



In Association with SVCH-Technologii, Moscow (Russia)

COMPANY PROFILE







About

KERONE

KERONE now renowned name in serving specialized need of customers with best quality and economical process Heating /cooling and drying products, manufactured in high quality environment by well trained and qualified workforce(special purpose machineries) .

KERONE is pioneer in application and implementation engineering with its vast experience and team of professionals. KERONE is devoted to serve the industry to optimize their operations both economically and environmentally with its specialized heating and drying solutions.



40 Years

Manufacturing Excellence



**Great Sale
Support**

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

Vision

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



Value
Proposition



Highly
**Customized
Product**



Sound
Infrastructure



Adherence to
Standards



Timely
Delivery



Team of experts
**Delivering
Quality**

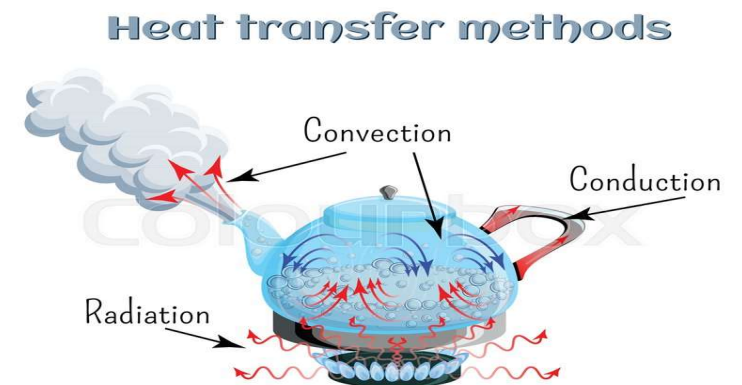
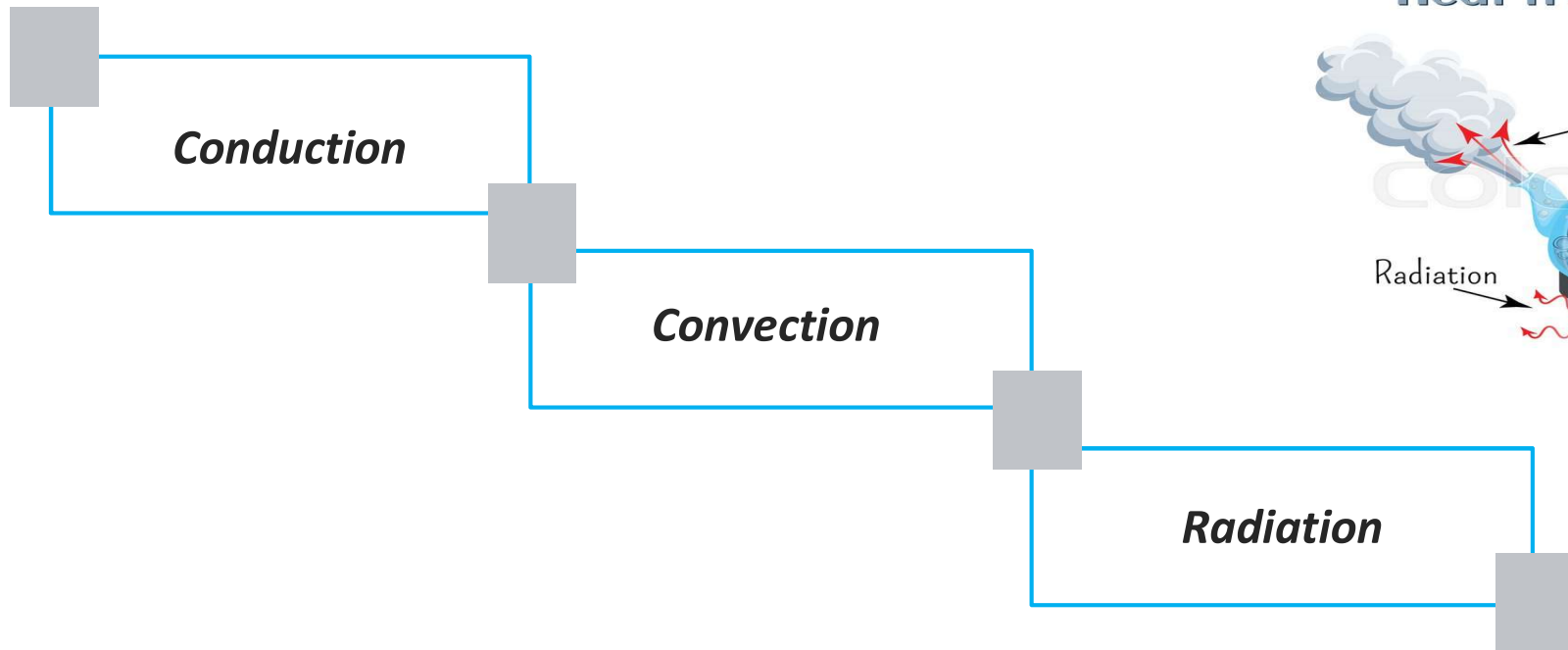


