

## **FOOD WASTE MANAGING THE RISK**

Within the general waste stream up to 60% is organic waste (food and garden waste). Food waste represents a particular challenge to any facility:

- Pending legislation will impact on how food waste is classified and managed.
- Food waste has a high CO2e footprint of 627kg/tonne.
- Waste management costs are increasing as landfills reach end of life and new space is built further and further away from the metropole; the ZAR:\$ exchange rate increases waste management company costs; minimum wage legislation will be passed onto the customer.
- Labour action in the waste industry will become more frequent with perishable food waste being the major hazard.

On-site composting allows food waste risks to be mitigated and controlled at relatively low cost.

# **EARTH CYCLER ON-SITE FOOD WASTE COMPOSTING SOLUTION**

Earth Probiotic is officially "Proudly South African". The company has developed solutions for the African market which enable the composting of 100% of the food waste stream.

- 100% South African manufactured.
- Process up to 5,000kg food waste per month including carbon input.
- Utilise indigenous Southern African micro-organisms.
- Bespoke composting recipes per site.
- Minimal energy use.
- Can be driven via solar energy.
- Small footprint and can fit into car parking space.
- · Locate indoors or outdoors.
- Fully automated composting process including guided C:N input.
- · Includes industrial shredder.
- Manufactured to require minimal servicing and maintenance.

DEPENDING ON MODEL, EARTH CYCLER CAPACITIES ARE 5, 10 AND 15 TONNES FOOD WASTE PER MONTH.









#### **AUTOMATED OPERATIONAL SIMPLICITY**

The intelligent PLC guides operators on input recipe protocols while automatically managing the mixing and aeration cycle,

The Earth Cycler utilises load cells which weigh material inputs and outputs while also visually communicating discharge requirements to operators.

### DATA ENABLED REMOTE MANAGEMENT FUNCTION

With a mobile, wireless or wired data connection the Earth Cycler can be remotely managed and controlled, software updated and performance measured from anywhere in the world.

### **MEASUREMENT & PERFORMANCE IMPACT REPORTING**

The Earth Cycler measures all inputs and outputs and can generate online reports showing:

- Carbon footprint reduction vs. landfill.
- Landfill airspace saving.
- Compost output.
- Potential carbon trading value. Online reporting dashboards are an optional paid service.

#### **SPECIFICATIONS**

Material: Insulated composting vessel. High quality steel mixing arms. IP65/68 electrical components.

Power Required: Single or Three phase for both the Cyclers and industrial shredder.

Power Use: <30kWh per month (220v measure) for the 5T unit.

Space Required: 5m x 3m working space.

Placed on concrete platform.

Site: Placed under cover.

Power connectors must be water proof.

Requires ventilation piping/ducting if installed inside building.

Input Feed: All food waste PLUS:

- non chemically contaminated paper/board.

- shredded garden/landscape waste.

- compostable packaging and films, bagasse, egg cartons..

Optional Extras: Solar power module and bin lifter.

Microbe Input: 1.5kg per week.

Automation: Automated timed schedule.

Monitoring: Input & output weights monitored through load cells and stored on HMI.

Warnings: "Discharge Now" indicator lights when maximum load is reached.

Guarantees: Fully guaranteed against manufacture defects for 24 months.

Safety: ISO14120 design compliance.

