



PyroCCS

Mobile, Entry-Level
**Semi-Continuous
Batch Pyrolyser**

Datasheet: SCB-X

250 to 500 Tons Biochar p.a.

up to 1,100 Carbon Credits p.a.

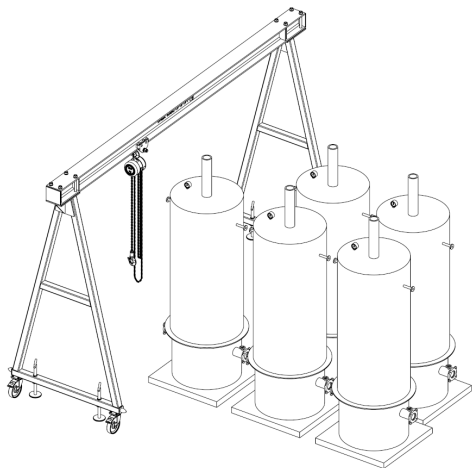
Reliable Low- Emission Biochar Production Systems designed and built for the Global South.

The PyroCCS SCB-X is an entry level, closed loop, mobile, semi-continuous batch pyrolyser with syngas recovery and recycling.

It comes as a modular cascading system of minimum 5 reactors and a maximum of 10 reactors. Each reactor comes with two removable pyrolysis pots that allow continuous operation.

The system is specifically designed for Industrial Proof-of-Concept (POC) projects in the Global South that aim towards building case studies for larger scale plant deployments at a later stage (e.g. with PyroCCS SCB-K or SCB-S with up to 2,500 tons of biochar capacity per year and more).

The pyrolysis system is supplied in a bundle with PyroCCS Sarva Carbon dMRV system and Carbon Credit Certifications.



DEFINITION	SPECIFICATION (HIGH DEPENDENCY ON BIOMASS TYPE)
SUITABLE BIOMASSES	Coconut Shells/Husks, Peanut Shells, Invasive Species (e.g. Lantana/Prosopis), Sugarcane Bagasse, Pellets, Briquettes, Bamboo, Forestry Residues, Cotton Stalk etc. Spectrum of other biomasses workable (talk to us!).
BIOMASS CAPACITY PER REACTOR	Reactor Capacity @ 0.8m ³ , at exemplary Biomass Bulk Density of 180kg/m ³ = approx. 140 kg/reactor
TOTAL PLANT UPTIME	350 days/year, 24/7 possible (4 shifts), alternative 12 hours/day (2 shifts)
TOTAL BATCHES	2 to 4 batches per day per reactor (2 to 6 hours per batch per reactor depending on biomass)
TOTAL BIOMASS PROCESSING CAPACITY	350 days, 12 hours/day operational, 3 batches/day, 5 reactor setup, 140kg biomass/reactor example = ~ 750 tons feedstock input/year.
BIOCHAR YIELD	~ 32 - 38%, Above example produces 260 tons biochar/year, higher biomass bulk density (e.g. 280kg/m ³) may produce up to 450 tons biochar/year.
PYROLYSIS TEMP.	600 to 650°C (fueled by recovered syngas & cofiring)
MOISTURE REQ.	15-20%, more biomass moisture requires more cofiring
STARTUP/COFIRING REQUIREMENTS	Same as feedstock, 15-30% of biomass input (additional to feedstock) depending on biomass
ELECTRICITY	None for Pyrolyser & Manual Hoist, ~3kW for Electric Hoist
BIOCHAR SPECS	~80% C(org), H/C(org): ~0.2 (WBC Premium) - exemplary
METHANE EMISSIONS	< 1 kg CH ₄ /ton of biochar (expected)
MATERIAL/LIFESPAN	Primarily Stainless Steel / 5 to 8 years
MANPOWER	1 operator & 2 helpers at a time (5 reactor setup)
CARBON STANDARD COMPATIBILITY	Carbon Standards International Global Biochar C-Sink, Puro Earth, Isometric (with Sarva Carbon dMRV)

Supply Terms

Lead Time: 8 to 10 weeks after receipt of payment
INCOTERMS: EXW Pune, India or Johannesburg, South Africa
Warranty: 12 months

Get in Touch

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