



THE GOAL:  
0%  
WASTE

## TREATING WASTE DIRECTLY ON SITE



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









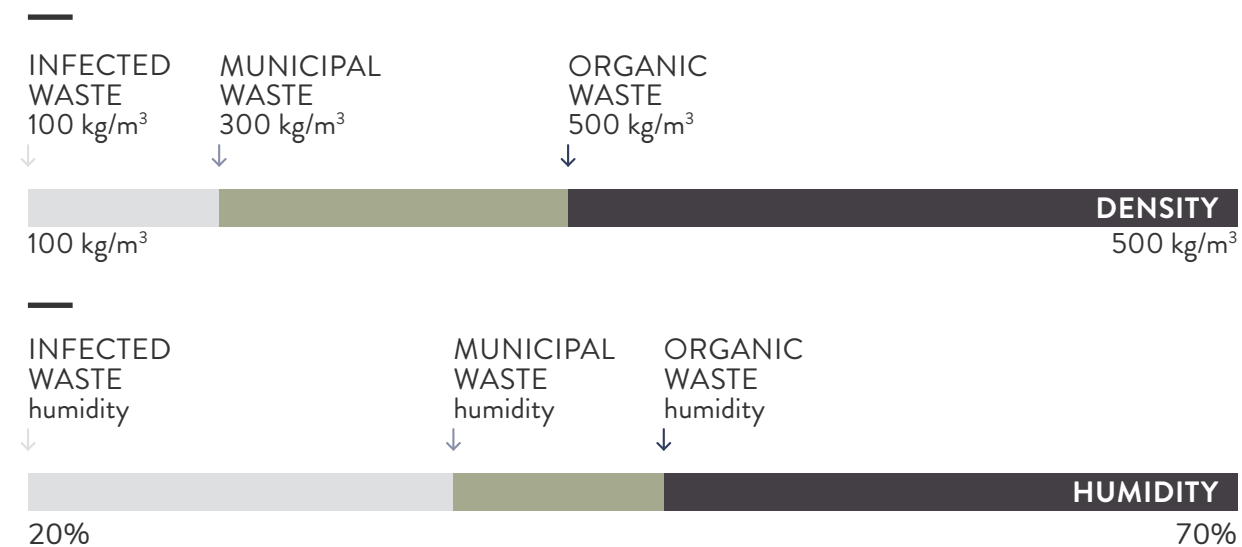
# APPLICATIONS

\_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!

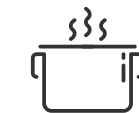
1.

WARM-UP  
FRICTION



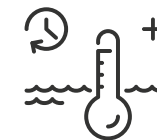
2.

EVAPORATION  
BOILING



3.

HEATING  
HIGH TEMPERATURE MOIST HEAT



# THE PROCESS

SEVEN STEPS 30 MINUTES ONLY

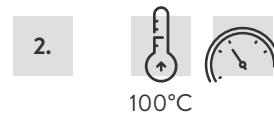


Converter® equipment is authorized to treat waste through physical modification, reduction of volume, dehydration and reduction of weight.



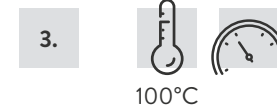
## WASTE LOADING

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



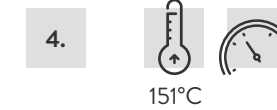
## CRUSHING

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.



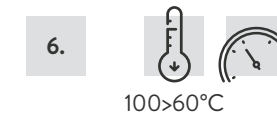
## SUPERHEATING

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



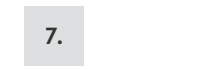
## STERILIZATION OR PASTEURIZATION

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.

