



ROTARY KILN BIOCHAR PRODUCTION SYSTEMS

[BRKC SERIES]

Turning Biomass into Biochar
and Durable Carbon Removal.



FULL-SPECTRUM SOLUTIONS FOR BIOCHAR

From biomass feedstock to biochar production, Pyrogreen delivers integrated carbonization solutions for projects of different scales and applications.



ISOMETRIC

BRKC SERIES 
PRE-APPROVED PYROLYZER MODEL
ON ISOMETRIC CERTIFY

Puro.earth & Rainbow Standards

One Step Closer to Certification
Assessment Completed · Official Certification **COMING SOON**



PYROGREEN ENERGY

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PYROGREEN'S SOLUTION

From biomass residues to biochar and carbon removal, Pyrogreen integrates feedstock assessment, carbonization technology, biochar production and carbon asset development into a complete project solution.

FROM BIOMASS TO CARBON REMOVAL



01

FEEDSTOCK
Responsible biomass sourcing

02

CARBONIZATION
Controlled pyrolysis and carbonization

03

BIOCHAR
Stable carbon-rich products

04

CARBON REMOVAL
Pathway to durable carbon removal



SUPPORTED FEEDSTOCKS

- Woody biomass and waste wood
- Peels, seeds, and crop residues
- Sewage sludge and fermentation residues
- Sieve residues, etc.





Wood waste

Bamboo waste

Coconut shell

Sawdust (Pelleting)

Açaí seed



Olive pomace (Pelleting)

Rice husk

Grain stalk (Pelleting)

Bagasse (Pelleting)

EFB (Pelleting)

