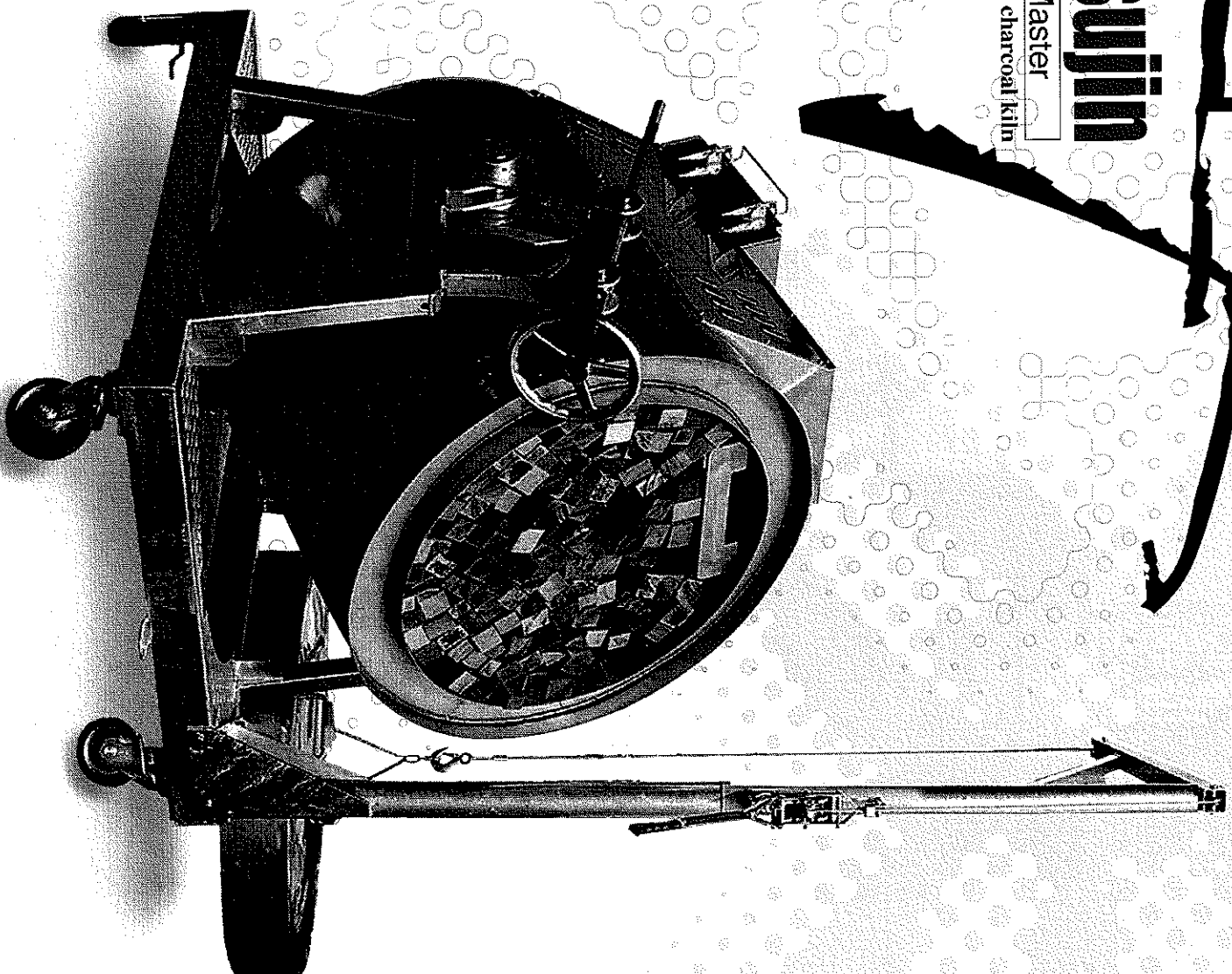


運

**Tatsuji**

the Master

Natural style charcoal kiln



**K405 / K1200**  
inclining type

# Charcoal making helps prevent global warming by transforming unwanted materials into useful resources.

Foresters and gardeners can make their own charcoal from unwanted wood that they have previously disposed of by burning. In the process of charcoal making, unwanted wood and bamboo is separated into its solid, almost pure carbon component and its liquid component by thermal decomposition. The resulting charcoal can be put to many effective uses such as a humidity controller, soil conditioner, and decorative objects. The liquid can be processed into wood vinegar.

