OMPECO



CONVERTER® NV TREATING WASTE DIRECTLY ON BOARD







APPLICATIONS

_PRIVATE YACHTS _OFFSHORE PLATFORMS _MERCHANT VESSELS _CRUISE SHIPS _TANKERS _FERRY BOATS



Transform unsorted waste into a dry, stable product.



WASTE CHARACTERISTICS

INFECTED WASTE 100 kg/m ³	MUNICIPAL WASTE 300 kg/m³ ↓	ORGANIC WASTE 500 kg/m³ ↓		
				DENSITY
100 kg/m³				500 kg/m³
INFECTED WASTE humidity		MUNICIPAL WASTE humidity ↓	ORGANIC WASTE humidity ↓	
				HUMIDITY
20%				70%







Flame free! SAFETY

SAFETY

The system does not work under pressure!



2.

3.

EVAPORATION Boiling

HIGH TEMPERATURE MOIST HEAT

THE PROCESS

SEVEN STEPS 30 MINUTES ONLY





Converter[®] equipment is

of weight.

authorized to treat waste through

physical modification, reduction of

volume, dehydration and reduction

1.

WASTE LOADING

The waste is loaded inside the chamber by hand in plastic bags and the lid is closed.



2.

CRUSHING

The rotor starts and accelerates gradually, as the material is finely ground and the temperature rises quickly to about 100 °C.

100°C



3.

े. २२ २२

100°C.

EVAPORATION

100°C

The heat generated by friction in

of the waste moisture and the

the material causes the evaporation

temperature remains firm at around



STERILIZATION OR PASTEURIZATION

The temperature of the material is held firm at 151°C for 3 minutes, under moist heat conditions through controlled water dosage.



6.

COOLING DOWN

The waste is sprinkled with water in order to lower the temperature of the material to about 100°C. A vacuum pump then lowers the temperature further down to 60°C adiabatically.

SUPERHEATING

4.

Once all the moisture has been eliminated, the frictional heat causes the temperature of the material to increase to 151°C.

100>60°C

151°C



7.

UNLOADING IN VACUUM BAG

The treated material is unloaded by centrifugal force through the opening of a servo-operated valve positioned at the bottom of the treatment chamber.



THE RESULT

WASTE BIN IS AN IDEAL BACTERIAL CULTURE

Microorganism proliferation and spreading is the common problem connected to the management of the waste because it directly affect the human health.

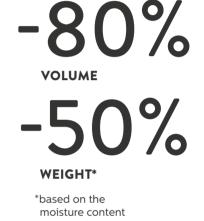
1 bacteria today \rightarrow 5x10⁸⁶ in 4 days



At the end of the treatment with the converter NV the final product is a completely unrecognizable, odorless and sterile flock or "fluff". The weight is reduced by 50%, and the volume by 80%. If vacuum packed the volume is reduced further and the brickets can be stored for long periods, with no odour, dust or need to refrigerate.

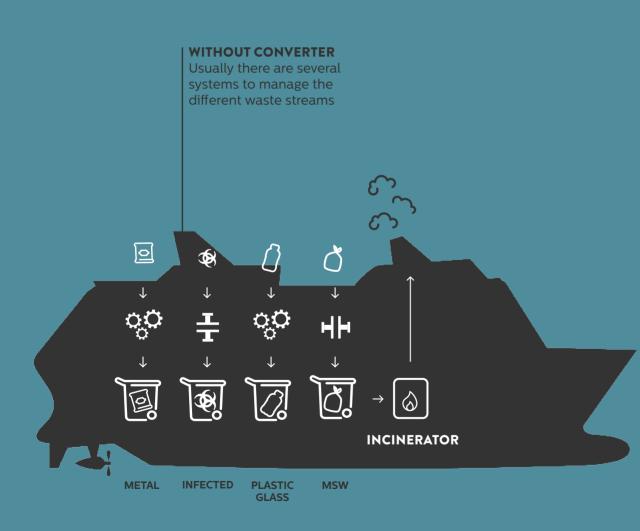
WASTE MATERIAL

includes several hazardous substances which can be eliminated only through thermal processes.

