

■ Standard specifications and cost etc. of the equipment

Our approach

Carbonization

Enhanced the models and achieved a low price by manufacturing at our own factories

We boast a large variety of machinery. Our lineup ranges from small to heavy machinery (15,000kg/day, custombuilt plant) to match customers' needs (we provide various testing machinery and experiment facilities.)

Energy Ace (standard specification)

| Model | Capacity of carbonization processing room (m ³) | | Processing capacity (m ³) | Processing time (1 batch) | Dimensions of carbonization equipment external diameter (W × L × H) | Offgas pyrolytic furnace Dimensions of the unit (W × L × H) | Power consumption (kw) | Fuel consumption (kerosene) (the amount of processing products) L /kg | Fuel | ※ For our costing, the following information is required. | | | | | | | | | |
|--------|---|---------------------------------|---------------------------------------|---------------------------|---|---|------------------------|---|--|---|--|--|--|--|--|--|--|--|--|
| | | Dimensions of internal diameter | | | | | | | | Name of processing products | | | | | | | | | |
| EG 025 | 0.25 | φ 700 × 700L | 0.2 | 4~10h | 1400 × 1800 × 2000 | 900 × 1000 × 1500 | 3.5 | 0.1~0.2 | Kerosene Heavy oil Liquefied Petroleum Gas (LPG) City gas | The amount of throughput | | | | | | | | | |
| EG 050 | 0.50 | φ 800 × 1000L | 0.4 | | kg/day | | | | | | | | | | | | | | |
| EG 100 | 1.00 | φ 1000 × 1400L | 0.8 | | Moisture content of raw materials | | | | | | | | | | | | | | |
| EG 200 | 2.00 | φ 1200 × 1800L | 1.6 | | % | | | | | | | | | | | | | | |
| EG 300 | 3.00 | φ 1400 × 2000L | 2.4 | 4~10h | 2200 × 3000 × 2600 | 1200 × 2400 × 2000 | 14.6 | | | Moisture content of products | | | | | | | | | |
| EG 400 | 4.00 | φ 1600 × 2000L | 3.2 | | % | | | | | | | | | | | | | | |
| EG 500 | 5.00 | φ 1600 × 2500L | 4.0 | | Apparent specific gravity | | | | | | | | | | | | | | |
| EG 750 | 7.50 | φ 1800 × 3000L | 6.0 | 4~10h | 2600 × 4000 × 2800 | 1400 × 3000 × 2000 | 18.5 | | | Apparent specific gravity | | | | | | | | | |
| EG1000 | 10.00 | φ 1800 × 4000L | 8.0 | | Physical properties, shapes, granularity, viscosity, and adherability of processing materials | | | | | | | | | | | | | | |
| EG1500 | 15.00 | φ 2000 × 5000L | 12.0 | | Source of heat | | | | | | | | | | | | | | |
| EG2000 | 20.00 | φ 2200 × 5500L | 16.0 | 4~10h | 3000 × 6500 × 3400 | 2200 × 4000 × 2000 | 30.4 | Allowable temperature of processing products | | | | | | | | | | | |
| | | | | | | | | | | ℃ | | | | | | | | | |

※ Please be aware that may change the specifications etc. without previous notice for product improvement

About the quoted price

The price of the equipment is set based on the above-mentioned standard specifications. However, there can be large differences depending on various conditions, such as the installation location (for instance, underground etc.) and the area of construction etc. Therefore, first of all we ask you the details of the requested equipment's processing abilities (for instance, necessity 1000kg per day) and installation locations, etc., and then we will present a separate estimate. However, estimates of the followings are excluded.

- ① Fundamental construction and building construction.
- ② Construction of electric wiring and water supply drain piping to the equipments location.

Regarding the warranty matters

Warranty of each equipment is one year after the trial run was handed over.

- Under the warranty, we repair and improve the equipment for free when it is not working properly due to the natural wear and tear or your mistake and carelessness. However, we are not responsible if the equipment is not functioning as it should due to an inevitable force such as a natural disaster etc. or due to damage or breakdown by intent.

Regarding the due date

Approximately 4 months after the contract.



Charcoal Ace

Water-treatment type, decompression drying, carbonization equipment



Dewatered sludge (soil improvement and fertilizer)



Food residue

- No need to separate organic waste products !
Waste plastic is also ok to be used
- Significantly reducing the capacity and quantity of organic wastes !
- It can produce good quality porous charcoal by reducing pressure!
- Dioxin, odor and smoke will not be generated!

Automatic operation with an automatic control device
Easy operation

■ Sales & Marketing



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KASSUI PLANT



This equipment can "carbonize" everything from a liquid substance to an individual substance alternative to an incinerator

Charcoal Ace

PAT.

Features

NO NEED TO SEPARATE ORGANIC WASTE PRODUCTS

It can produce good quality porous charcoal by reducing pressure in the drying chamber.

It sucks evaporative water with the decompression (vacuum) suction machine so pressure will be reduced and the boiling point will lower. As a result, the drying time will be reduced, energy will be saved and the process will be completed. Also, it doesn't become ash because of the absence of oxygen and it can produce good quality porous charcoal.

Neither dioxin nor odor are generated due to the complete purification process (water treatment), so this is smokeless.

Significantly reducing the capacity and the quantity of organic wastes (1/5 - 1/200)

Drying temperature, moisture content, and drying time can be set freely depending on the processing products.

