



COW DUNG ROTARY 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+

Years of Experience



10,000+

Satisfied Clients



500+

Employee



100+

Experts



50+

Global Presence



50+ Years Manufacturing Excellence



Great Sale Support



Highly Customized Product



Adherence to Standards



Sound Infrastructure



Team of experts Delivering Quality



Timely Delivery



Cost Effective Solutions



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.





Cow Dung Rotary Dryer

The Cow Dung Rotary Dryer is a professionally designed and developed new-type rotary dryer built in response to market demand. After the cow dung is dried, it becomes suitable for storage and the production of organic fertilizer. The processed cow dung can be utilized across several industries – serving as a green fertilizer for growing fruits and vegetables, as feed for pigs, chickens, and fish, or as a medium for growing mushrooms.

The complete set of a cow dung rotary dryer is mainly composed of the drum dryer, feed spiral, output spiral, pipeline, burning furnace, dust collector, airlock, air-induced fan, and an electric control cabinet. Humid materials are conveyed from the feed screw directly into the dryer drum, raised by the drum wall panels repeatedly, and scattered by crushing blow dispersion devices. The materials and the high-temperature media combine sufficiently to complete the heat and mass transfer process. As a result of the drum wind angle and induced air, feed materials move slowly through the drum and are discharged from the spiral after drying, while exhaust gas is handled by a dust precipitator before venting to the atmosphere.

Key Features

- **Unique Internal Flight Design**
The inside of the cow dung rotary dryer has unique flights that hit and tumble the materials to maximize the efficiency of heat transfer between the material and drying air, increasing equipment output by more than 50% while reducing fuel energy consumption by more than 30%.

- **High-Temperature Drying & Disinfection**
The machine can dry fresh cow dung with a moisture content of 65% through high-temperature drying, disinfection, and decomposition, producing pure cow dung organic fertilizer with a moisture level of less than 13%.
- **Modular Dust Collection & Heat Recycling**
This type of dryer uses a modular dust collector purifying and heat recycling assembly, making it safe and environmentally protective.
- **Energy-Saving Design**
The cow dung dryer offers several options for a new-type energy-saving hot air furnace – energy consumption decreases by about 30%, power consumption reduces by 20%, resulting in lower overall operating costs.

Advantages

- **High Drying Efficiency**
Reduces moisture from 65–85% down to below 13% in a single continuous pass
- **Low Operating Cost**
Energy savings of 30%+ on fuel and 20%+ on power compared to conventional dryers
- **Large Processing Capacity**
Handles small, medium, and large-scale farm operations continuously
- **Versatile Material Handling**
Also suitable for chicken manure, sludge, bean dregs, starch residue, beer distiller's grains, straw, and other materials with 50–85% moisture content
- **Minimal Footprint**
Covers less area and can save energy more than 50% compared to ordinary dryers .

Applications

Industry	Description
Organic Fertilizer Production	Dries cow dung to produce granulated or powdered organic fertilizer for commercial sale
Agriculture & Farming	Provides nutrient-rich dried manure used as green fertilizer for fruits, vegetables, and crops
Animal Feed Industry	Processed dried dung used as supplementary feed for pigs, chickens, and fish farming
Mushroom Cultivation	Dried cow dung used as a culture medium for growing mushrooms like <i>Agaricus bisporus</i>
Biogas & Biofuel Plants	Dried manure serves as biomass feedstock for energy generation
Waste Management	Converts farm animal waste into valuable by-products, reducing environmental pollution
Compost Production	Dried dung is mixed with other organics to produce premium quality compost



Technical Specifications

Parameter	Specification Range	Description
Inlet Moisture Content	50% – 85%	Moisture level of raw wet cow dung fed into the machine
Outlet Moisture Content	≤ 13%	Final moisture content of dried output product
Drying Temperature	600°C – 850°C	Hot air furnace operating temperature range
Drum Rotation Speed	3 – 8 RPM	Speed at which the rotary drum revolves
Installed Power	7.5 – 75 kW	Total motor power depending on capacity
Thermal Efficiency	≥ 70%	Heat utilization efficiency of the drying system
Dust Emission Control	Cyclone + Bag Filter	Modular dust collector system for clean exhaust



THANK YOU

UNIT 1 (KESL)

4 & 5, Marudhar Industrial 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, Providencia, 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