BIOCHAR & BIOCARBON APPLICATIONS



BIOCHAR

Positioning
Long-term carbon storage and carbon-negative material

Applications

- Soil amendment
- Carbon sequestration
- Carbon removal



BIOCARBON

Positioning
Renewable carbon material for industrial decarbonization

Applications

- Steelmaking
- Non-ferrous metals
- Mineral processing

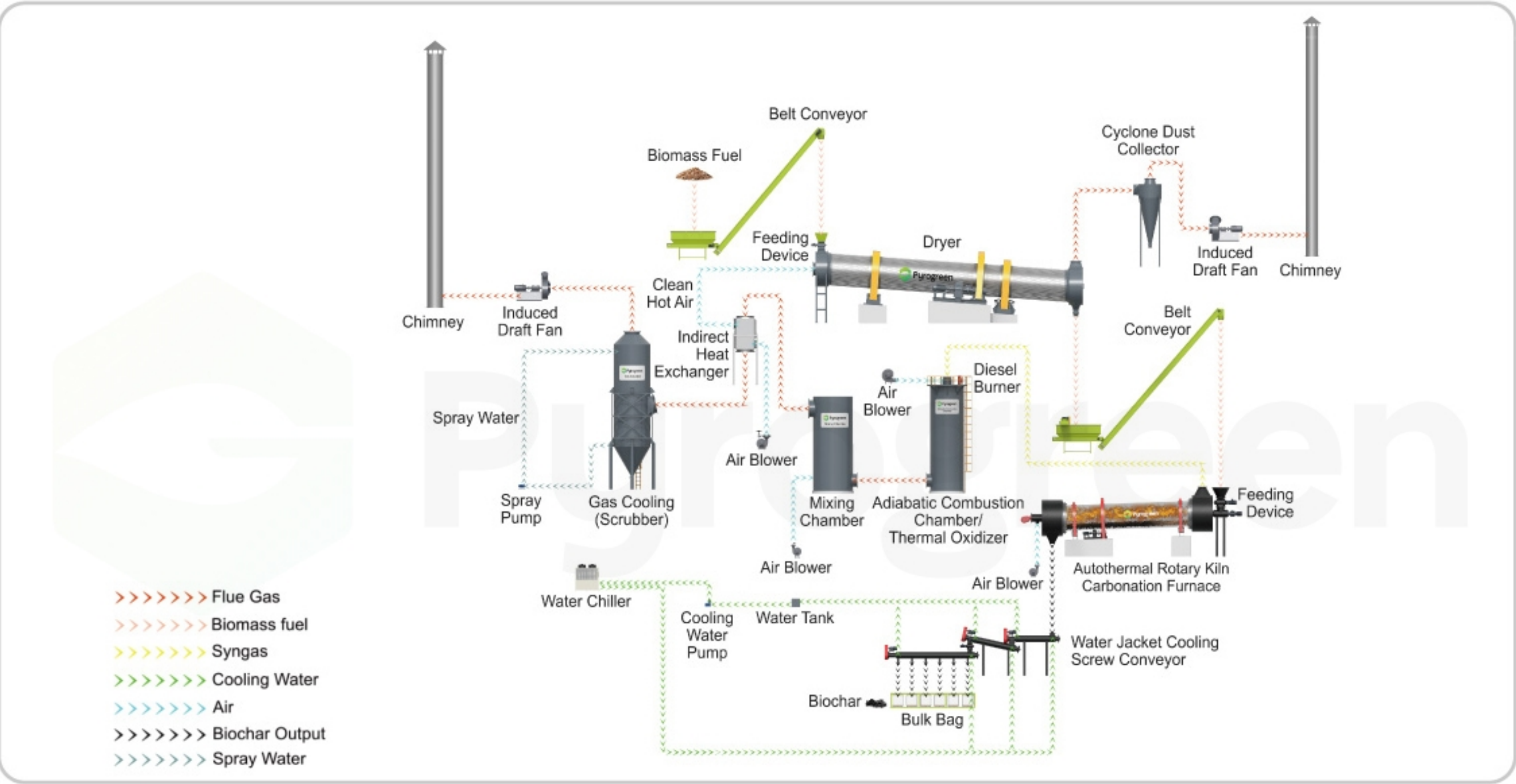
AUTOTHERMAL CONTINUOUS CARBONIZATION

 ≤ 50 mm
LARGER FEEDSTOCKS

Designed for continuous biomass carbonization, the autothermal system utilizes process-generated energy to support efficient operation and biochar production.



PROCESS FLOW



Item	BRKC1000(DH)	BRKC2000(DH)	BRKC3000(DH)	BRKC4000(DH)	BRKC5000(DH)	BRKC8000(DH)
Feed Rate	1000 Kg/Hr	2000 Kg/Hr	3000 Kg/Hr	4000 Kg/Hr	5000 Kg/Hr	8000 Kg/Hr
Footprint (L * W)	46.8 * 41.7 m	52.2 * 41.7 m	57.6 * 41.7 m	63.2 * 41.7 m	68.9 * 41.7 m	74 * 43.2 m
Pressure	Slight Negative Pressure					
Heating Fuel	Diesel, natural gas, heavy oil, etc (Just for starting)					
Heating Mode	Direct Heated					
Pyrolysis Temperature (°C)	500 - 700°C (Actual operating temperature depends on feedstock properties and target biochar specifications.)					
Biochar Yield	18 - 25% (Depending on the properties of the raw materials)					

Note: If there are any deviations in the above data, please refer to the actual product and market conditions.