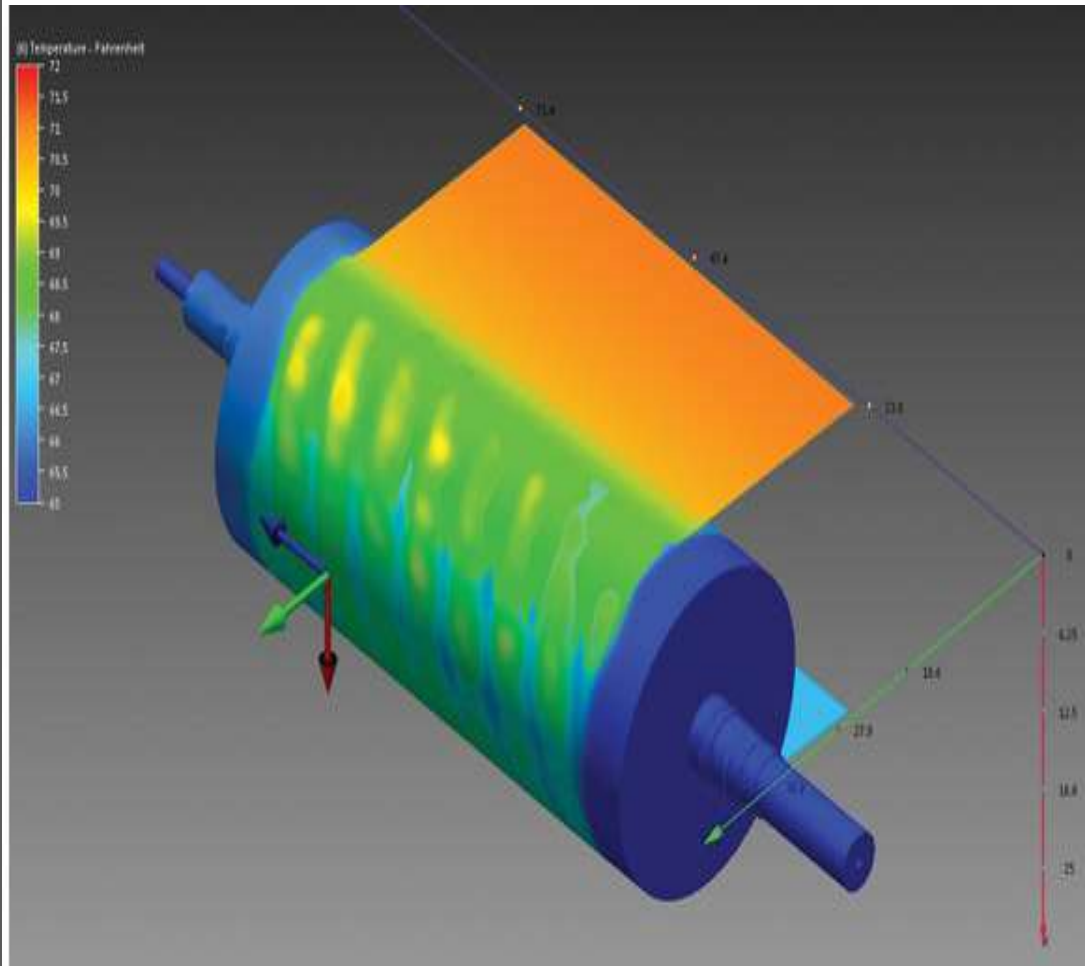
Cost Effective
Solutions

HEAT TRANSFER TECHNOLOGIES

KERONE is a recognized leader in the field of Industrial Heating Equipments and PLC Control Panels; Industrial Dryers, Coating Machines, Process Equipments, Industrial Ovens / Pilot Plants / Lab Equipments / Vacuum, Infrared, Microwave and RF Equipments known for the quality and performance of its products and its services.

Today we shall review some of these as listed below:-





KERONE is having over 40 years experience in designing and manufacturing of various type of Contact Drying- Steam Cylinders/Cans. Our expertise with dryers and drying application, Contact Drying- Steam Cylinders/Cans the simplest and cheapest mode of drying web like fabrics/papers.

Contact Drying- Steam Cylinders/Cans are primarily employed for transitional drying rather than final drying and for pre-drying prior to stentering. Fabric/drying material is passed around a series of steam heated cylinders using steam at pressures varying from 35 psi to 65 psi.

Salient features

Closed construction available

Maintains low RH air blanketing

