

TECHNOLOGICAL ADVANCEMENTS IN INDUSTRIAL DRYERS



In Association with SVCH-Technologii, Moscow (Russia)
ISO 9001:2015 | ISO 14001:2015 | ISO 45001:2018

ABOUT US

KERONE is now renowned for serving the specialized needs of customers with the best quality and economical process of Heating /cooling and drying products, manufactured in a high-quality environment by a trained and qualified workforce (special purpose machinery)

-  48+ Years Manufacturing Excellence
-  Great Sale Support
-  Highly Customized Product
-  Adherence to Standards
-  Sound Infrastructure
-  Team of experts Delivering Quality
-  Timely Delivery
-  Cost Effective Solutions



KERONE is a pioneer in application and implementation engineering with its vast experience and team of professionals.



KERONE is devoteded to serve the industry to optimize its operations both economically and environmentally with its specialized heating and drying solutions.



KERONE is having immense expertise in manufacturing and implementing various types of engineering solutions.



KERONE is possessing employee strength of more than 280+ experts continuously putting efforts for happy industrial engineering solutions.

WHY CHOOSE US

With decades of expertise, cutting-edge technology, and a customer-centric approach, Kerone Engineering offers tailor-made heating solutions that prioritize quality, flexibility, and cost-effectiveness. Benefit from our commitment to excellence, post-sales support, and innovative solutions for your unique heating needs. Choose Kerone Engineering for reliability, performance, and unmatched value.

MISSION

- ✓ To enhance the value of customer operation through our customer need centric engineering solution
- ✓ We are committed to provide our customers, unique and best in class products in Industrial heating drying and cooling segment with strategic tie-up for the technical know-how with renowned leader in the industry specific segment

VISION

- ✓ Turn into a world leader in providing specialized, top-notch quality and ecological industrial heating, cooling, and drying solutions across the globe.
- ✓ To attain global recognition as the best of quality and environment-friendly engineering solution company.

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Enhance the value of customer operation through our customer need centric engineering solution.

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HEAT PUMP & MECHANICAL STEAM COMPRESSION DRYERS

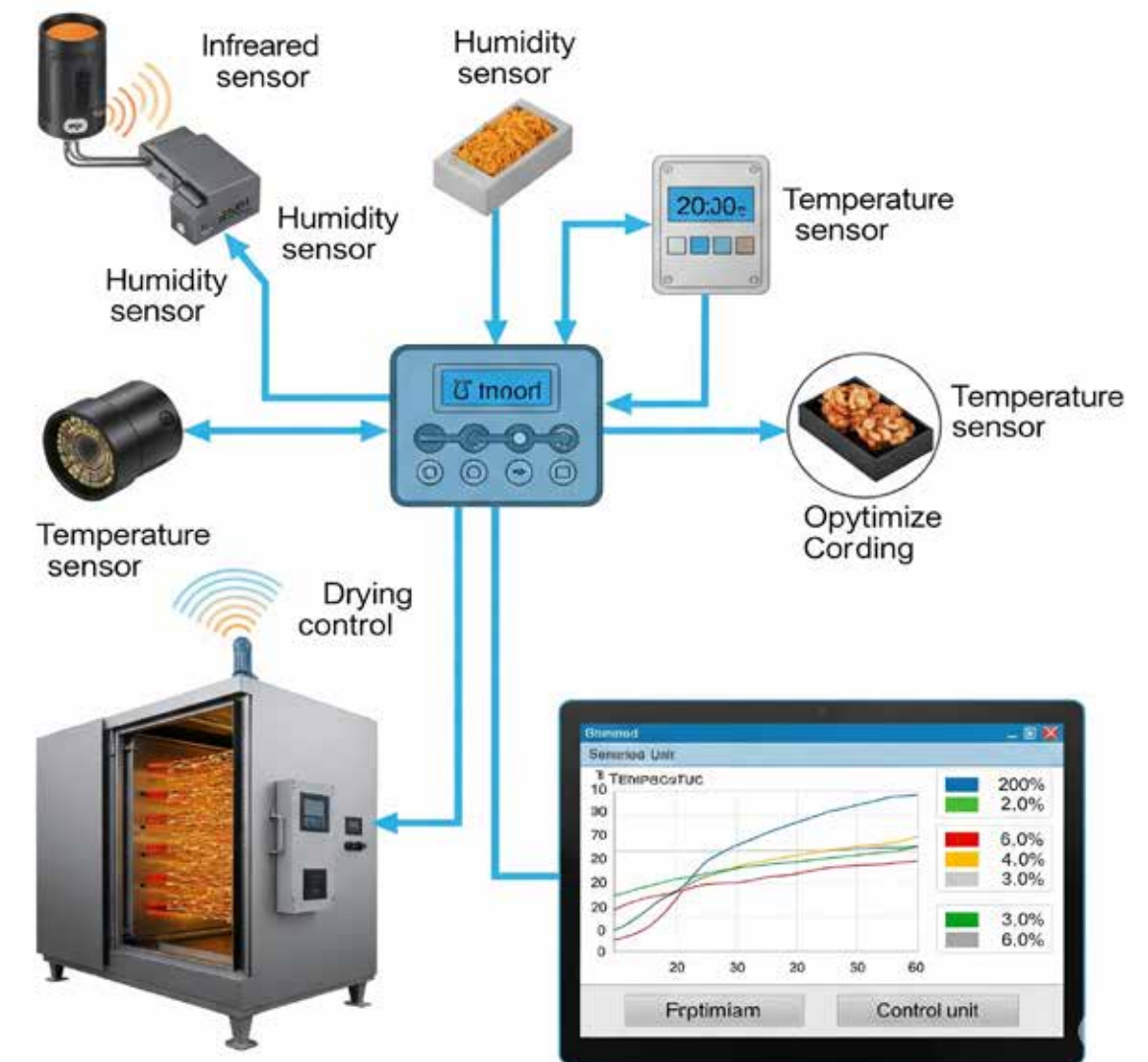
- Energy Savings:**
Up to 50% reduction in energy consumption.
- Heat Recycling:**
These dryers recover and reuse latent heat from exhaust, improving efficiency.
- Applications:**
Widely used in textile, paper, and chemical industries due to their high thermal efficiency and gentle drying capabilities.



