174 mi)		-	-		-	-	Europe
	-		2,400 km (1,491 mi)	12,000 km (7,456 mi)		2,000 km (1,242 mi)	10,000 km (6,213 mi)	Africa
	-		3,800 km (2,361 mi)	19,000 km (11,806 mi)		2,000 km (1,242 mi)	10,000 km (6,213 mi)	Asia/Japan
	-	OR	2,800 km (1,739 mi)	14,000 km (8,699 mi)	OR	2,000 km (1,242 mi)	10,000 km (6,213 mi)	North America
	-		2,800 km (1,739 mi)	14,000 km (8,699 mi)		2,000 km (1,242 mi)	10,000 km (6,213 mi)	South America
	-		1,600 km (994 mi)	8,000 km (4,970 mi)		800 km (497 mi)	4,000 km (2,485 mi)	Middle East
	-		3,800 km (2,361 mi)	19,000 km (11,806 mi)		2,400 km (1,491 mi)	12,000 km (7,456 mi)	Oceania

Results

The EIME (Environmental Impact and Management Explorer) software version 5.8.1, and its database, version CODDE-2018-11 were used for the Life Cycle Assessment (LCA). Indicators for PEP ecopassport PCR3 – 2015 are used.

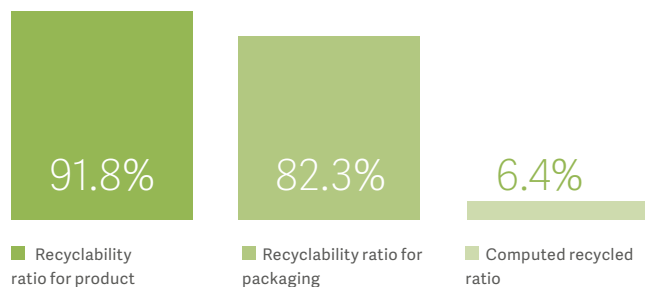
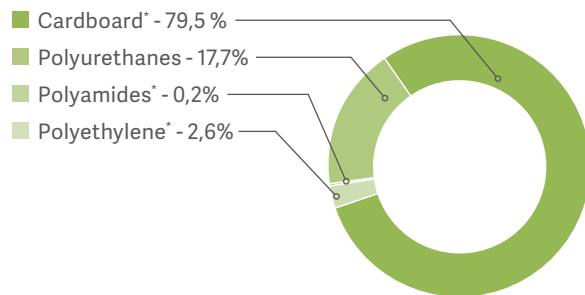
Product

Real weight of the product : 85,3 kg / 188,05 lb



Packaging

Packaging weight : 16.36 kg / 36.07 lb



*Material recyclable

The following materials are considered recyclable

- Steel, Alu, Bronze, Brass, Copper (except cables)
 - Cardboard, Paper
 - Thermoplastics (PMMA, PVC, ABS, ABS-PC, PC, PS, PET, PE, PA, PP, POM)
- Thermosetting plastics, elastomers and other materials not listed are considered non-recyclable

Environmental impact

France, Europe, North and South America, Asia, Japan, Oceania, Middle East, Africa

A - Description: Acidification potential of soil and water - Unit: kg SO₂ eq.

ADPe - Description: Abiotic depletion (elements, ultimate reserves) - Unit: kg antimony eq.

ADPf - Description: Abiotic depletion (fossil fuels) - Unit: MJ

AP - Description: Air pollution - Unit: m³

EP - Description: Eutrophication (fate not incl.) - Unit: kg PO₄ eq.

GWP - Description: Global warming (GWP100) - Unit: kg CO₂ eq.

ODP - Description: Ozone layer depletion ODP steady state - Unit: kg CFC-11 eq.

POCP - Description: Photochemical oxidation (high NOx) - Unit: kg ethylene eq.

