



## Biomass Pyrolysis Plant Vertical

### Pyrolysis Plants *designed for mobile use*

BHFTECH pyrolysis plants are intended for pyrolysis recycling wastes such as: Plastic, MSW, rubber wastes, waste plastics, used tires, wood waste, soil contaminated by oil sludge, mazut, bitumen, oil sludge, medical waste, etc.

Model No.	Plant Size
<b>BHFV1TPD</b>	<b>1 Ton Per Day Raw Material</b>
<b>BHFV2TPD</b>	<b>2 Ton Per Day Raw Material</b>
<b>BHFV4TPD</b>	<b>4 Ton Per Day Raw Material</b>

#### Modern Facility

Our modern In-House Manufacturing Facilities with Designing & Engineering, Manufacturing and Testing of Products ensure Highest Product Quality Standards. Our Manufacturing Techniques ensures efficient and time saving method of manufacturing to meet customer requirement on shorter lead time

Our State-of-the-Art Manufacturing Facilities are based in India

We has developed numerous ranges of Pyrolysis Plant for Diesel And Petrol from Plastic waste in India and Export : Use of proven technologies, high quality craftsmanship and low Total Cost of Ownership. 1TPD, 2TPD, 4TPD, 6TPD,10 TPD,12TPD,15TPD and 30TPD. All BHF Plants implement Powerful SCADA system for safety and Reliability



Operational Cycle of Pyrolysis Plant	Time in Hours
1. Heating	1 to 2 Hours
2. Pyrolysis	6 to 10 Hours
3. Cooling	0.5 Hours
Total	8 to 12 Hours

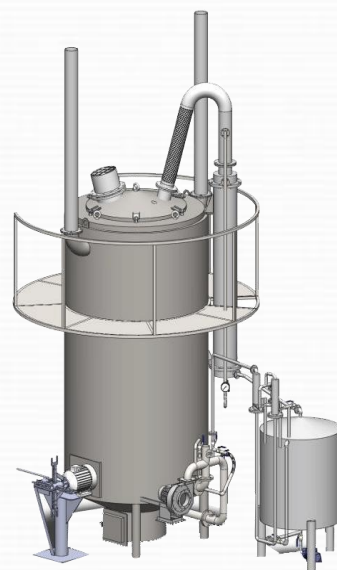
Operational Cycle of Reactor	Time in Hrs
1. Loading of raw material and closing of lid	0.5
2. Placing retort in the module	0.25
3. Taking retort out the module	0.25
4. Cooling	6..8
5. Unloading of the retort	0.25



## Plastic Pyrolysis Plant To Diesel And Petrol

### Advantages of BHFTECH Pyrolysis Plants

- (1) The Reactor is made of stainless heat-resistant steel.
- (2) Furnace is multi-fuel. It is possible to use any kind of solid fuel and gas and to set a burner for any type of liquid fuel.
- (3) Lining is made from the fire-resistant fiber protected with a layer of the strong fire-resistant concrete reinforced with stainless steel, has high resistance against mechanical and chemical influences, provides temperature of an external surface of the plant not higher than 60 C that is safe for operators to maintain the plant during the whole process.
- (4) Simplicity of a design. The increased reliability. A possibility of modification of a design to local conditions.
- (5) Means of explosion protection. Explosion-proof valve and gas emergency relief system ensure the safety of operators and equipment in case of a malfunction of the plant.
- (6) Easily repaired equipment.
- (7) The plant is easy-to-work and service, it is not required vocational education for operators, our company makes trainings for operators.
- (8) Mobility of the plant. Plants are designed for mobile use: have standard dimensions for transportation by any type of transport, flange connections in the whole structure so the installation-dismantling process takes minimum time, fixed concrete lining so dismantling of it is not required.
- (9) Low electricity consumption (10-14 kW\*hour per each ton) and low fuel consumption (30-40 kg of fuel oil per one process).
- (10) Best price for same characteristics of equipment of other manufacturers.



## SPECIFICATION

Pyrolysis module	1
Reactor	2
Heat-exchanger	1
Tank	1
System of separators	1
Platform for service	1
Stand for transportation	1
Pipelines	set
Control panel	1

## OUTPUT OF PRODUCTS OF PYROLYSIS PROCESS

Output of products of Pyrolysis process depends on the composition and characteristics of the raw material used.

<p><b>Used tires</b></p> <ul style="list-style-type: none"> <li>-Pyrolysis oil 30%</li> <li>-Pyrolysis gas 20%</li> <li>-Carbon black 40%</li> <li>-Steel cord 10%</li> </ul>	<p><b>MSW (municipal solid waste) unsorted:</b></p> <ul style="list-style-type: none"> <li>-Pyrolysis oil 15-20%</li> <li>-Pyrolysis gas 8-10%</li> <li>-Carbon black 30-35%</li> </ul>
<p><b>Mazut</b></p> <ul style="list-style-type: none"> <li>-Pyrolysis oil 80%</li> <li>-Semi coke 15%</li> <li>-Pyrolysis gas 5%</li> </ul>	<p><b>MSW (municipal solid waste) sorted:</b></p> <ul style="list-style-type: none"> <li>-Pyrolysis oil 48%</li> <li>-Pyrolysis gas 13%</li> <li>-Carbon black 17%</li> </ul>
<p><b>Medical wastes</b></p> <ul style="list-style-type: none"> <li>-Pyrolysis oil 50-70%</li> <li>-Pyrolysis gas 10%</li> <li>-Carbon 20%</li> </ul>	<p><b>Plastic</b></p> <ul style="list-style-type: none"> <li>-Pyrolysis oil 40-60%</li> <li>-Pyrolysis gas 10%</li> <li>-Carbon 5-30%</li> </ul>
<p><b>E-Wastes</b></p> <ul style="list-style-type: none"> <li>-Pyrolysis oil 15-50%</li> <li>-Pyrolysis gas 5%</li> <li>-Mixed remains of process (metal is not processing by pyrolysis – higher temperature is needed)</li> </ul>	<p><b>Oil sludge (output from content of oil):</b></p> <ul style="list-style-type: none"> <li>-Pyrolysis oil – 60-80%</li> <li>-Pyrolysis gas – 10...12%</li> <li>-Semi Coke – 10-15%</li> <li>-Residue – soil, sand, service water (depends on the content of sludge composition)</li> </ul>
<p><b>Wood:</b></p> <ul style="list-style-type: none"> <li>-Wood tar – 4-5%</li> <li>-Pyrolysis gas – 25-30%</li> <li>-Charcoal – 20-25%</li> <li>- Water</li> </ul>	<p><b>Used oil:</b></p> <ul style="list-style-type: none"> <li>-Pyrolysis oil – 60-90%</li> <li>-Pyrolysis gas – 5-7%</li> <li>-Semi Coke – 5-7%</li> </ul>