Minimize vapour nuisance

SOME OF OUR INSTALLATIONS

Conveyorized Heating System for Piston Rod



Inline Electrical Water Heater



Batch Heating System for Annealing of Metal Parts



Fabric Coating and Drying System



◆ *Batch Heating System for Silicon Rubber Hose Curing*



◆ *Hot Water Heating Generating System*



◆ *Batch Heating System for Automotive Parts*



◆ *Batch Oven for Metal Heating*



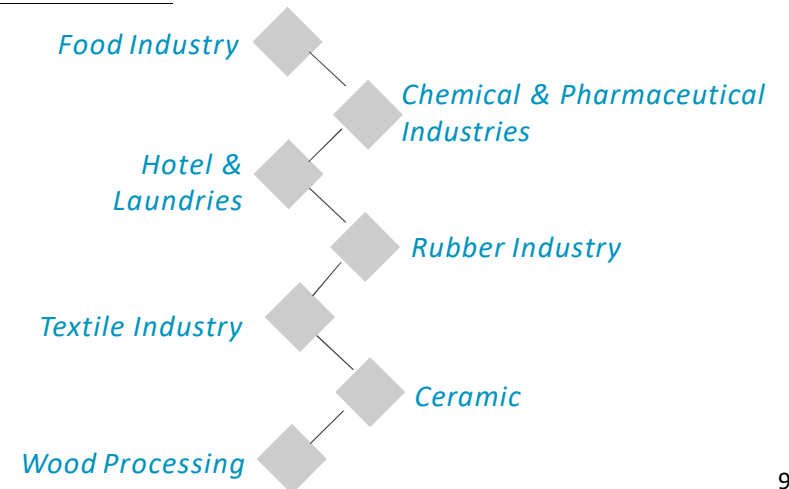
Heaters By Kerone:

- ❖ *Corrugation Heaters*
- ❖ *Immersion Heaters*
- ❖ *Space Heaters*
- ❖ *Cartridge Heaters*
- ❖ *Tubular Heaters*
- ❖ *Flameproof Heaters*
- ❖ *Custom Built Heaters*
- ❖ *Strip and Band Heaters*



- ◆ We hold upper hand in customizing the hot air dryers based on the heat exchanger such as Condenser, Vent Condenser, Re-Boiler and Sub-cooler based on the suitability of Clients process need.
- ◆ Based on client requirement and process need KERONE manufactures Hot Air dryers and Hot air Generators manufactured those can be fired by verity of fuels :
 - 1.Oil fired Hot Air Dryer
 - 2.Gas Fired Hot Air Dryer
 - 3.Solid Fired Hot Air Dryer
 - 4.Electric Hot Air Dryer

