



TREATING WASTE  
DIRECTLY ON SITE

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



**CONVERTER®**



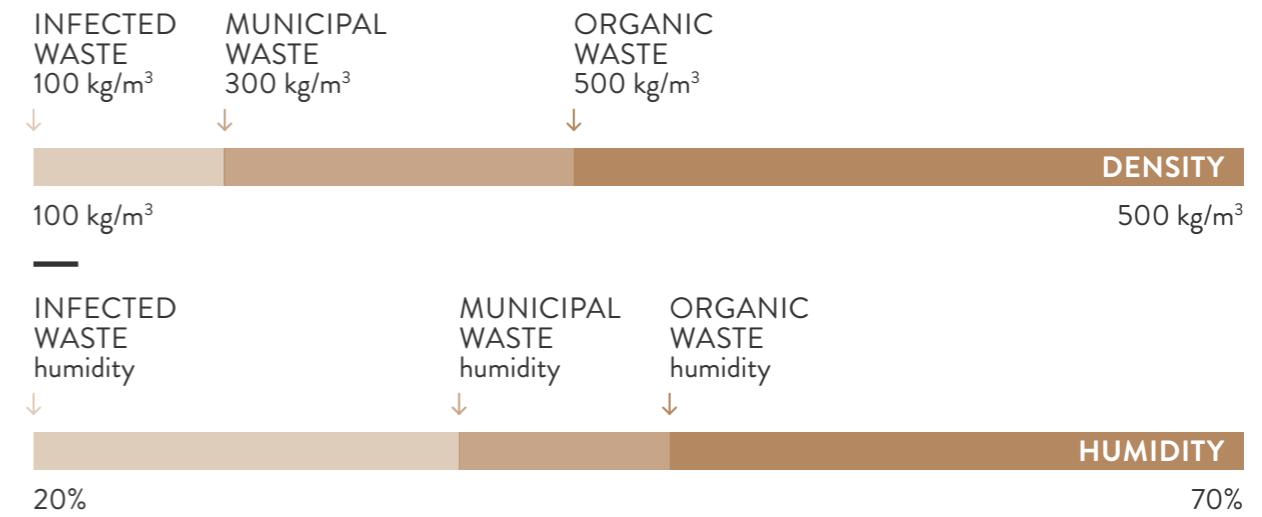
# APPLICATIONS

- RESTAURANTS
- HOTELS
- BARS
- RESIDENCES
- HOMES
- RESORTS
- MALLS



Transform unsorted waste  
into a dry, stable,  
homogeneous 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



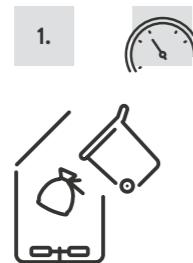
3.

HEATING  
HIGH TEMPERATURE MOIST HEAT



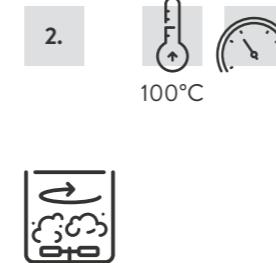
# THE PROCESS

SEVEN STEPS 30 MINUTES ONLY



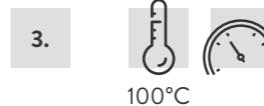
## WASTE LOADING

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.



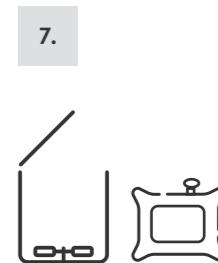
## STERILIZATION OR PASTEURIZATION

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.

# THE RESULT

## LIGHT AND DRY

### WASTE BIN IS AN IDEAL BACTERIAL CULTURE

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

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



At the end of the treatment with the Converter® MO series 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.



**-80%**  
VOLUME  
**-50%**  
WEIGHT\*

\*based on the moisture content

# UNRECOGNIZABLE ODORLESS AND PASTEURIZED

90  DAYS

The waste can be kept without emitting odors for up to 90 days.



RDF

3.5 ÷ 4.5 MWh/t\*

\* nominal value

↓  
FLUFF

↓  
AUTOMATIC VACUUM



NO ODORS



NO WASTE  
MANAGEMENT



NO WASTE STORAGE  
EASY STORAGE  
LESS SPACE REQUIRED



NO  
REFRIGERATIONS





#### 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