KERONE
Kerone Engineering Solutions Limited

COIR
PITH DRYER

50+ Years
Of experience

ISO 9001:2015 | ISO 14001:2015 | ISO 45001:2018

ABOUT US

Kerone Engineering Solutions Ltd is a global leader in advanced industrial heating, drying, cooling & end to end process engineering solutions. With over five decades of proven expertise, we specialize in designing, manufacturing, and delivering highly customized, cutting-edge systems tailored to the evolving needs of industries worldwide.

Our commitment to engineering excellence, sustainability, digitalization, and technological innovation has positioned us as a trusted partner for businesses across multiple sectors. By integrating Artificial Intelligence (AI), Machine Learning (ML), and Internet of Things (IoT) technologies into our systems, Kerone ensures smarter automation, real-time monitoring, predictive maintenance, and data-driven process optimization—empowering our clients to achieve greater productivity, efficiency, and reliability.

50+	10,000+	500+	100+	50+
Years of Experience	Satisfied Clients	Employee	Experts	Global Presence

INDUSTRIES WE SERVE

- Food Processing & Agro-Processing
- Chemicals & Petrochemicals
- Pharmaceuticals
- Textiles, Automotive & Aerospace
- Paper & Packaging
- Ceramics & Glass
- Rubber & Plastics
- Environmental & Waste Management
- Oil, Gas & Steel Industries

- Industry Expertise – Over 50 years of global engineering leadership.
- Custom Solutions – Tailored engineering that meets unique industrial requirements.
- Global Reach – Trusted by industries across continents with proven reliability.
- Digital & Smart Systems – AI/ML-powered automation, IoT-based monitoring, and predictive insights.
- Cutting-Edge Technology – Continuous innovation in heating, drying, and advanced processing.
- Energy Efficiency – AI-optimized designs for lower energy consumption and sustainability.

QUALITY & COMPLIANCE

At Kerone, quality and compliance are non-negotiable. All our solutions are engineered in adherence to international standards and industry best practices, ensuring maximum safety, durability, reliability, and efficiency. With integrated digital technologies, we enable smarter quality control and compliance tracking across all operations.

Coir Pith Dryer

The Coir Pith Dryer is a robust industrial machine designed to efficiently reduce moisture content in coir pith from 50-60% to 10-15%, ensuring optimal quality for storage and packaging. Featuring a heavy-duty rotary drum constructed from mild steel or stainless steel, the dryer uses internal lifting flights to continuously tumble material for uniform heat distribution and consistent drying results. The variable-speed motor-driven drum operates with multi-fuel heating systems including biomass (coconut shells, husk), diesel, gas, or electric elements, with options for direct or indirect heat transfer. Advanced models incorporate heat recovery systems to minimize fuel consumption and reduce operational costs.

Equipped with an automated PLC control panel, the dryer allows precise temperature regulation between 80-120°C with real-time monitoring of moisture levels, drying time, and system performance. The machine includes adjustable material feeding through a heavy-duty hopper, efficient exhaust systems with cyclone separators or bag filters for environmental compliance, and comprehensive safety features including emergency stops, automatic shutdown protection, and explosion-proof designs. Available in capacities ranging from 500 kg to 10 tons per batch with customizable configurations, this dryer delivers consistent, high-quality cocopeat while preventing fungal growth, reducing transportation costs, and meeting the demands of agricultural, horticultural, and industrial applications.

Key Features

- **Drying Performance**
  Reduces moisture content from 50-60% to 10-15%
  Processing time: 45-90 minutes per cycle
- **Construction & Design**
  Corrosion-resistant materials for long service life
  Mounted on precision roller bearings for smooth operation
- **Heating System**
  Multi-fuel compatibility: biomass, diesel, gas, electric
  Direct/indirect heat transfer options
- **Control & Automation**
  PLC-based automated control panel
  Temperature regulation: 80-120°C
  Variable-speed drum rotation control
- **Material Handling**
  Heavy-duty feeding hopper with adjustable rate
  Efficient discharge system for dried output
- **Capacity Options**
  Small scale: 500 kg per batch
  Medium scale: 1-3 tons per batch

Advantages

- **Versatile Production**
  Scalable capacity from 500 kg to 10+ tons with customizable configurations for grow bags, blocks, and bulk cocopeat manufacturing.
- **Automated Performance**
  PLC-controlled 24/7 operation with 45-90 minute cycles maximizes daily output while minimizing labor and ensuring batch-to-batch consistency.
- **Robust & Reliable**
  Industrial-grade construction delivers 15-20 years of low-maintenance operation with corrosion-resistant components and minimal downtime.
- **Smart Energy Use**
  Intelligent heat management and insulated design minimize fuel consumption while maintaining optimal drying temperatures efficiently.