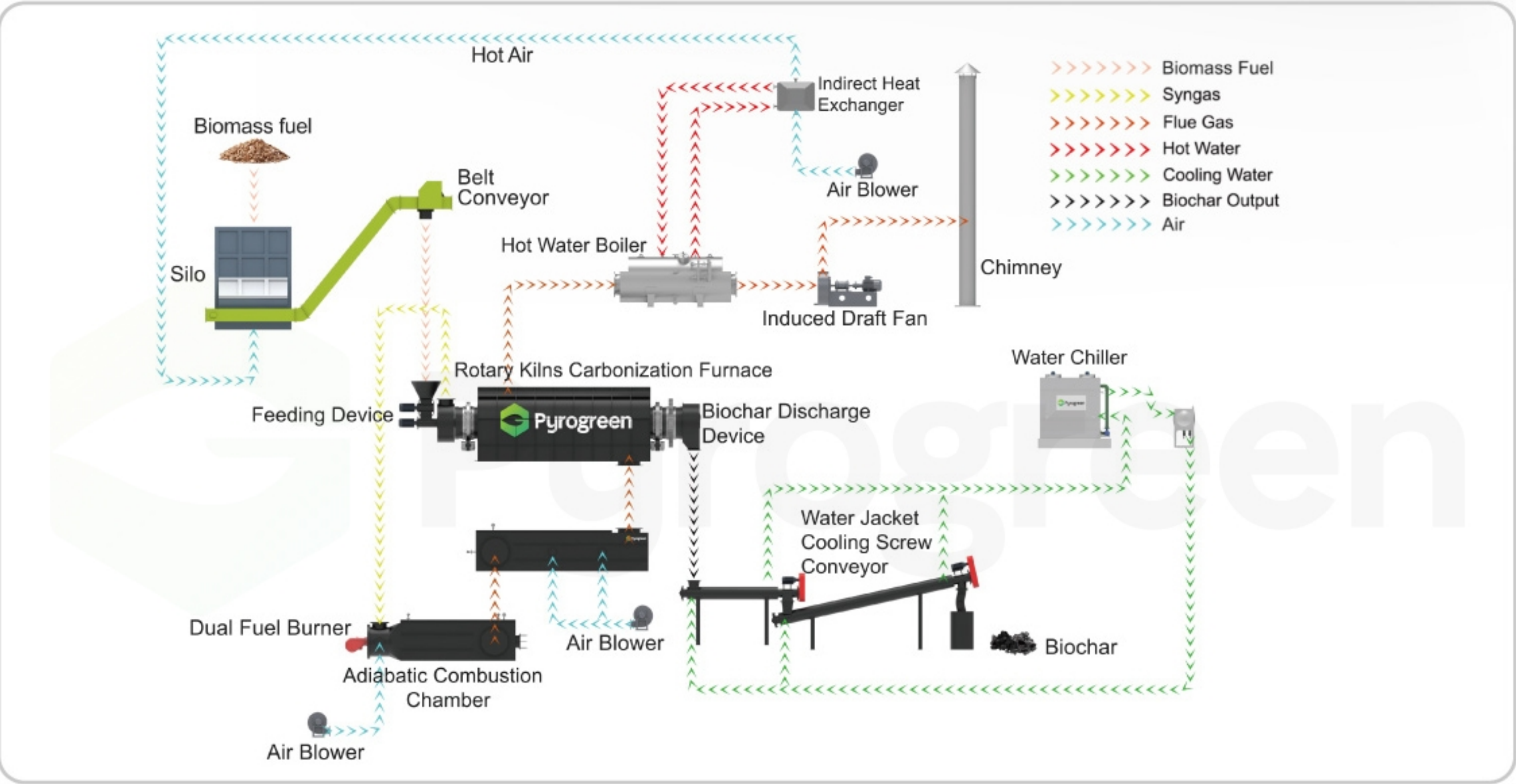
INDIRECTLY HEATED ROTARY PYROLYSIS

 **≤ 15 mm**
FINE FEEDSTOCKS

Stable, efficient and continuous biochar production with high fixed-carbon content and low emissions.



PROCESS FLOW



Item	BRKC600	BRKC1000	BRKC3500	Item	Specification
Feed Rate	0.6m³/h (200 Kg/Hr)	1m³/h (300 Kg/Hr)	3.5m³/h (1000 Kg/Hr)	Pressure	Micro Negative Pressure
Footprint (L * W)	12 m * 10.5 m	15 m * 10.5 m	18 m * 12 m	Heating Fuel	Diesel, natural gas, heavy oil, etc (Just for starting)
Working Mode	Continuous			Heating Mode	Indirect Heating
Feed Requirements	Size ≤ 15 mm, MC ≤ 15%			Noise (dB)	≤ 80
Construction	Indirect Heating Rotary Kilns Type			Cooling Mode	Circulating Water Cooling
Control Mode	PLC Control System			Rotation Mode	External Gear Rotation
Material	SS310S + SS304 + Carbon Steel			Biochar Yield	Max 30%

Pyrolysis Temperature (°C): 500 - 700°C (Actual operating temperature depends on feedstock properties and target biochar specifications.)

SELECTED PROJECTS

Pyrogreen biochar production systems have been selected for upcoming international projects, providing tailored solutions for diverse feedstocks and production requirements.