WP - Description: Water Pollution - Unit: m³

	A	ADPe	ADPf	AP	EP	GWP	ODP	POCP	WP
France									
Manufacturing	3.08e+0	6.24e-2	1.02e+4	1.14e+5	7.25e-1	1.01e+3	9.24e-5	2.51e-1	6.12e+4
Distribution	1.71e-1	4.59e-6	4.61e+2	3.19e+3	3.85e-2	5.91e+1	2.21e-6	1.18e-2	2.50e+4
Use	3.44e+0	2.20e-4	8.94e+3	2.32e+4	3.17e-1	9.72e+2	2.10e-3	1.98e-1	3.81e+4
End of life	2.23e-2	2.89e-7	7.71e+1	1.25e+3	5.41e-2	2.46e+1	7.74e-7	5.71e-3	3.17e+3
Total	6.72e+0	6.26e-2	1.97e+4	1.42e+5	1.13e+0	2.07e+3	2.20e-3	4.67e-1	1.27e+5

CO₂ impact for the life cycle of the product:
~ 2.07 tones CO₂ equivalent

	A	ADPe	ADPf	AP	EP	GWP	ODP	POCP	WP
Europe									
Manufacturing	3.08e+0	6.24e-2	1.02e+4	1.14e+5	7.25e-1	1.01e+3	9.24e-5	2.51e-1	6.12e+4
Distribution	2.50e+1	5.23e-6	6.88e+2	3.93e+3	5.62e-2	7.52e+1	2.24e-6	1.73e-2	2.76e+4
Use	2.83e+1	1.71e-4	3.86e+4	1.61e+5	1.06e+0	3.74e+3	9.10e-4	1.34e+0	1.57e+5
End of life	2.23e-2	2.89e-7	7.71e+1	1.25e+3	5.41e-2	2.46e+1	7.74e-7	5.71e-3	3.17e+3
Total	3.17e+1	6.26e-2	4.95e+4	2.80e+5	1.90e+0	4.85e+3	1.00e-3	1.61e+0	2.49e+5

CO₂ impact for the life cycle of the product:
~ 4.85 tones CO₂ equivalent

	A	ADPe	ADPf	AP	EP	GWP	ODP	POCP	WP
North America									
Manufacturing	3.08e+0	6.24e-2	1.02e+4	1.14e+5	7.25e-1	1.01e+3	9.24e-5	2.51e-1	6.12e+4
Distribution	1.37e+0	1.38e-5	3.70e+3	1.03e+4	2.38e-1	2.91e+2	2.57e-6	8.45e-2	6.29e+4
(based on USA data)									
Use	4.20e+0	4.31e-5	5.35e+4	3.73e+5	1.11e+0	4.39e+3	7.96e-5	6.73e-1	2.16e+5
End of life	2.23e-2	2.89e-7	7.71e+1	1.25e+3	5.41e-2	2.46e+1	7.74e-7	5.71e-3	3.17e+3
Total	8.68e+0	6.25e-2	6.74e+4	4.99e+5	2.13e+0	5.72e+3	1.75e-4	1.01e+0	3.44e+5

CO₂ impact for the life cycle of the product:
~ 5.72 tones CO₂ equivalent

	A	ADPe	ADPf	AP	EP	GWP	ODP	POCP	WP
South America									
Manufacturing	3.08e+0	6.24e-2	1.02e+4	1.14e+5	7.25e-1	1.01e+3	9.24e-5	2.51e-1	6.12e+4
Distribution	1.37e+0	1.38e-5	3.70e+3	1.03e+4	2.38e-1	2.91e+2	2.57e-6	8.45e-2	6.29e+4
(based on Brazil data)									
Use	1.01e+0	9.90e-5	8.41e+3	8.99e+4	2.70e-1	1.37e+3	1.73e-4	2.73e-1	5.71e+4
End of life	2.23e-2	2.89e-7	7.71e+1	1.25e+3	5.41e-2	2.46e+1	7.74e-7	5.71e-3	3.17e+3
Total	5.49e+0	6.25e-2	2.24e+4	2.16e+5	1.29e+0	2.70e+3	2.69e-4	6.14e-1	1.84e+5

CO₂ impact for the life cycle of the product:
~ 2.70 tones CO₂ equivalent

Asia
(based on
China data)

	A	ADPe	ADPf	AP	EP	GWP	ODP	POCP	WP
Manufacturing	3.08e+0	6.24e-2	1.02e+4	1.14e+5	7.25e-1	1.01e+3	9.24e-5	2.51e-1	6.12e+4
Distribution	1.59e+0	1.42e-5	3.86e+3	1.15e+4	2.52e-1	3.03e+2	2.59e-6	9.58e-2	6.47e+4
Use	6.99e+0	2.83e-5	9.75e+4	6.69e+5	1.85e+0	6.45e+3	5.13e-5	8.26e-1	3.21e+5
End of life	2.23e-2	2.89e-7	7.71e+1	1.25e+3	5.41e-2	2.46e+1	7.74e-7	5.71e-3	3.17e+3
Total	1.17e+1	6.24e-2	1.12e+5	7.96e+5	2.89e+0	7.79e+3	1.47e-4	1.18e+0	4.50e+5

