

Melt King models comparison

Melt King DNX
General garbage reducer and dryer

High recycling rate

Most of the calorie value remains, so high calorie solid fuel can be recycled.
Depending on the processed material, it can be recycled into feed and fertilizer.



Melt King MD
Sterilizer, reducer and dryer

Reliable sterilization

Stir the processed material in the sterilization room slowly.
Equipped with a function that maintains the temperature at 180 to 200°C for more than 30 minutes, which is necessary for sterilization.



Specification of Melt King

Model	DNX-500	DNX-1000	MD-500	MD-1000
Main feature	Dry garbage with a high moisture content up to 1/50 to reduce weight		Infectious waste such as diapers and medical waste with water content can be dried, sterilized and reduced	
Can be processed	Food waste, cooking waste, vegetables, fruits, plants, livestock dung and combustibles materials etc		Diapers, gauze with blood, absorbent cotton, bandages, infectious waste etc.	
Can not be processed	Vinyl chloride products, petroleum, oil, metal, iron, steel, glass, stone, porcelain, bound paper or books, large amount of cloths / plastic, infectious waste etc		Vinyl chloride products, petroleum, oil, metal, iron, glass, stone, porcelain, bound paper or books, large amount of cloths / plastic, etc	
Dangerous prohibited	Spray cans, organic solvents, toxic poisons, explosives, large quantities of alcohol, injection needles, scalpels, and other sharp objects, low flash points, etc.			
Customers	Many factories at box lunch, food processing, spice and sprout, Resort hotels, golf courses, cafeteria, Japan Antarctic station		Hospitals, nursing homes, rehabilitation hospitals etc.	
Size (mm) W x D x H	1,910 x 1,350 x 2,425	2,340 x 1,510 x 2,535	1,910 x 1,350 x 2,425	2,350 x 1,510 x 2,535
Exhaust tower	400 mm height			
Weight Kgs	1,900	3,000	1,900	3,000
Processing capacity	500 liters / badge	1,000 Litters / badge	500 Litters / badge	1,000 Litters / badge
Inlet size	650 x 400			
Electrical power	3 phase 200 voltage			
Power consumption	1.3kw / h	2.3kw / h	1.3kw / h	2.3kw / h
Fuel oil	Kerosene JIS No.1			
Fuel oil consumption	6~8 Litters / h	8~13 Litters / h	6~8 Litters / h	8~13 Litters / h
Fuel In case of Gas	City gas 13A 2kpa Can be changed to LPG			
Fuel gas consumption	4~6m ³ / h	5~9.6 m ³ / h	4~6m ³ / h	5~9.6 m ³ / h
Processing time	6~10 h/ badge	8~13 h/ badge	6~10 h/badge	8~13 h/ badge
Accessory	Kerosene use : Kerosene tank (198 liters), cleaning stick, saucer, grease Gas use : cleaning stick, saucer, grease			



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Max 98% volume reduction, sterilization and drying for infectious medical waste, diapers, high-moisture wet waste, vegetable, food waste and livestock dung.
Vegetable waste can be recycled as fertilizer in the field

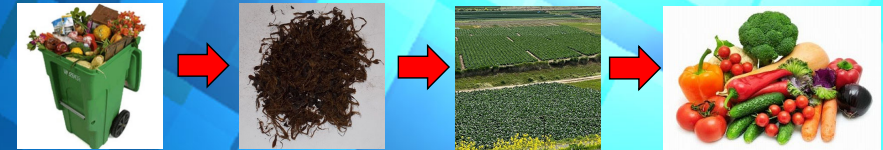
Melt King



General garbage dryer Melt King DNX



Dryer and sterilizer Melt King MD



Diapers and infectious medical waste



Sprout



Tomato and cucumbers



Pineapple and banana



Potato and banana



Onion and celery



Livestock dung

Melt King Max 98% volume reduction with sterilization of medical waste, diapers, garbage, vegetable, leftovers, watery waste. Vegetable waste is recyclable fertilizer for the fields.

Main features of Melt King

① Possible to reduce volume max 98%

Diapers, garbage, food waste are cut off oxygen in the reduction room and indirectly heated and dried to achieve significant weight loss. The weight loss rate depends on the type of treated material and the water content, and a maximum weight loss of 98% is possible. For example, food waste will be reduced to 98%.

③ Significant processing cost reduction

Originally, it costs a lot to manage and dispose of it as industrial waste, but by introducing it, it is possible to greatly reduce the treatment cost.

⑤ Prevention of documents leakage

It can also be used to process confidential important documents. By processing in the facility, it is possible to prevent leakage of confidential information and personal information.