Application Industries



SOME OF OUR INSTALLATIONS

◆ Hot Air Tray Dryer



◆ Conveyorized Hot Air Heating System for Drying Metal Parts



◆ Gas Convection Curing System for Automobile Gaskets



◆ Fabric Coating and Drying System



- ❖ At KERONE we are involved in manufacturing of conventional heating and drying system since 1976, which provide us experience of manufacturing vast variety of conventional drying solutions, the conventional dryers designed and built by KERONE is strictly as per the need and specification of clients process requirements.
- ❖ Dryers are designed only after studying each and every parameter of process requirement and the study is performed on the consequence analysis for each minute to minute details. We have established our name for timely delivery and high quality product.
- ❖ We manufacture various type of conventional dryer :

1. Batch type
2. Conveyorized Type

- With Uniform Temperature Zone
- With Various Temperature Zone
- Can accommodate multiple types of conveyor mechanism.

◆ Batch Drum Heating Oven



◆ Batch Dehydrator for Noodles Drying



◆ Batch Drum Heating Oven Double Door



◆ Gas Convection Drying System



Applications in Various Industries:

- ❖ Food Industry: Curing, Dairies, Confectionery, Fruits & Vegetable Canning, Dehydration, Pasteurizers, Vegetable Oil Refineries etc.
- ❖ Chemical & Pharmaceutical Industries: Dyes and Intermediates, Refineries, Lube oil plants, Oil Reclamation, Additives, Adhesives, Pesticides, Fertilizers etc.
- ❖ Textiles: Stenter machine, Curing machines etc.
- ❖ Hotels & Laundries, Kitchen
- ❖ Rubber, Tyre Retreading, Paper & Board, Leather Industries, Plastic Industries
- ❖ Cement Concrete/Mosaic Tiles Curing
- ❖ Metal Pre-treatment, Timber Seasoning.



◆ *Conveyorized Glass Bottle Drying*



◆ *Batch Tray Dryer for Colour Pigments*



◆ *Batch Dehydrator for Spices*



◆ *Batch Tray Dryer for Food Solids*



◆ *Batch Lab Oven*



◆ *Batch Convection Heating System for Curing of Rubber Products*



<i>Conventional Heating System</i>	<i>Microwave Heating System</i>
<ul style="list-style-type: none"> •Conventional heating system have slow hating rate, heat is transferred via means of air 	<ul style="list-style-type: none"> •Microwave heating system is generates the heat very fast within material
<ul style="list-style-type: none"> •Instance heating does not takes place, it requires warm-up of surrounding 	<ul style="list-style-type: none"> •Heating of materials are due to molecule movements hence no chamber warm up time is required
<ul style="list-style-type: none"> •Produces carbon or toxic gases hence not much environmental friendly heating solutions 	<ul style="list-style-type: none"> •Environmental friendly and green heating solution, no carbon emission
<ul style="list-style-type: none"> •100% energy utilization is not possible, as material is heated by surrounding hot air 	<ul style="list-style-type: none"> •100% energy utilization, as heating takes place within the material
<ul style="list-style-type: none"> •Poor floor utilization index as it require bigger chamberarea for material to rotate 	<ul style="list-style-type: none"> •Better floor utilization index as it doesn't require chamber area
<ul style="list-style-type: none"> •Surrounding air temperature rises with rise in heater temperature 	<ul style="list-style-type: none"> •No Temperature loss in surrounding, ambient workplace

