



TREATING WASTE  
DIRECTLY ON SITE

+

**CERTIFICATIONS**

ISO 9001 NATO AH649  
RINA  
M.O.G.C. 231  
APHIS  
APHA





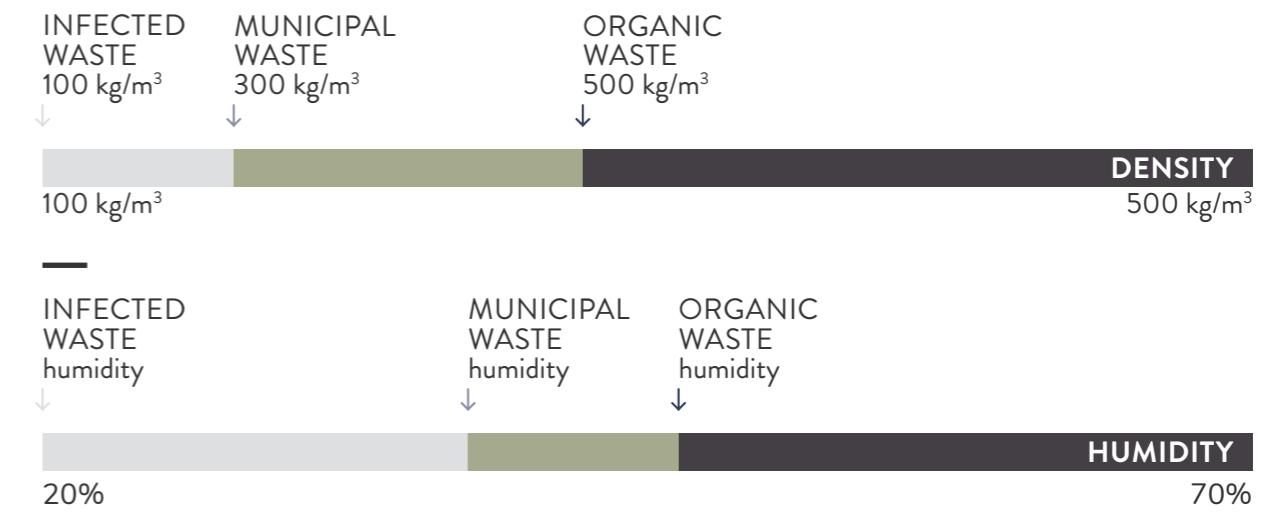
# APPLICATIONS

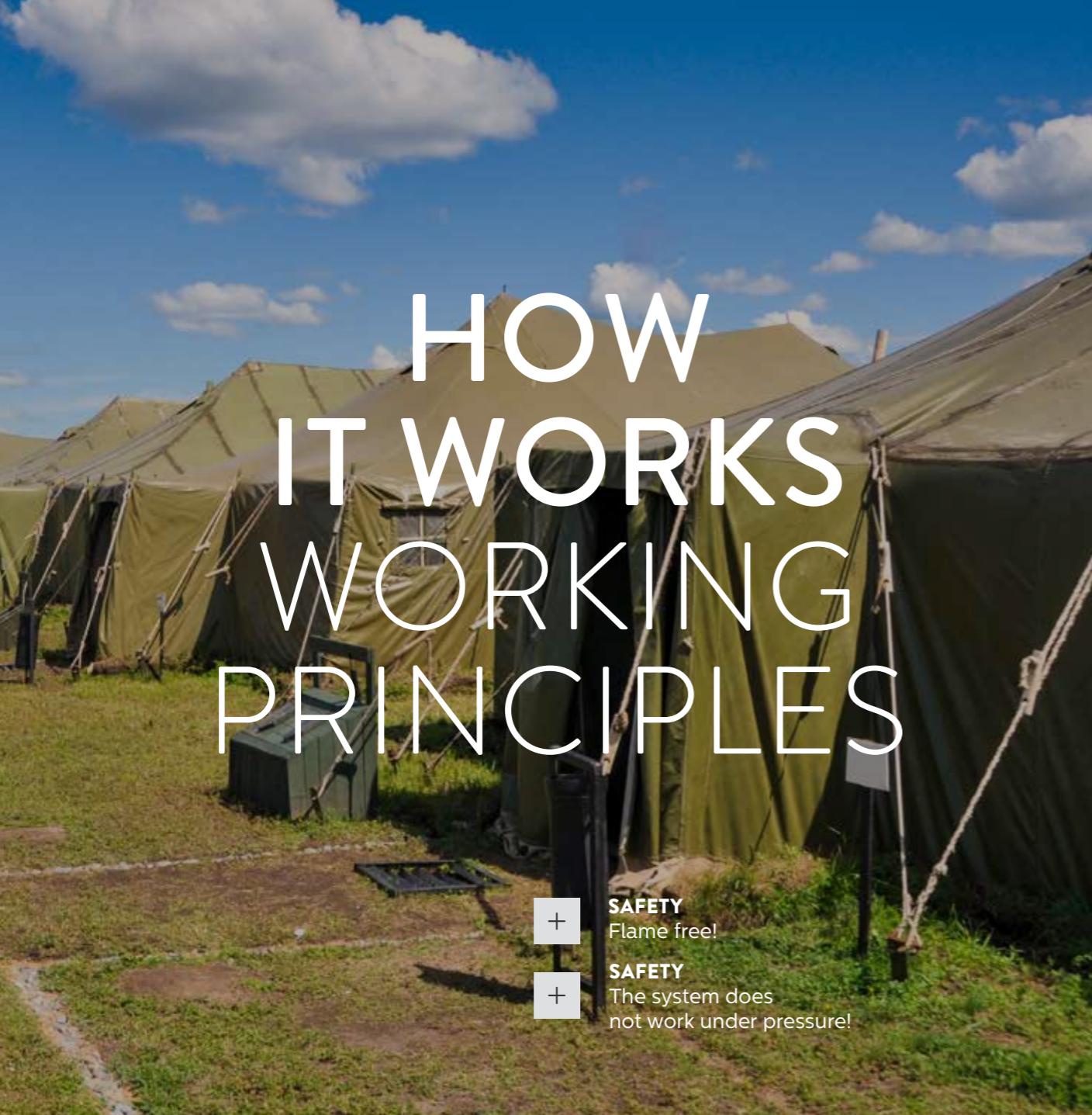
- MILITARY BASES
- HUMANITARIAN CAMPS
- HOSPITAL CAMPS
- AIRPORTS
- CUSTOMS
- MILITARY SHIPS
- HARBOURS



Transform unsorted  
waste into a dry,  
stable product.

# WASTE CHARACTERISTICS





# HOW IT WORKS WORKING PRINCIPLES



## SAFETY

Flame free!



## SAFETY

The system does not work under pressure!

1.

## WARM-UP FRICTION



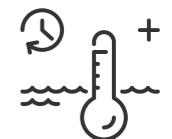
2.

## EVAPORATION BOILING



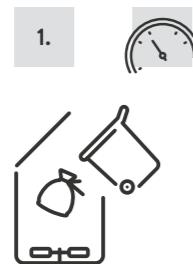
3.

## HEATING HIGH TEMPERATURE MOIST HEAT



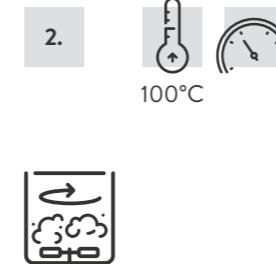
# THE PROCESS

SEVEN STEPS 30 MINUTES ONLY



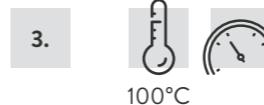
## WASTE LOADING

Converter® equipment is authorized to treat waste through physical modification, reduction of volume, dehydration and reduction of weight.



## CRUSHING

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



## EVAPORATION

The heat generated by friction in the material causes the evaporation of the waste moisture and the temperature remains firm at around 100°C.



