



THE INNOVATIVE SANITIZER

for a more efficient sterilization and a healthy environment

CEBCON - Sustainable solutions for the economical treatment of biomass.

**FLEXIBLE.
MODULAR.
EFFICIENT.**

As a modular system, our systems offer intelligent solutions that are especially energy-efficient, flexible and safe.



FLEXIBILITY



MODULARITY



SUSTAINABILITY



INNOVATION



BIOMASS



EXPERIENCE



The Innovative Sanitizer

for a more efficient sterilization and a healthy environment

The new innovative sanitizer from **CEBCON Technologies** is characterized by a particularly efficient and environmentally friendly disinfection of solid/pourable bio-substrates that are subject to the hygiene regulation EC 1774/2002 or EG1069 / 2009 and the EU regulation EU 142/2011. These substrates must not be used untreated in the agricultural sector.

Before further use it must be ensured that harmful substances and/or bacteria and weed seeds for residual products from horti- and agriculture as well as waste from food production have been inactivated.

These substrates are subject to a heat treatment of at least 70 ° C for at least 60 minutes to be reliably free of germs. Important nutrients remain preserved. Thereafter, the sanitized substrate may be reused safely (e.g., as a soil additive or for composting).

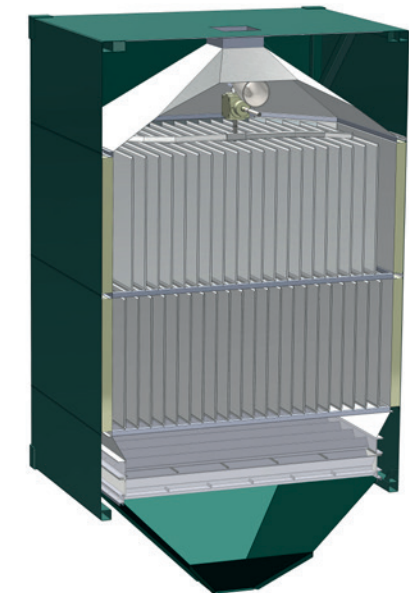
The CEBCON sanitizer operates continuously in a countercurrent mode. The advantage of this continuous approach is the optimal use of available resources. No peak loads need to be considered.

The sanitizer consists of multiple heat exchanger plates, which are arranged in a special way and form the chutes of the unit. According to the principle of contact heating, the sterilization is carried out by the combination of retention time and a homogeneous mixture. This happens in a consistent way and will be independent from external influences. Short circuit flow will not be an issue. This ensures extremely effective and easy sterilization.

The heating energy is usually taken from an existing (waste-) heat source providing hot water. Since the

substrate has a temperature of at least 70 °C at the end of the process, another integrated recooling stage reduces the temperature to 40 °C and thus recovers the heat energy for the sanitation stage.

The sanitizer is flexible and easy to use: it is equipped with the necessary sensors to ensure hygienic requirements anytime. It can be integrated into the upstream process control and documentation system for fully automated operation. In addition, the sanitizer is designed in standard container format, which reduces the transport and installation costs.



▲ Sanitizer

Features & Advantages

- Effective neutralization of pathogenic germs by complying with EC + EU regulations (biosubstrate category 3, retention time > 60 min at min. 70° C)
- Safe inactivation of unwanted weed seeds in plant residues
- Low operating costs due to efficient countercurrent process control
- Simple modular integration of a recooling stage with heat recovery is additionally possible
- Minimized fire and failure risk due to design features
- Reduced expenditure for transportation and installation due to containerisation
- Possible sanitizing performance: 0,5 - 5 to/h
- Various substrates/granulates/pellets made of e.g.:
 - Green cut and garden waste
 - Solid substrates for biogas production
 - Solid fermentation residues from biogas production
 - Animal excrements (chicken, horses)
 - Sewage sludge



Using equipment from CEBCON technologies, leads to:

REDUCTION IN OPERATING COSTS

due to high energy efficiency

FLEXIBILITY

due to semi-mobile construction on a container basis

OPERATIONAL SAFETY

due to systems' mode of functioning

PRACTICABILITY

due to considerable experience that has gone into the development

CEBCON Technologies GmbH
Notkestraße 85
22607 Hamburg / Germany

T +49 40 38 66 14 92
info-cebcon@cebcon-tech.com
www.cebcon-tech.com