RADIATION

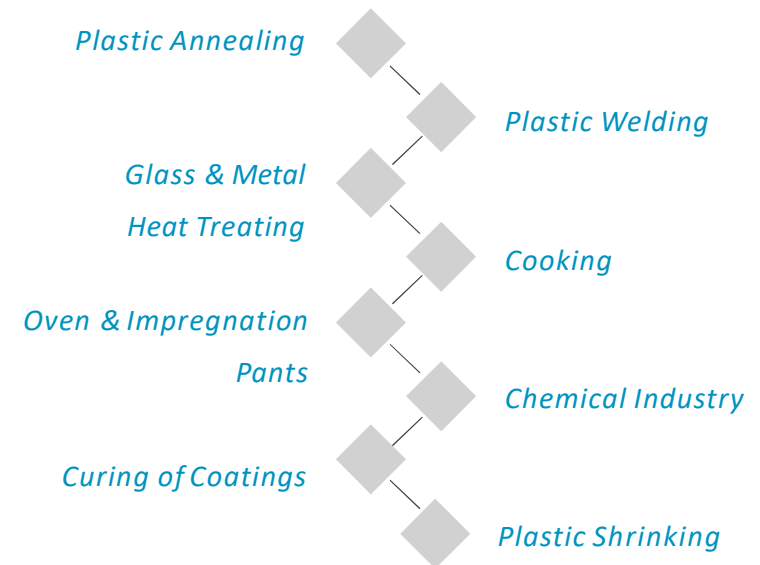
INFRARED HEATING

Designing & manufacturing Infrared heating system user across industries for various applications :



- ◆ Kerone is known as one of the early bird in Infrared drying segment, we are in first few heating/drying solution provider who started advocating in favor of Infrared as source to produce the heat required from drying, in these several years we have played crucial role in the transformation that happened in segment of drying in Asia and other continents.

Application Industries



SOME OF OUR INSTALLATIONS

- ◆ IR Flash Dryer for Drying of Plastisol Based Ink on Fabric



- ◆ Conveyorized IR Heating System for Metal Dies



- ◆ Conveyorized Drying System for Screen Printed Ink



- ◆ Continuous IR Heating System for carbide pieces



Some Facts about Infrared Technology

- ❖ Infrared dryers belong to family of generate heat at targeted material type of dryers similar to microwave and RF dryers, however key difference is Infrared generates heat on the surface of material.
- ❖ To Increase the heat efficiency of conventional oven IR booster section is introduced.
- ❖ It Increases line speed that enhances production and maximizes resources . It provides smaller foot print that results in less work in progress.
- ❖ These systems also allow resultant ambient heat to be redirected into convection oven for added savings.
- ❖ Infrared Heating can be introduced at the initial stage of Conventional or Microwave Drying process to increase the product temperature and reduce surface moisture content .
- ❖ Infrared waves are majorly classified based on the wave length range:
- ❖ Short wave infrared (wavelength range from 780 nm to 1400 nm).
- ❖ Medium wave infrared (wavelength range 1400 nm and 3000 nm).
- ❖ Far infrared or dark emitters (Wavelengths above 3000 nm).

Conveyorized IR Heating System for Foundry Mold Drying



Conveyorized IR Preheating System for Non-woven fabric prior to molding (Automotive Lining)



Lab Gas IR Heating System



Batch IR Furnace for Drying of Meal Sludge



Applications in Various Industries:

- ❖ Adhesive coating
- ❖ Foundry Mold Drying
- ❖ Plastic Annealing
- ❖ Drying of fabrics in Textile.
- ❖ Drying of ink and paper
- ❖ Laminate foam to fabric using web adhesives for automotive and furniture industries.
- ❖ Preheat films for laminating and embossing.
- ❖ Cure Silicone coatings on various substrates.
- ❖ Dry and cure solvent base resin coatings for electronics industry.
- ❖ Drying of pharmaceutical coating.
- ❖ Curing Rubber Products

Feature of the Infrared Dryer:

- ❖ Infrared dryers are having superior Air Handling arrangement.
- ❖ Forced airflow speed up drying/curing process.
- ❖ High-volume circulation blower reduces energy costs.
- ❖ After the dryer has been turned off, the blowers and belt will continue to run for five minutes to shut down automatically after cooling of heat chamber.
- ❖ Conveyor belt is made of imported antistatic heat-resistant, Teflon-coated fiberglass coating.
- ❖ conveyor Driven by a reliable, heavy-duty, variable-speed AC motor with imported variable speed drive and gear box.