## SPECIAL FEATURES

### Easy operation

Inclining also makes easy cleaning possible. Materials can be loaded and unloaded easily by any adult.

### Energy saving design

Designed to save energy. Carbonization can be started quickly using only a small amount of wood scraps.

### Carbonizing temperature can be controlled freely

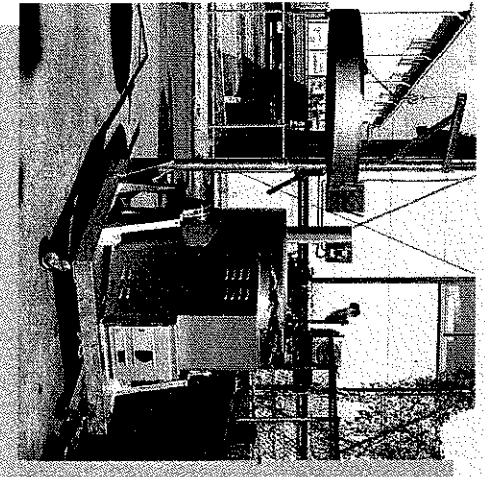
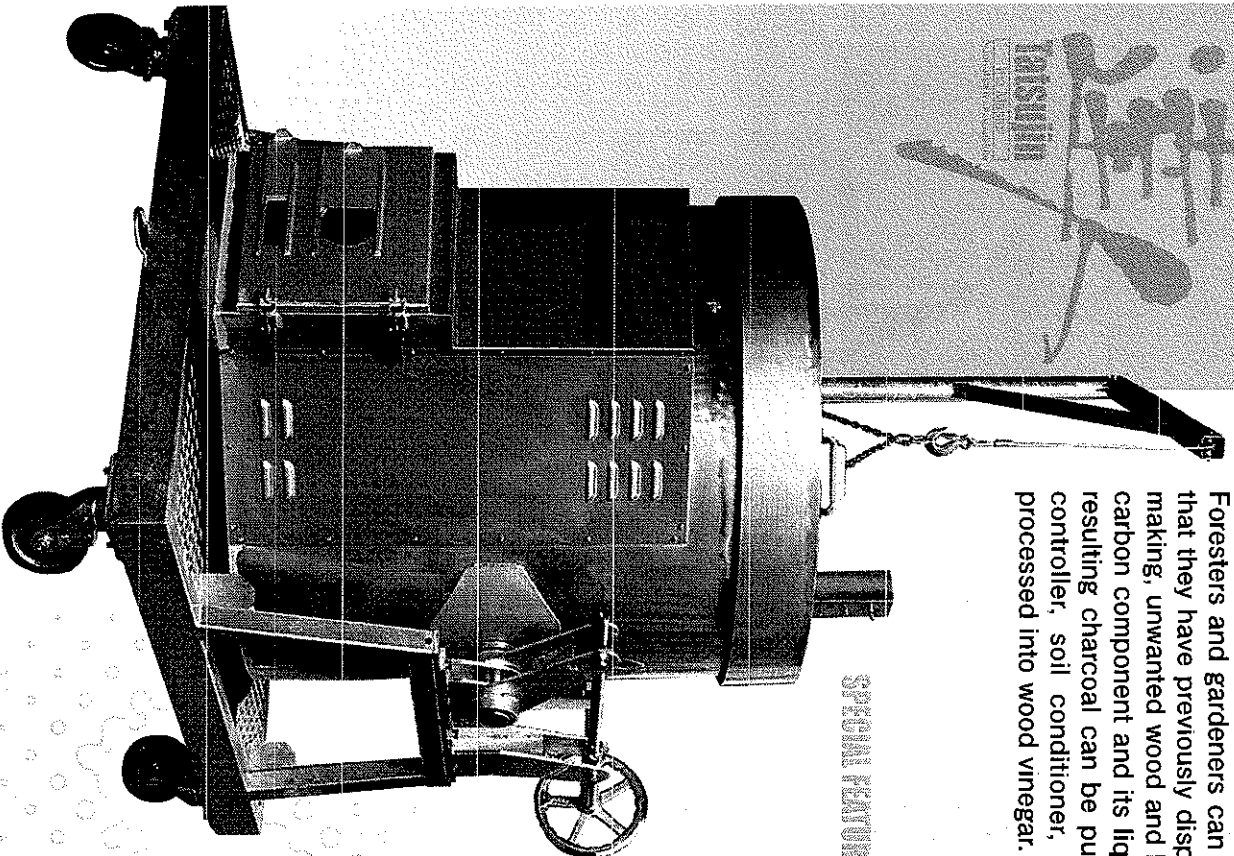
Both air inlet & smoke outlet can be adjusted according to your purposes. You can set the duration of carbonization for longer or shorter periods and fine tune the temperature setting to produce lighter or harder charcoal.