② No dioxin, dust scattering and smell

Because it is indirect heating, there is no scattering of dust, and it is an eco-friendly system that does not generate dioxin because it does not incinerate. Patented deodorizing technology significantly reduces odor during heating and reducing driving noise.

④ Vegetable waste can be recycled

Vegetable waste can be recycled as fertilizer in the field.

⑥ Safety that can be used in residential areas

Both the weight loss room and the deodorization room have a double structure, ensuring high safety. The processing temperature in the weight reduction chamber is as low as about 180°C ambient temperature, and there is no oxidation reaction, so the equipment lasts longer. With a vibration sensor, it responds to emergencies.

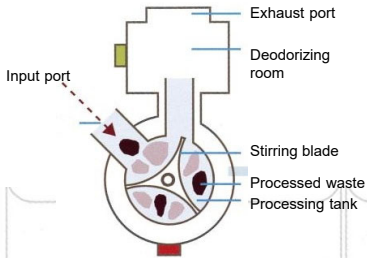
Effective use of recycled waste

Since Melt King is not an incinerator and there is no combustion(oxidation reaction) of the processed material, the processed material is not ash but a combustible solid. Most of the calorific value is retained, so it can be recycled as high calorie solid fuel or fertilizer for fields. This allows for effective utilization of waste and recycling in an environmentally friendly manner.



Processing flow of Melt King

1. Input of material

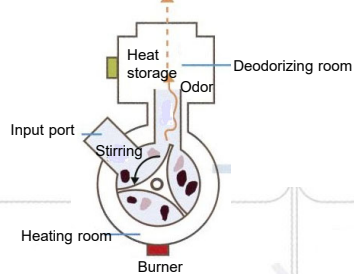


Input material into processing tank. Seal the inlet door and shut off the air supply from the outside

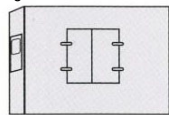


Input without fine sorting

2. Stir and dry

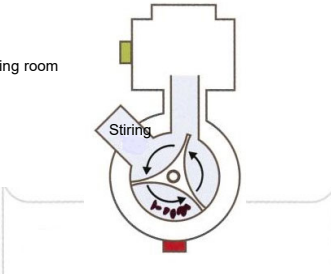


The inside of the processing tank is heated from the surroundings with burners and the materials is stirred and reduced in an extremely low oxygen state. The odor is led to the deodorizing room where it is deodorized and discharged.



After input, it is fully automatic indirect heating, drying, weight loss drying and sterilization. **Melt King MD maintains the sterilization room at 180 to 200°C for 30 minutes or more to ensure sterilization.**

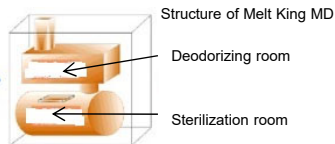
3. Cool and discharge



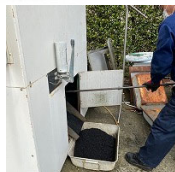
Residue(dry material) can be disposed of as combustible material, or it can be recycled as another material. Weight can be reduced to 1/5 to 1/50, there is no need to worry about dioxin and CO2, and it can be disposed of as industrial waste.



The treated waste can be disposed of as non-industrial waste.



Structure of Melt King MD
Deodorizing room
Sterilization room



Discharging the residue



Residue

Vegetable waste can be recycled as fertilizer in the field



Customer cases of Melt King in Japan

<p>Model : DNX-1000 Employee cafeteria Food waste</p>	<p>Model : DNX-1000 Sprout factory Sprout</p>	<p>Model : DNX-500 Resort hotel Food waste, fruits</p>	<p>Model : DNX-1000 Confectionery Potato</p>
<p>Model : DNX-1000 Box lunch factory Food waste</p>	<p>Model : DNX-1000 Spice factory Japanese spice</p>	<p>Model : DNX-1000 Pickles factory White rape</p>	<p>Model : DNX-1000 Process food factory Fruit, beans rice</p>
<p>Model : DNX-500 Golf course Grass</p>	<p>Model : DNX-1000 Japan Antarctic base Food waste</p>	<p>Model : MD-500 Nursing home Diapers, food waste</p>	<p>Model : MD-1000 Nursing home Diapers</p>
<p>Model : MD-1000 Rehabilitation center Diapers</p>	<p>Model : MD-1000 Medical inspection Blood, gauze</p>	<p>Model : MD-1000 City hospital Diapers, gauze</p>	<p>Model : MD-500 General hospital Diapers</p>