01

FORESTRY RESIDUES BIOCHAR PROJECT

Bolivia



Feedstock
Wood waste



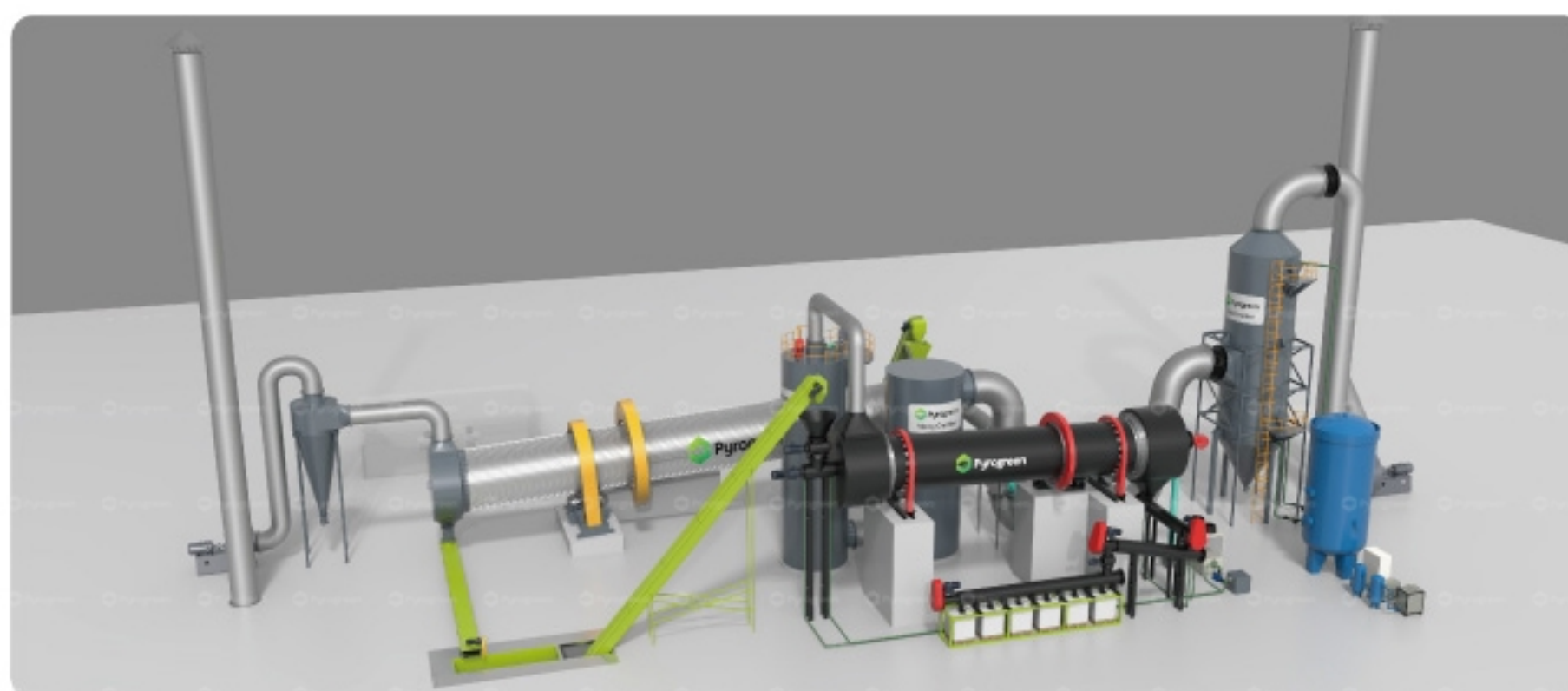
System
Pyrogreen BRKC(DH) Series



Capacity
2 × 4 t/h input



Application
Biochar production & carbon removal



PROJECT HIGHLIGHTS

- Large-scale biochar production from wood waste
- Integrated crushing, drying and carbonization system: 4 t/h per unit
- High-quality biochar designed to meet Puro.earth carbon-credit requirements