### Suited to ornamental charcoal manufacturing

Inclining facilitates removal of fragile objects. Ornamental charcoal made from pine cones, chestnut pods and other plant materials is very fragile, but can be removed easily without being damaged.

### Movable to any location

Since it has 4 casters, "Tatsuin" is easy to move. You can practice charcoal making anywhere you like, where it is convenient for you.



Equipped with a winch for shifting the heavy roof.



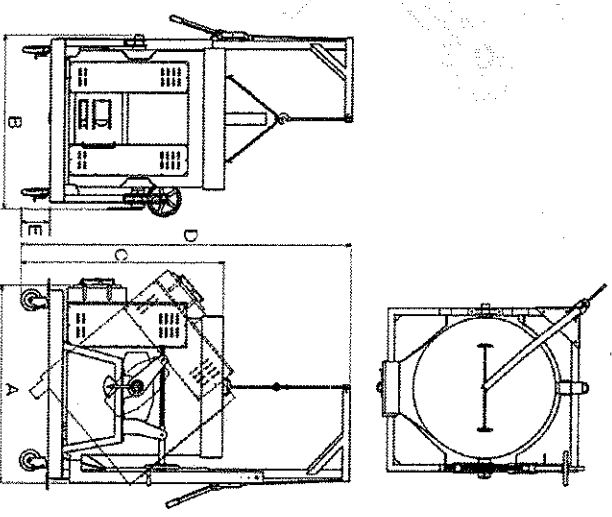
By turning the handle slightly, the kiln body can easily be inclined.

## ■ Tatsujin K 405

## ■ Tatsujin K 1200

### · material properties

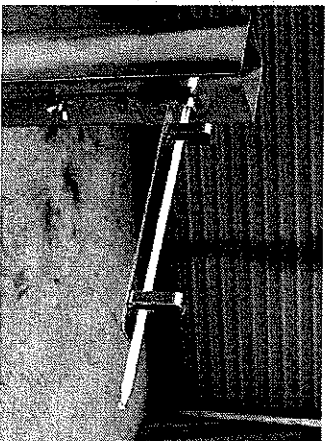
- charcoal kiln / inner : stainless steel (SUS304) & ceramic insulating material  
exterior : stainless steel (SUS304)
- chimney : stainless steel (SUS304)
- roof : stainless steel (SUS304) & ceramic insulating material
- push car & roof winch : galvanized steel structure
- casters : galvanized sheet iron & rubber wheels with brake