◆ Batch IR Heating System for Annealing and Shaping of Medical Products



◆ Auto Exposed Printing & IR Drying System



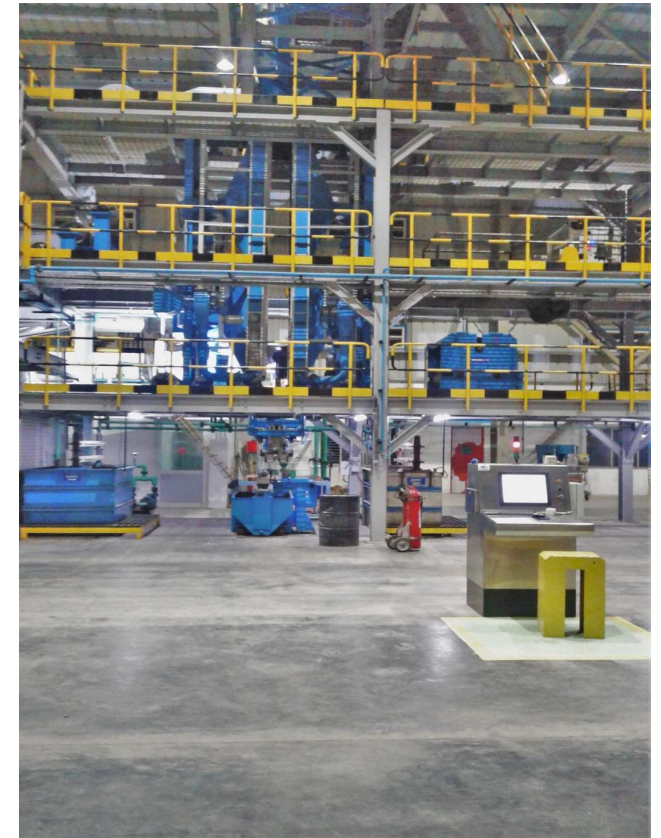
◆ Continuous IR System for Curing of Coted Yarn Threads



◆ Continuous EPDM Rubber Vulcanizing Plant



◆ Continuous IR System for Paint Drying on Metal Strips



<i>Infrared Heating System</i>	<i>Microwave Heating System</i>
•IR heating systems utilizes electromagnetic system uses wavelength of about 0.01 centimeters	•Microwave heating systems utilizes electromagnetic system uses wavelength of about 1 centimeters
•Compact system providing better floor utilization index	•Microwave heating systems does not require large space hence offers better floor utilization index
•Infrared heating systems are better substitution of traditional convention heaters	•Microwave heating systems are not substitute the conventional heaters
•Depth of heat penetration is lower in infrared heaters as it heats from surface	•Depth of heat penetration is higher in Microwave heaters
•Rate of heating depends on the surface characteristics of material	•Rate of heating depends on the moisture content within the material
•Heats the object from surface of object	•Heats the objects from within the object

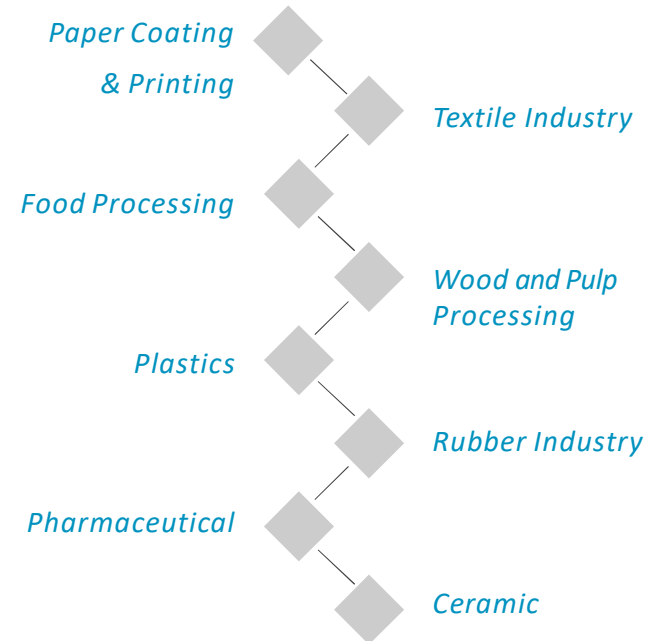
MICROWAVE HEATING

Specialized in designing & manufacturing Microwave heating system that caters to specialized needs :

◆ We have been innovating in the field of heating, drying and cooling technologies since last 40 years. We provide wide range of electromagnetic heating solutions that finds application in many industrial processes and plants.