CO₂ impact for the life cycle of the product:
~ 7.79 tones CO₂ equivalent

Japan

	A	ADPe	ADPf	AP	EP	GWP	ODP	POCP	WP
Manufacturing	3.08e+0	6.24e-2	1.02e+4	1.14e+5	7.25e-1	1.01e+3	9.24e-5	2.51e-1	6.12e+4
Distribution	1.59e+0	1.42e-5	3.86e+3	1.15e+4	2.52e-1	3.03e+2	2.59e-6	9.58e-2	6.47e+4
Use	2.57e+0	3.71e-5	3.16e+4	2.05e+5	6.82e-1	3.20e+3	3.36e-4	5.27e-1	1.97e+5
End of life	2.23e-2	2.89e-7	7.71e+1	1.25e+3	5.41e-2	2.46e+1	7.74e-7	5.71e-3	3.17e+3
Total	7.27e+0	6.24e-2	4.57e+4	3.32e+5	1.72e+0	4.54e+3	4.31e-4	8.79e-1	3.26e+5

CO₂ impact for the life cycle of the product:
~ 4.54 tones CO₂ equivalent

Oceania
(based on
Australia
data)

	A	ADPe	ADPf	AP	EP	GWP	ODP	POCP	WP
Manufacturing	3.08e+0	6.24e-2	1.02e+4	1.14e+5	7.25e-1	1.01e+3	9.24e-5	2.51e-1	6.12e+4
Distribution	1.72e+0	1.59e-5	4.44e+3	1.23e+4	2.90e-1	3.44e+2	2.66e-6	1.04e-1	7.15e+4
Use	7.24e+0	2.78e-5	9.78e+4	6.78e+5	1.91e+0	7.05e+3	8.47e-5	9.83e-1	3.24e+5
End of life	2.23e-2	2.89e-7	7.71e+1	1.25e+3	5.41e-2	2.46e+1	7.74e-7	5.71e-3	3.17e+3
Total	1.21e+1	6.24e-2	1.13e+5	8.06e+5	2.98e+0	8.43e+3	1.81e-4	1.34e+0	4.60e+5

CO₂ impact for the life cycle of the product:
~ 8.43 tones CO₂ equivalent

Middle East

	A	ADPe	ADPf	AP	EP	GWP	ODP	POCP	WP
Manufacturing	3.08e+0	6.24e-2	1.02e+4	1.14e+5	7.25e-1	1.01e+3	9.24e-5	2.51e-1	6.12e+4
Distribution	7.41e-1	8.33e-6	1.78e+3	6.41e+3	1.26e-1	1.54e+2	2.36e-6	4.50e-2	4.04e+4
Use	3.49e+0	3.85e-5	4.00e+4	2.95e+5	9.22e-1	4.16e+3	1.42e-4	6.97e-1	1.47e+5
End of life	2.23e-2	2.89e-7	7.71e+1	1.25e+3	5.41e-2	2.46e+1	7.74e-7	5.71e-3	3.17e+3
Total	7.34e+0	6.24e-2	5.20e+4	4.17e+5	1.83e+0	5.34e+3	2.37e-4	9.99e-1	2.52e+5

CO₂ impact for the life cycle of the product:
~ 5.34 tones CO₂ equivalent

Africa
(based on
Egypt data)

	A	ADPe	ADPf	AP	EP	GWP	ODP	POCP	WP
Manufacturing	3.08e+0	6.24e-2	1.02e+4	1.14e+5	7.25e-1	1.01e+3	9.24e-5	2.51e-1	6.12e+4
Distribution	1.29e+0	1.36e-5	3.64e+3	9.81e+3	2.28e-1	2.87e+2	2.56e-6	7.99e-2	6.22e+4
Use	2.29e+0	2.98e-5	1.90e+4	1.79e+5	6.13e-1	3.45e+3	9.78e-4	6.05e-1	2.07e+5
End of life	2.23e-2	2.89e-7	7.71e+1	1.25e+3	5.41e-2	2.46e+1	7.74e-7	5.71e-3	3.17e+3
Total	6.68e+0	6.24e-2	3.29e+4	3.05e+5	1.62e+0	4.77e+3	1.07e-3	9.41e-1	3.34e+5

CO₂ impact for the life cycle of the product:
~ 4.77 tones CO₂ equivalent

