

## 50kg/hr Mobile Unit



## Specifications

- **Inputs:** 400 lbs/hr (200 kg/hr) wood-chips, at approx 20% moisture content  
1 gal/run (4 liters/run) propane for flare ignition pilot and startup  
0.15 gal/hr (0.6 liters/hr) gasoline to power generator for mechanical removal of biochar  
2 gal/hr (8 liters/hr) H<sub>2</sub>O for char quench  
2 lb/run (1 kg/run) CO<sub>2</sub> from tank for shut-down
- **Output:** 100 lbs/hr (50kg/hr) biochar at controlled temperature, clean soot-free emissions
- **Operating temperature:** 300-600°C, monitored & controllable by onboard software
- **Dimensions:** 5' x 12' x 7' (1.5m w x 3.6 m x 2.1m)
- **Weight:** 3,000 lbs (1.4 metric tonnes)
- **Operation:** 200kg wood-chips are loaded into the hopper approx. every hour. The biomass is ignited by the propane flame-front, & heat from combustion pyrolyzes the biomass in the barrel. Excess heat is used to completely flare the combustible gases for clean emissions. Upon reaching desired temperature, the biochar is mechanically removed by an auger, powered by the gen-set. The biochar is then quenched to safeguard against spontaneous combustion.
- **Included:** Self-contained, mobile unit includes frame, hopper, pyrolysis vessel, computer, software, genset, air compressor, water tank, CO<sub>2</sub> tank.
- **Suggested Uses:**
  - biochar at a range of temperatures for soil research
  - forest management
  - invasive species mitigation
  - mine tailings reclamation
  - agricultural soil studies
  - agricultural waste mgmt
  - green waste management
  - early adopters

*Note: This unit is a pre-production, beta unit intended for research only.*



Price: \$50,000