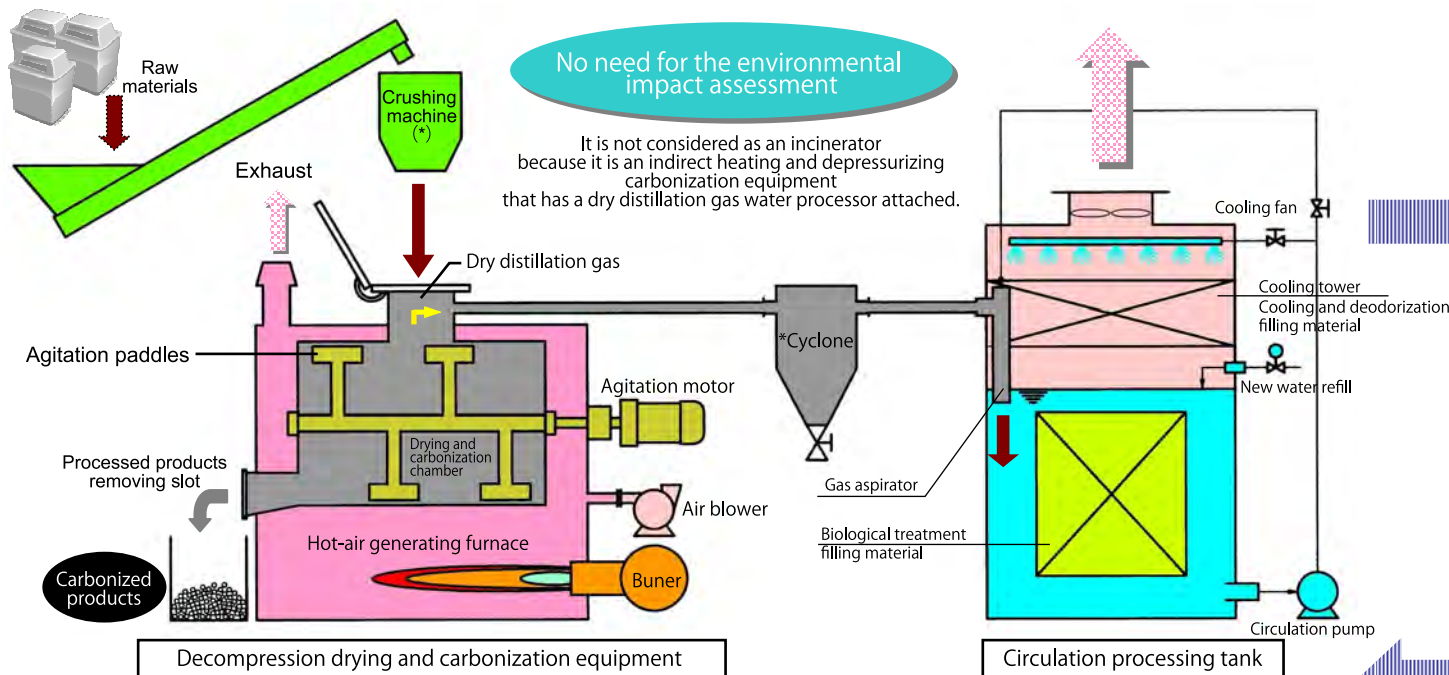
Economical with low running cost

"Durability of the equipment" is also preeminent due to low-temperature drying and short processing time.

Easy to operate as it is fully automatic.

Decompression thermal depolymerization and carbonization equipment
<Basic flow sheet>

Drying process time
4-10 hours (1 batch)



Note: (*) is optional. -"Cyclone" also becomes a recovery device for "pyrolygneous acid" and "light oil" depending on the kinds of raw materials used.
(1/20 volume reduction. 1000kg→50kg) * However, it can be 1/5 to 1/200 of volume reduction depending on the moisture content in the waste products.

Summary of the equipment

The equipment has agitation paddles. It decompresses the carbonization room and pyrolyzes waste products to oil, charcoal and offgas by indirect heating. No sludge will be generated. This equipment can "thermal depolymerize" and "carbonize" everything (combustible substance) from liquid substance to an individual substance.

- Wood waste
- Dewatered sludge
- Waste tires
- Onion
- Disposable diapers



There are various models (from small to heavy machinery)
Low - price by self producing

Charcoal Ace

Various dry processing products (part of examples)

- Beef bone powder
- Waste liquid preparation
- Food residue
- Barley tea residue

Processed products can be recycled by desiccating wastes such as wood, food, Polluted mud, animal products and fishery products.

- Fertilizer / Fuel
- Soil amendments
- Fermentation accelerator
- Building material
- Adsorbent filtration
- Snow melting agent
- etc.

Recycling of coal (Fuel, Soil amendments etc.)

Use (example)

Charcoal Ace can serve a variety of purposes.

- [Wood] ● bark ● thinning ● pruned branch ● fresh flowers ● vegetation ● wood chips ● wood construction waste etc.
- [Food] ● beverage pomace ● agricultural product scraps ● food processing scraps ● fishery product scraps ● animal product scraps ● raw garbage etc.
- [Polluted mud] ● various polluted mud ● animal husbandry manure ● pulp sludge etc.
- [Medical] ● medical waste ● disposable diapers etc.
- [Plastic] ● waste plastic ● synthetic fiber scraps ● polyvinyl chloride pipe etc.
- [Rubber] ● waste rubber ● waste tires etc.
- [Waste liquid] ● dense waste liquid ● distilled spirit waste liquid ● liquid preparation ● acid-alkaline waste liquid etc.
- [Coating material] ● waste paint ● paint residue ● waste ink ● mold release agent etc.