

Charcoal Briquette Carbonization Furnace with Gas Recovery

The carbonization furnace performs dry distillation and anaerobic carbonization of wood materials under high temperatures. It recovers, purifies, and cyclically burns combustible gases produced during carbonization, addressing pollution and heat energy challenges.



ADDITIONAL IMAGES



Overview

High-Efficiency Carbonization System

This advanced carbonization furnace is designed for the anaerobic dry distillation of various biomass materials, transforming them into high-quality charcoal. By utilizing a sophisticated gas recovery and purification system, the unit recycles combustible byproducts to fuel the process, ensuring energy efficiency and compliance with environmental standards. The modular split-design separates the combustion chamber from the furnace, enabling continuous operation and significantly increased production throughput.

Technical Specifications

Carbonization Process Stages

Stage	Temperature Range	Key Process
Drying	Up to 160°C	Moisture evaporation
Initial Carbonization	160°C - 280°C	Thermal decomposition
Full Carbonization	300°C - 650°C	Gas generation & distillation
High-Temperature Calcination	800°C - 1000°C	Graphite structure enhancement

Compatible Feedstock

Wood chips, Rice husks, Peanut shells, Plant stalks, Bark

Key Features

System Components

- Combustion chamber
- Carbonization liner
- Exhaust gas treatment device
- Waste heat utilization system
- Crane handling system

Operational Advantages

Energy saving • Fast cooling • Continuous operation • Smoke-free combustion • High calorific value output