



I C P S - Improved Charcoal Production System (adam-retort)

The ICPS is a modern, innovative and environmentally friendly system to produce charcoal from bio mass. (low-cost retort kiln)

Advantages:

- 1) High economy and better efficiency approx. 35% to 40% (Instead of about 18% efficiency compared to the traditional systems; calculated from dry weight).
- 2) Recycling and clean combustion of the pyrolysis gas during the 2nd phase of operation (retort-system) results in a low-emission of carbon monoxides during the charcoal production! The effective carbonization of the biomass takes only 10 hours.
- 3) Low investment costs (about 250 Euros) and a simple construction with locally available materials.
- 4) About 3m³ of biomass (corresponding to approx. 600 to 700kg wood, coconut shells, etc.) can be converted to up to 250kg of charcoal.
- 5) An effective 24 to 30 hour production cycle (batch) and a simple operation of the plant result in an increased income for its operators. The right system to be used at forest projects, sustainable energy-wood plantations and charcoal makers.
- 6) Only waste and residual biomass needs to be burnt (~50kg) in a separate fire box to dry and heat the wood and initiate the carbonization process during the 1st phase.

For further information contact:

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