Applications

Industry	Description
Coir Processing Units	Drying raw coir pith into marketable cocopeat with extended shelf life and reduced storage requirements.
Horticulture & Nurseries	Production of dry cocopeat for potting mixes, seed starting media, and greenhouse growing substrates.
Agriculture	Manufacturing dried cocopeat for soil conditioning, mulching, hydroponics, and organic farming applications.
Compressed Block Production	Processing coir pith into compressed blocks, bricks, and briquettes for retail and wholesale distribution.
Organic Fertilizer Industry	Drying cocopeat as base material for organic fertilizer blends and compost additives.
Livestock & Poultry	Manufacturing dried cocopeat bedding material for cattle sheds and poultry farms.
Waste Management	Converting coconut processing waste into valuable product supporting circular economy initiatives.

Technical Specifications

Parameter	Specification Range	Description
Capacity	500 kg - 10 tons/batch	Processing volume per drying cycle
Moisture Reduction	50-60% to 10-15%	Input to output moisture content
Drying Time	45 - 90 minutes	Complete cycle duration per batch
Operating Temperature	80°C - 120°C	Adjustable temperature control range
Drum Diameter	1.2 m - 3.0 m	Rotating drum size based on capacity
Drum Length	4 m - 12 m	Drum length varies with capacity
Fuel Type	Biomass/Diesel/Gas/Electric	Multi-fuel heating system options
Insulation Thickness	50 mm - 100 mm	Thermal insulation for heat retention
Air Flow Rate	2000 - 8000 m^3/hr	Exhaust air volume per hour
Fuel Consumption	40 - 150 kg/hr (biomass)	Fuel usage based on capacity
Discharge Temperature	40°C - 60°C	Final product exit temperature
Floor Space Required	50 - 200 m^2	Installation area including auxiliaries
Safety Features	Emergency Stop/Auto Shutdown	Built-in protection mechanisms

THANK YOU

UNIT 1 (KESL)

4 & 5, Marudhar Indlustrial. Estate, Gas Godown Lane, Goddev Fatak Road, Bhayander (E), Dist. Thane - 401105. (India)

Contact Us
+91-22 48255071, 48255072

UNIT 2 (MIDC)

Plot No. B-47, Addl. MIDC Anand Nagar, Ambernath (E), Dist. Thane - 421506 (India)

Contact Us
+91(0251)2620542/43/44/45/46

UNIT 3 (KRDC)

Plot No K2, Industrial Gala F4A, D- Wing, MGN Properties, Opposite Godrej Co., Addl MIDC Anand Nagar, Ambernath (E)-421506 (India)

Contact Us
+91-2512620543/44

UNIT 4 (EUROPE)

(EMitech) Viale della Palma, 7, 70033 Corato BA, Italy (Europe)

Contact Us
+91-2512620543/44

UNIT 5 (THAILAND)

Thailand Representative: 163 Rajapark Building, 18th floor, Sukhumvit 21 Road (Asoke), Wattana, Bangkok - 10110, Thailand

Contact Us
G.Vivekanand
+6689 500 9821

Uzbekistan / Kazakhstan (Office)

TIT Company LLC: 100060, 2, A. Kahhar, Tashkent, Uzbekistan

Contact Us
Mr. Slava
+998 903540963

Israel (Office)

Ornatus Industrial Tech Ltd: Dam Hamacbim 36, 7178602 Modiin, Israel

Contact Us
Omri Fabian
+972 584844887

Australia & New Zealand (Office)

Linetech Pty Ltd: Po Box 3046, Browns Plains, Qld 4118. Australia

Contact Us
Eric Quevauvilliers
+61 (0)418 871 005

Bangladesh (Office)

House-10, Road-5 Priyanka City, Sector-12, Uttara, Dhaka-1230, Bangladesh

Contact Us
Md. Emtiaz Morshed
+8801747762200

Chile & South America (LatAM)

La Concepcion
165 Oficina 303, Provedencia, Santiago, CHILE

Contact Us
+56 232 243 921

SCAN HERE

Our Mails

info@kerone.com
sales@kerone.com
marketing@kerone.com

Website

www.kerone.com
www.kerone.in
www.keronedryers.com
www.keronebiochar.com