## SUPERHEATING

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



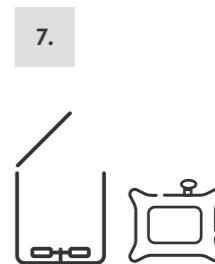
## STERILIZATION OR PASTEURIZATION

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



## 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.



## 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.

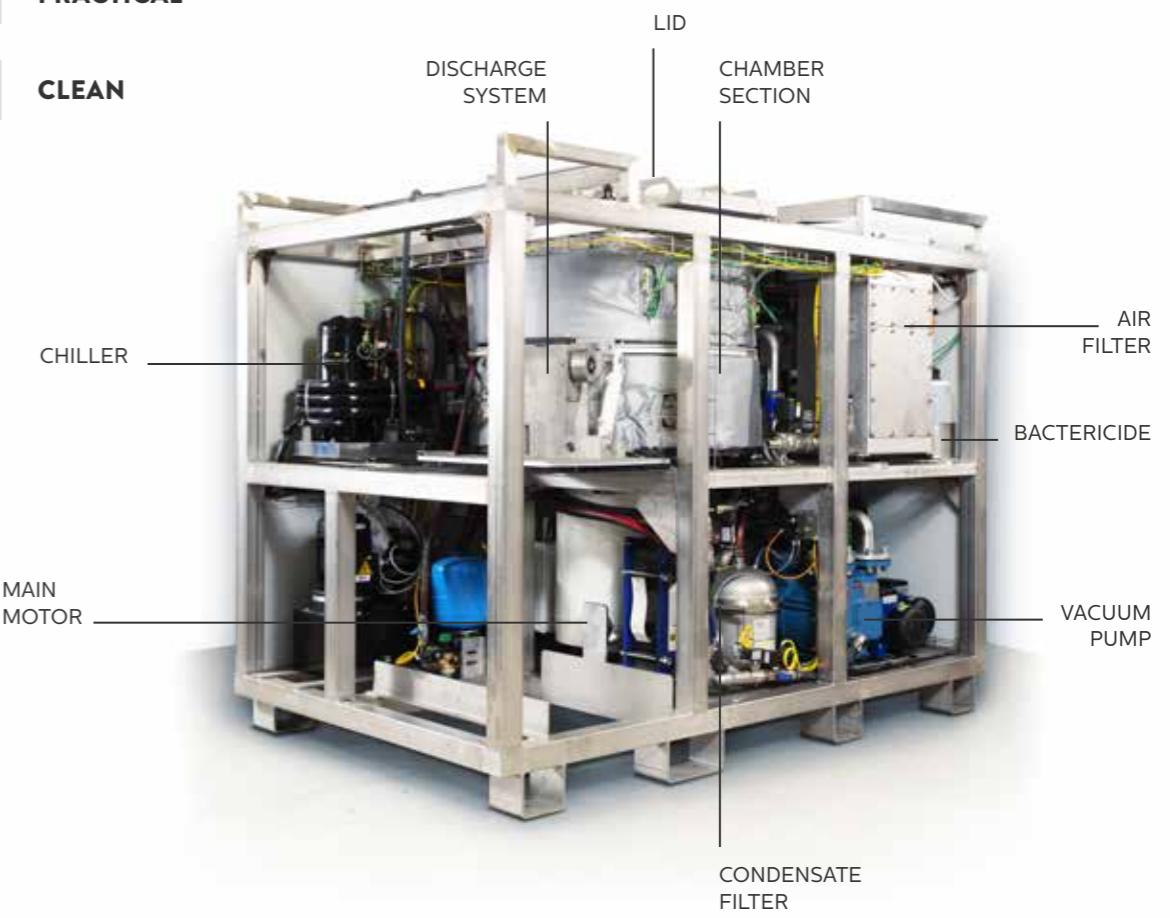


**+** COSTS SAVING

**+** SAFE

**+** PRACTICAL

**+** CLEAN



# THE RESULT

## LIGHT AND DRY

### WASTE BIN IS AN IDEAL BACTERIAL CULTURE

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

1 bacteria today →  $5 \times 10^{86}$  in 4 days



At the end of the treatment with Converter 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.









CONVERTER

WWW.OMPECO.COM

# STANDARD EQUIPMENT LAND USE



250 kW Diesel generator,  
stabilized for excellent  
voltage response, electric  
starter kit



Special independent cooling  
system including ventilation  
system



Specially designed Water  
Recycle System cooling  
system including heavy duty  
dry cooler



Pressurized system for  
process water



Thermal protection of  
the container to ensure  
functioning at -10°C  
below the external



Electric control board of  
Container and auxiliary  
components with PLC and 5,7'  
color touch screen



Container Air conditioning  
and Heating System (electric)



Condensate management  
system with storage tank and  
discharge pump



Soundproof protection  
for the converter, auxiliary  
components and container  
itself



**OPTIONS:**  
NATO Mimetic pattern  
painting





#### NO POLLUTANT EMISSIONS

Liquids present in the waste are separated and condensed



#### NO WATER CONSUMPTION

Can be reduced down to zero



#### SAFE STOCK

No dust  
No odor  
No fermentation



#### EASY TO USE

No special license is needed to operate



#### NO WASTE SEGREGATION

Time saving



#### LOW ENERGY CONSUMPTION

ECOFRIENDLY  
SUSTAINABLE  
ECONOMIC