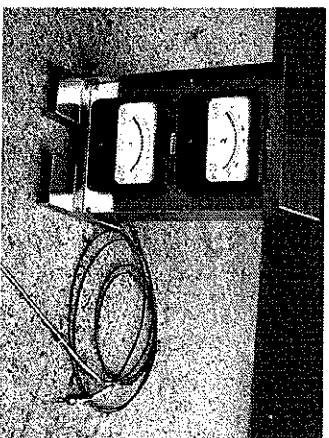
type	carbonizing room			part size					weight
	inner volume	inner size	external size	A	B	C	D	E	
K 405	405 ℓ (101 gal)	φ 770 mm X 930 mm (2.52' X 3')	φ 979 mm X 1010 mm (3.18' X 3.31')	1430 mm (4.69')	1230 mm (4')	1450 mm (4.75')	2425 mm (7.93')	207 mm (6.79')	360 kg (792 lbs.)
K 1200	1200 ℓ (300 gal)	φ 1190 mm X 1110 mm (3.9' X 3.64')	φ 1452 mm X 1216 mm (4.75' X 3.96')	1950 mm (6.39')	1700 mm (5.57')	1735 mm (5.67')	2550 mm (8.36')	262 mm (8.59')	610 kg (1343 lbs.)

Note : Due to ongoing improvements, specifics are subject to change without notice.

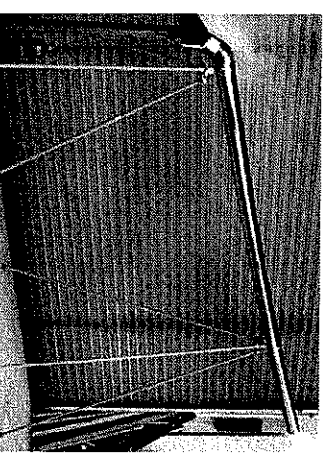
## options



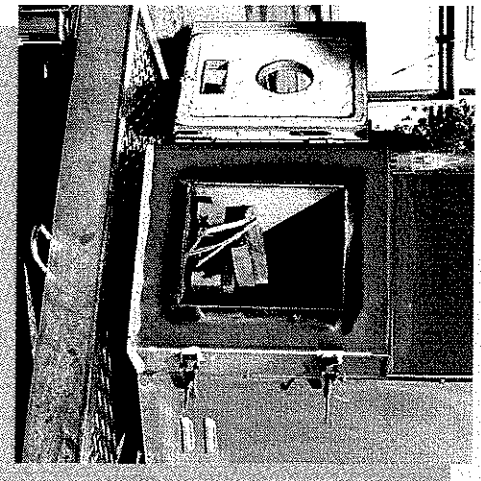
mercury thermometer and its holder



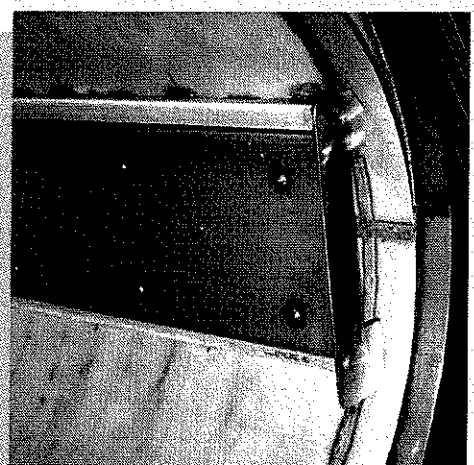
needle type thermometer (thermocouple)



