



SISTEMA Q-RING®
Powered by EntSORGA

Q-RING™ SYSTEM

AERATED FLOOR AND BREATHABLE COVER Q-RING™

Powered by EntSORGA



THE RESULT OF TWENTY YEARS OF EXPERIENCE IN BIOLOGICAL WASTE TREATMENT, THE **Q-RING™ SYSTEM** IS AMONG **THE MOST COST COMPETITIVE METHODS** ON THE MARKET TO ALLOW EFFICIENT PROCESSING OF ORGANIC WASTE.

THE SOLUTION COMBINES **LOW INVESTMENTS** WITH **EXCELLENT PERFORMANCES**, THANKS TO THE Q-RING™ BREATHABLE FABRIC STUDIED BY ENTSORGA TO ENSURE OPTIMAL CONDITIONS FOR THE OXIDATION PROCESS, WHILE ALLOWING FOR AN EFFECTIVE ODOR ABATEMENT.

ENTSORGA
GREEN TECHNOLOGY REVOLUTION



MOSTLY USED IN THE FINAL CURING PHASE OF COMPOST, THE Q-RING™ SOLUTION GUARANTEES EFFICIENT AND CONTROLLED BIOMASS MATURATION: WHILE FORCED AERATION IMPROVES OXYGENATION, THE Q-RING™ FABRIC PROTECTS THE FEEDSTOCK FROM RAIN AND OUTSIDE HUMIDITY WHILE ALLOW RELEASING PROCESSED AIR AND GUARANTEING EXCELLENT ODOR ABATEMENT.

MAIN FEATURES

This process solution consists of:

A **forced aeration system** (1) provided by a network of **air ducts** (2) embedded in a **concrete floor** (3) and equipped with anti-clogging nozzles, to allow a homogeneous distribution of the air in the heap. In case of existing flooring, it is possible to install air ducts above the floor.

Q-Ring™ cover (4), a semi-breathable fabric in which the mid layer is permeable, to allow **reducing humidity and filter the process air**, abating odors, before release to the atmosphere. The exterior layer of the cover is waterproof and allows avoiding the formation of leachate.

A **wetting system**, is installed between the Q-Ring™ cover and the feedstock

An **automatic control system** allows monitoring process parameters, and to adjust wetting and air flow rates.

STRENGTHS

- **Reduced investment:** one of the most cost effective systems on the market
- **Modularity:** the technology adapts easily to different process configuration and existing infrastructure
- **Standardization:** continuous monitoring guarantee efficiency, durability and ease of use

The Q-Ring™ fabric ensures:

- **Waterproof:** avoids uncontrolled wetting of the feedstock and the consequent production of leachate
- **Maximum breathability and odor control**
- **High durability and resistance**
- **Light, easy to install and customizable:** the cover is produced and cut to measure

1. FORCED AERATION SYSTEM



2. FORCED AERATION DUCTS



3. AERATED CEMENT SLAB



4. Q-RING™ COVER



APPLICATIONS

Without need of modifications, the Q-Ring™ system is suitable for all types of aerobic biological treatment:

- **COMPOSTING** the organic fraction of waste, digestate and sludges
- **BIOSTABILIZATION** of waste before landfilling
- **BIODRYING** of waste and biomass and subsequent production of Solid Recovered Fuel (SRF)



ENTSORGAFIN S.P.A | ENTSORGA ITALIA S.P.A.

Strada Provinciale per Castelnuovo Scrivia, 7/9 | 15057 Tortona (AL) | Italy | T +39 0131 811383

info@entsorga.it