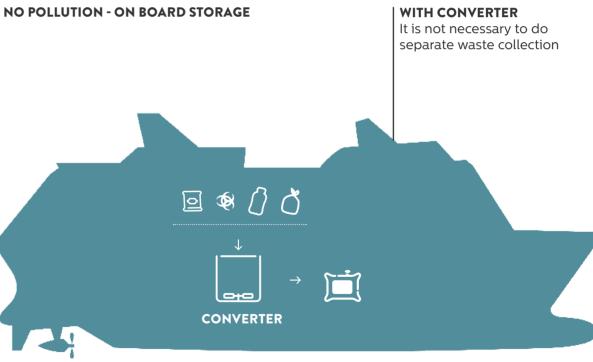


VIRUSES Bacteria INSECTS





EASY WASTE MANAGEMENT



UNRECOGNIZABLE ODORLESS AND PASTEURIZED





↓ FLUFF

AUTOMATIC VACUUM

RDF 3.5 ÷ 4.5 MWh/t* * nominal value









E NO REFRIGERATION

NO ODORS NO LEACHATE

NO WASTE MANAGEMENT

NO WASTE STORAGE EASY FLOCK LESS SPACE REQUIRED

Converter[®] NV 200 Converter[®] NV 100 Converter[®] NV 60 Converter[®] NV 30 Converter[®] NV 10

CONVERTER® NV200





↓ TECHNICAL DETAILS

400 liters waste

organic

municipal

→ 60 to 80 kg/h
→ 100 to 150 kg/h

Specification

op comon como	
treatment chamber volume [lt]	400
machine dry weight [Kg]	2200
machine footprint [mm - h]	2300x1500-1800
electric cabinet weight [Kg]	450
electric cabinet footprint [mm]	1000x660x2000
total installed power [KW]	100
nominal motor power [KW]	85
nominal current [A]	120
peack current [A]	150
electrical consumption [KW/Kg]	0,4-0,6

CONVERTER® NV100





TECHNICAL DETAILS

200 liters waste

organic \rightarrow municipal

30 to 40 kg/h 40 to 80 kg/h \rightarrow

Specification

treatment chamber volume [lt]	200
machine dry weight [Kg]	1500
machine footprint [mm - h]	1950x1200-1400
electric cabinet weight [Kg]	450
electric cabinet footprint [mm]	1000x660x2000
total installed power [KW]	65
nominal motor power [KW]	60
nominal current [A]	95
peack current [A]	120
electrical consumption [KW/Kg]	0,4 - 0,6

ONVERTER(R)**NV60**





TECHNICAL DETAILS

peack current [A]

electrical consumption [KW/Kg]

100 liters waste

organic municipal \rightarrow 20 to 40 kg/h

→ 15 to 20 kg/h

Specification treatment chamber volume [lt] machine dry weight [Kg] machine footprint [mm - h] electric cabinet weight [Kg] electric cabinet footprint [mm] total installed power [KW] nominal motor power [KW] nominal current [A]

100 1100 1500x1100-1400 450 1000x660x2000 55 50 70 80 0,4 - 0,6

CONVERTER (R)NV30_NV10





50

10

TECHNICAL DETAILS

NV30

Specification treatment chamber volume [lt] machine dry weight [Kg] 250 machine footprint [mm - h] 700x700-1100 total installed power [Kw] waste [Kg/h] 8-12

NV10 Specification

[t] 25
110
700x600-900
2,8
4-6



NO POLLUTANT EMISSIONS Liquids present in the waste are separated and condensed



SAFE STOCK No dust No odor No fermentation





NO WASTE SEGREGATION Time saving



NO WATER CONSUMPTION Can be reduced down to zero





EASY TO USE No special license is needed to operate



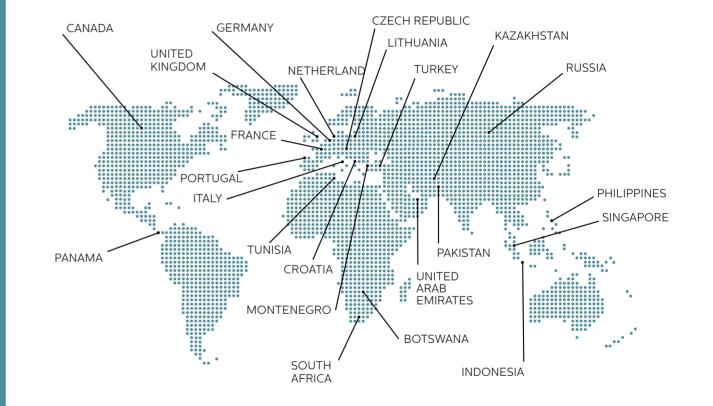
LOW ENERGY CONSUMPTION

ECOFRIENDLY

CONVERTER® INTHE WORLD

25 COUNTRIES

- Our brokers are present worldwide;
- Several local distributors operate
- exclusively in their territories;
- Among our clients there are the 5 most
- important NATO Navies and manufactures
- of large luxury Yachts.





OMPECO s.r.l.

Via Cavalieri del Lavoro, 16 10024 Moncalieri Torino, Italy T. +39 011 02.40.108 www.ompeco.com info@ompeco.com Legal headquarters and billing address: Corso Laghi 26 10051 Avigliana - Torino, Italy Reg. Imp. RI/PRA/2014/46068/800 R.E.A. di Torino 1188899 VAT n° IT11118350013

Information, photos and description contained in this publication are supplied for illustrative purposes and are not binding.