SMART SENSOR-CONTROLLED DRYING SYSTEMS

- Real-Time Monitoring:**
Uses moisture sensors to detect and adjust moisture levels instantly.
- AI & ML Integration:**
Adaptive control systems optimize drying cycles based on product characteristics.
- Energy Reduction:**
Leads to 10–15% lower energy use by preventing over-drying or under-drying.
- Benefit:**
Enhances product quality and lowers operational cost.

Smart Sensor-Controlled Drying System



ADVANCED SPRAY DRYING TECHNOLOGIES

- **Multizone Radial Dryers (RMD):**
Reduce energy consumption by 20–30%.
- **Innovative Techniques:**
Pulse spray and zeolite-sorption systems preserve heat-sensitive compounds.
- **Industry Fit:**
Ideal for food and pharmaceuticals—maintains flavor, nutrients, and active ingredients.



ELECTROMAGNETIC & DIELECTRIC-ASSISTED DRYING

- Technologies:**
Includes Radio Frequency (RF) and Microwave-Vacuum methods.
- How it Works:**
Delivers rapid heating at the surface with minimal temperature rise in the core.
- Best Use Case:**
Perfect for sensitive or heat-labile materials (e.g., nutraceuticals, bioactive powders).



VIBRATORY & FLUIDIZED-BED DRYERS

- Uniform Drying:**
Ideal for fine and granular materials requiring consistent moisture removal.
- Efficiency Gains:**
Lower drying time and energy usage due to better airflow and particle agitation.
- Key Industries:**
Widely used in pharma, mineral processing, and chemical powders.



MODULAR HYBRID DRYING SYSTEMS

- **Design:**
Integrates multiple drying stages—fluidized bed, infrared, and convection.
- **Efficiency:**
Increases drying efficiency by up to 12%.
- **Versatility:**
Highly adaptable to various materials and moisture profiles.
- **Future-Ready:**
Scalable and modular for next-gen processing plants.



FUTURE TRENDS

IoT-Enabled Dryers:

Allow for remote diagnostics and control for uninterrupted operations.

Predictive AI Control:

Uses video analytics and real-time data to forecast drying performance and schedule maintenance.

Customized Hybrid Systems:

Built for specific material needs—combining thermal, mechanical, and electromagnetic elements.



CROSS-INDUSTRY APPLICATIONS

Industries Benefiting:

- Food – drying of grains, dairy, herbs.
- Pharmaceuticals – powders, granules, intermediates.
- Textiles – yarn, fabrics.
- Chemicals – resins, solvents, catalysts.
- Minerals – ores, sands, clays.



KEY CONSIDERATIONS FOR ADOPTION

| CapEx vs OpEx

Balance upfront investment with long-term savings.

| Product-Specific Needs

Consider heat sensitivity, particle size, and desired final moisture level.

| Scalability

Evaluate ability to scale with production growth.

TRUSTED PARTNERS

AFCONS

Technip



ISO 14001:2004



LLOYD'S

ZEPPELIN
WE CREATE SOLUTIONS



SC Shroff Consultants

STERLING & WILSON



THANK YOU

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