

KC vs KCA vs KCE

Parameters	KWIK Composter (KC)	Heater Based Machine (KCA)	KWIK Composter Export (KCE)
Operation	Fully Automatic Continuous In-Vessel Composting	Fully Automatic Drying (need further curing of output)	Fully Automatic Continuous In-Vessel Composting
Process	Fully Automatic Aerobic composting based on Thermophilic bacterial decomposition without any heater	Reduction of waste through indirect heating by ceramic/oil heaters	Fully Automatic Aerobic composting based on Thermophilic bacterial decomposition without any heater
Reduction	75-80%	80-90%	85-95 %
Composting Method	Aerobic Bacterial Decomposition	Drying through electric heaters	Aerobic Bacterial Decomposition
Processing/Retention Time	18 days inside machine	24-48 Hours	18 days inside machine
Material Mixing By	Whole Vessel rotates on the rollers with the help of Gearbox and Motor assembly. It helps uniform mixing and aeration.	It done by Mixing arm/shaft. It may bend or break if material inside vessel become thick/hard. It also lead to failure of motor and Gearbox.	Whole Vessel rotates on the rollers with the help of Gearbox and Motor assembly. It helps to done uniform mixing of material and aeration.
Heating done by	Use of Thermophilic bacterias lead to decomposition of waste with help of additional carbonaceous material, moisture, nitrogen and oxygen. During this process of decomposition heat gets evolved (Exothermic Reaction). The same heat is trapped inside vessel which again utilize for decomposition. So no need of any external heating. It help to reduce the power consumption of system.	Heating is done with the help of Ceramic Pad/Oil heaters. It will lead to extensive power consumption.	Use of Thermophilic bacterias lead to decomposition of waste with help of additional carbonaceous material, moisture, nitrogen and oxygen. During this process of decomposition heat gets evolved (Exothermic Reaction). The same heat is trapped inside vessel which again utilize for decomposition. So no need of any external heating. It help to reduce the power consumption of system.
Output	Ready to use compost which follows all the FCO norms. The Natural phenomenon of decomposition is used in this machine.	The output of this machine is Biomass. It just remove the moisture from waste with the help of heaters and give output in powder form. The output has no nutritional value as the process only takes place in 24-48 hours. No bacteria can grow and decompose the whole matter in such short time.	Ready to use compost which follows all the FCO norms. The Natural phenomenon of decomposition is used in this machine.
Energy Consumption Factor	Energy consumption of machine is very low as the vessel will only rotate 1-2 minutes per hour i.e hardly 1-1.5 hours in whole day. The accessories are also operate 1-2 hour only. So the power consumption of whole system is very low.	Operation of heater is based on moisture content in the waste, so if the moisture in waste are more then heater will automatically stay on till evaporation of moisture. So power consumption of this machine is very high. If we add accessories like dewatering screw press with the machine then power consumption will again increase.	Energy consumption of machine is very low as the vessel will only rotate 1-2 minutes per hour i.e hardly 1-1.5 hours in whole day. The accessories are also operate 1-2 hour only. So the power consumption of whole system is very low.
Material Feeding	Manual /with the help of given additional accessory feeder	Manual or Automatic	Automatic with the help of given inbuilt feeder
Material segregation	Manually with given additional accessory of belt conveyor assembly etc or segregation table	Manually with given additional accessory of belt conveyor assembly or segregation table	Manually with given additional accessory of belt conveyor assembly or segregation table
Output removal	Automatic. (One need to place the bins at outlet only, compost will automatically fall in that as vessel rotates)	Manual (One has to remove the output manually with help of shovels)	Automatic. (One need to place the bins at outlet only, compost will automatically fall in that as vessel rotates)
Compost Seiving	Additional accessory given named compst seiving machine	No any provision/ manual sieving possible	Additional accessory given named compst seiving machine
Odour Control Mechanism	Yes, Deodourizing unit/ Bio filter provided along with machine	Yes, Deodourizing unit/ Bio filter provided along with machine	Yes, Deodourizing unit/ Bio filter provided along with machine
Manpower Required	Proposed system is fully automatic and unskilled labour can easily operate the same. If we use tractor in future for loading of waste, then no manpower required.	Skilled or semi-skilled labour required. More number of labours will also needed as the system operates manually (No automation on feeding of waste or removal of compost)	Skilled or semi- skilled labour required. Single person can operate the machine seating at any place via mobile or tablet. (Fully automation on feeding of waste or removal of compost)