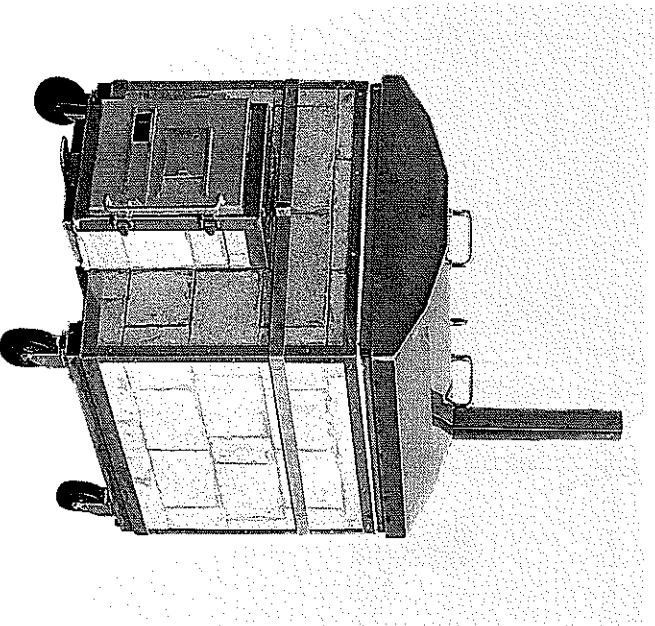
wood vinegar collector



The fire box is very efficient, requiring only a small amount of wood scraps without fossil fuels.

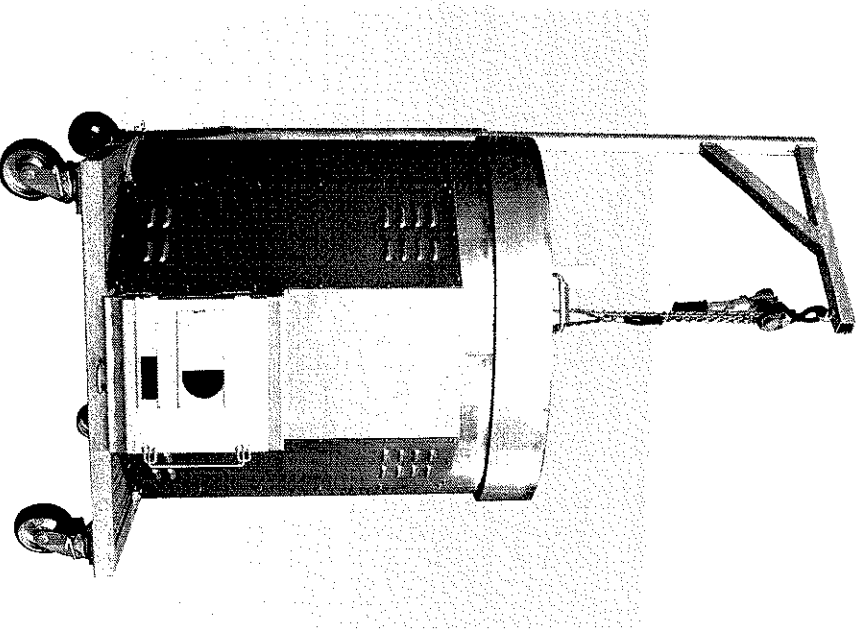


The shielding wall directs the heat waves to prevent burning the material, for the highest yield of charcoal.



### ■ Tatsujin T105

- inner volume of the furnace : 105 ℓ ( 26.25 gal )
- external size : L=930 W=610 H=890 ( mm )  
( L=3.05' W=2' H=2.91' )
- net weight : 140kg ( 308 lbs. )
- material properties
  - charcoal kiln / inner : stainless steel
  - exterior : ceramic insulating material & diatomaceous earth bricks
  - base : stainless steel
  - chimney : stainless steel
  - root : stainless steel & ceramic insulating material
  - casters : stainless steel & rubber wheels



### ■ Tatsujin T405

- inner volume of the furnace : 405 ℓ ( 101 gal )
- external size : L=990 W=1430 H=1370 ( mm )  
( L=3.24' W=4.69' H=4.49' )
- net weight : 320kg ( 792 lbs. )
- material properties
  - inner : stainless steel & ceramic insulating material
  - exterior : stainless steel
  - root : stainless steel & ceramic insulating material
  - chimney : stainless steel
  - push car & root winch : galvanized steel structure
  - casters : galvanized sheet iron & rubber wheels with brake

Note : Due to ongoing improvements, specifics are subject to change without notice.