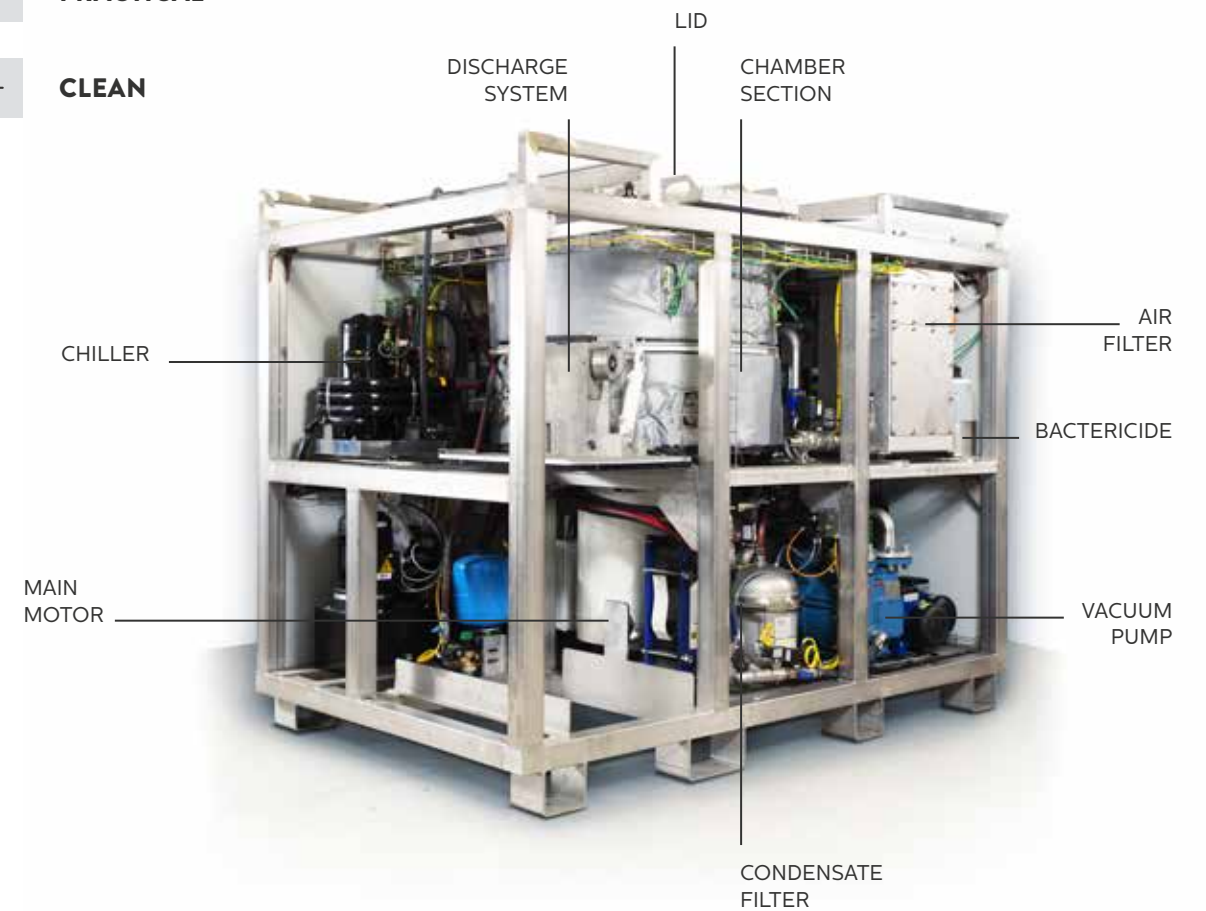


## UNLOADING IN VACUUM BAG

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 bricks 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.















# STANDARD EQUIPEMENT LAND USE



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



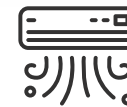
Special independent cooling  
system including ventilation  
system



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



**OPTIONS:**  
NATO Mimetic pattern  
painting



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



Pressurized system for  
process water



Thermal protection of  
the container to ensure  
functioning at  $-10^{\circ}\text{C}$   
below the external



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







**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 SUSTAINABLE ECONOMIC