02

FORESTRY RESIDUES BIOCHAR PROJECT

The Netherlands



Feedstock
Wood waste



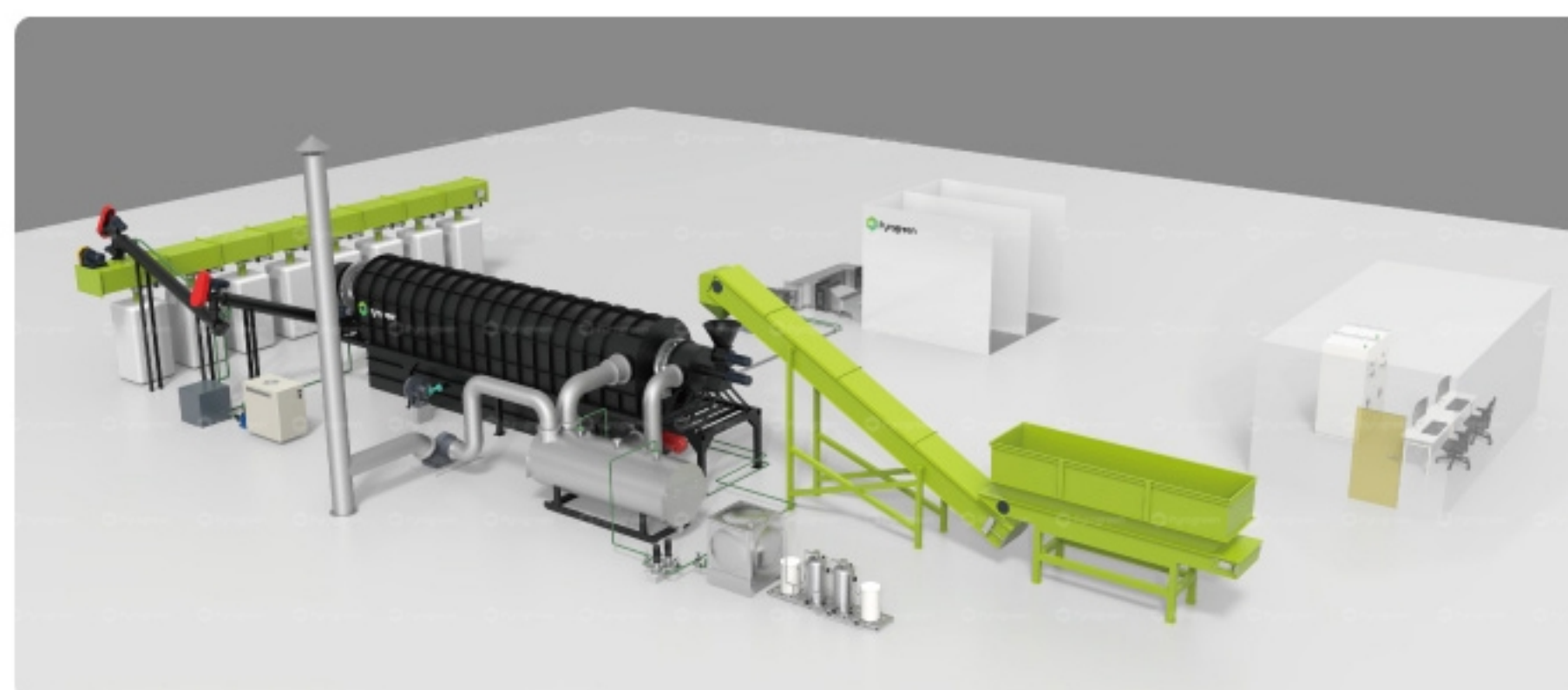
System
Pyrogreen BRKC Series



Capacity
1 × 300 kg/h input



Application
Biochar production & carbon removal



PROJECT HIGHLIGHTS

- Efficient carbonization of wood waste with 40% initial moisture content
- Integrated waste-heat recovery for feedstock drying and hot-water production
- High-quality biochar designed to meet Puro.earth carbon-credit requirements



LET'S BUILD YOUR BIOCHAR PROJECT

From feedstock assessment and system design to biochar production and carbon project development, Pyrogreen supports your project from concept to long-term operation.



SCAN TO EXPLORE
PYROGREEN

THE STRENGTH BEHIND PYROGREEN

Pyrogreen, a proprietary brand of Wuxi Powemax Renewable Energy Technology Co., Ltd., specializing in biochar technology and carbon asset development.

Backed by established manufacturing, engineering and project capabilities, Pyrogreen develops integrated solutions for biochar production and carbon removal projects.



2018

Trademark Registered
(Pyrogreen)



2025

Latest Product Launch
(BRKC Series & BRKCTF (IH))



Isometric

Equipment Certification
(BRKC Series)



WBC/EBC

Biochar Certification Ready
(BRKC Series)



40+ Years

Manufacturing Experience



2,000 m²

Office Area



27,000 m²

Workshop Area



120+

Employees

OUR STRENGTHS



GLOBAL PERSPECTIVE

Connected to the global biochar and carbon removal community.



CUSTOMER FOCUS

Solutions tailored to feedstocks and project requirements.



CERTIFIED SYSTEMS

Certified equipment and biochar for international markets.



SUSTAINABLE IMPACT

Supporting biochar production and durable carbon removal.

CONNECTED TO THE GLOBAL BIOCHAR COMMUNITY



Actively participating in international biochar, biomass carbonization and carbon removal collaboration.

CONTRIBUTING TO THE UN SDGs



BEYOND EQUIPMENT

Biochar Production

From feedstock to finished biochar

dMRV SUPPORT

Digital monitoring and data support for carbon removal projects

Carbon Project Development

Supporting carbon removal project development

Carbon Asset Management

Solutions for long-term carbon asset value