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Enjoy Slow Life

Eco-friendly hobby for the 21st century - Try homemade charcoal making.

# Charcoal making entertains you and Saves the Earth

Charcoal is recognized worldwide as an ecological material. This "Tatsujin" enables you to make authentic charcoal from useless materials. Why don't you enjoy this eco-friendly hobby and fight global warming with "the Master" ?

Anyone can enjoy making charcoal whenever and however you like.

Make wonderful ornamental charcoal from fruit, leaves and seeds.

Scrap wood and garden trimmings may be re-born as a useful material.

Charcoal enriches the soil for growing crops & gardening.

You can obtain charcoal & wood vinegar in the amount you desire.

Easy to operate and including casters for convenient moving.

## 運 the Master

Natural style charcoal kiln

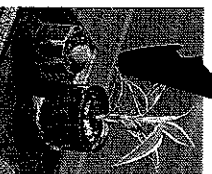
■ Many uses



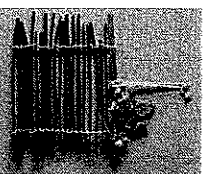
as deodorizer and humidity controller



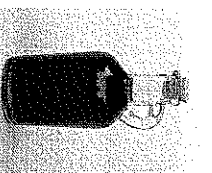
ornamental charcoal



bamboo charcoal for flower pots



interior decoration



wood vinegar

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Tesaki Manufacturing Corporation

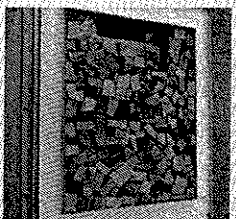
5-27 Takara-machi, Higashi Osaka-city, Osaka, 579-8025, Japan  
<http://www.tesaki.co.jp/sumiyaki/>



## Making charcoal with "Tatsujin"

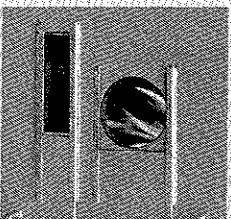
### 1 prepare material

Prepare materials such as wood, bamboo, scrap wood, garden trimmings, pinecones, etc. Ensure they are approximately the same length and pack them tightly so that there are no gaps in between.



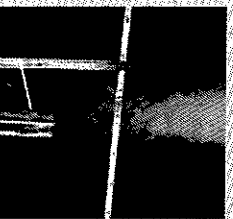
### 2 start carbonization

Open the furnace door, put in combustible chips and ignite. After it is burning well, close the furnace door while leaving the round window open to put in more chips. Continue burning for 1-2 hours in this manner.



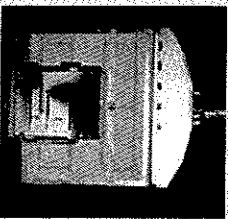
### 3 carbonization stage

The smoke color changes gradually along with temperature. Initially it is off-white, later blue, and finally turns to heat waves. In case of wood it takes around 10 hours from ignition to the end of carbonization. Bamboo requires about 7-8 hours.



### 4 end of carbonization

Close off the air vent and wait for another 30 minutes to close the chimney completely. Leave it for 12 hours to cool down naturally.



### 5 charcoal removal

After cooled, you may remove your charcoal. Lift off the roof of the kiln and collect your authentic charcoal.



To distinguish the condition of carbonization correctly, use of optional thermometer is recommended. Moreover, if you set the wood vinegar collector, wood vinegar can also be harvested during the carbonization process.



**Q&A**  
Frequently asked questions  
about the "Tatsujin" charcoal kiln.

### Q I have never practiced charcoal making. Can I operate this "Tatsujin"?

**A** Even first time users can enjoy making charcoal, and with continued use, you can become a master.

"Tatsujin" is not a mere instrument for producing charcoal, but you can also relish the pleasure of charcoal making. Don't expect to get charcoal just by flipping a switch. Operation is almost the same as the Japanese traditional way of charcoal making. By observing the changes in the smoke with your own eyes and nose you can control the carbonization process more delicately. With each experience you can become more of a connoisseur of the differences in the smoke. A detailed operating manual is included with the kiln so even first time users of the "Tatsujin" can be confident of success.

### Q How does making charcoal save the Earth?

**A** Charcoal making is helpful in preventing global warming and in conditioning the soil.

Disposing of unwanted wood and bamboo by burning releases carbon dioxide into the air and contributes to the greenhouse effect. But making charcoal involves a chemical reaction known as thermal decomposition, by which the carbon remains and is not released into the air. The charcoal produced can be mixed into the soil to condition it and produce healthy plants full of vitality.

### Q Is wood the only material used in making charcoal?

**A** No, charcoal can be made from many kinds of plant materials.

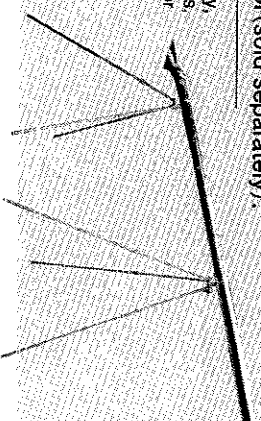
One of the pleasures of making charcoal is that in addition to wood, other materials such as bamboo, reed and any part of plants can be used. Decorative objects can be made from pinecones, seeds and pods, even fruit, vegetables and flowers!

### Q What is wood vinegar?

**A** Wood vinegar (pyroligneous acid) is produced when the smoke is cooled and condensed into liquid form, in the wood vinegar collector (sold separately).

This liquid is highly acidic, smells smoky, and can be used for a variety of purposes, including as a natural pest repellent for gardening and agriculture.

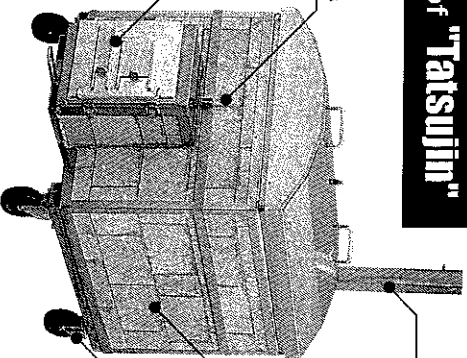
wood vinegar collector made of stainless steel (sold separately)



## construction of "Tatsujin"

The interior of "Tatsujin" is solidly constructed of stainless steel plate.

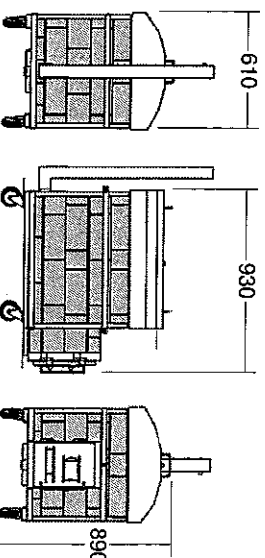
In consideration of the environment, "Tatsujin" can be fired with natural fuels such as scrap wood, instead of using fossil fuels.



Chimney, to which the (optional) wood vinegar collector can be attached for condensing the smoke released in the charcoal-making process.

The exterior is constructed of light-weight diatomaceous earth.

Casters attached to "Tatsujin" make it easy to move to any location.



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( L=3.05' W=2' H=2.91' )  
inner volume of the furnace : 105 ℓ ( 26.25 gal )  
net weight : 140kg ( 308 lbs. )

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