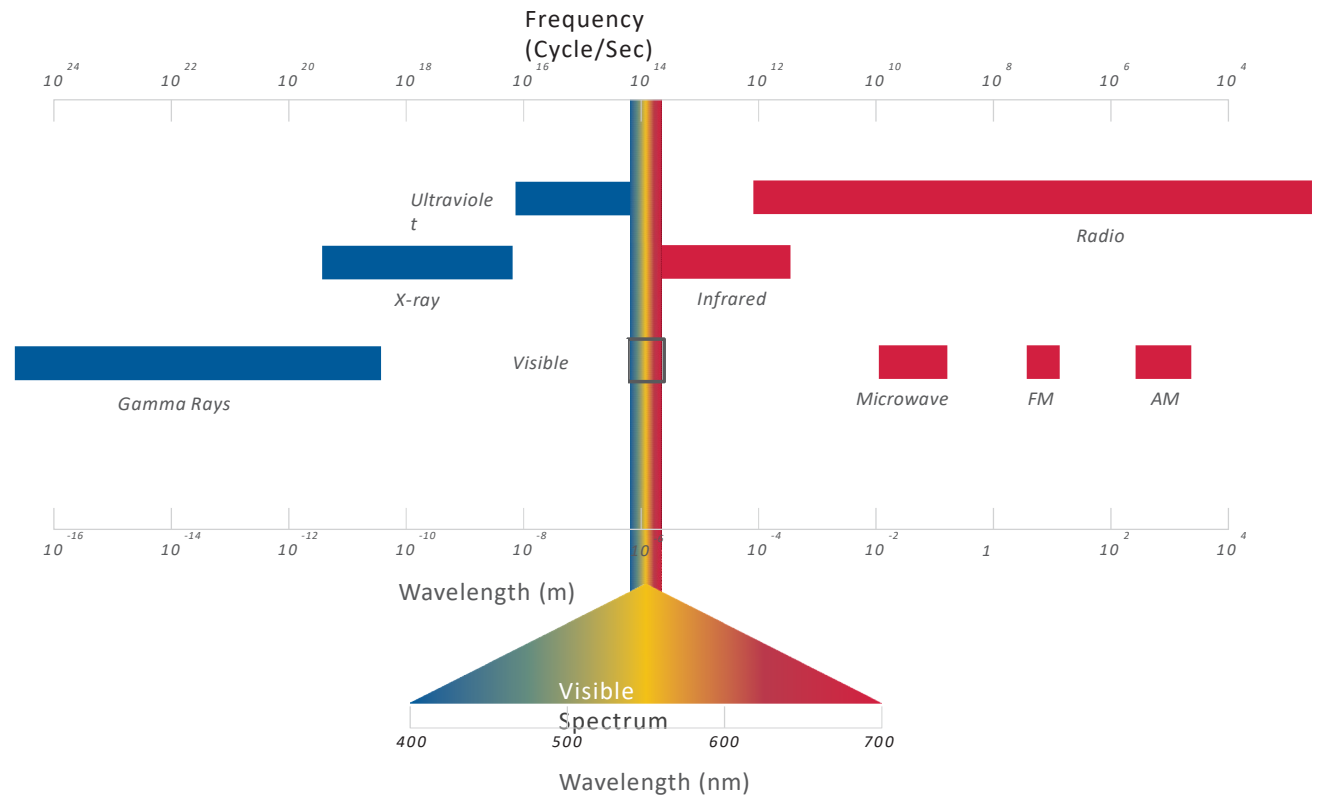


Application Industries



ADVANTAGES OF MICROWAVE HEATING SYSTEM

- **Uniform Heating** occurs throughout the material Process speed is increased
- **Desirable** chemical and physical **Effects** are produced
- **Floor Space** requirements are **Decreased**
- Better and more **Rapid Process** control is achieved
- **Purity** in final product
- **High Efficiency** of Heating
- Environmental heat loss is save, **Reduce wastage** of heat



SOME OF OUR INSTALLATIONS

Conveyorized Microwave Heating System for Drying of Pulp Paper & Trays Drying



Conveyorized Microwave Heating System for Drying of Pulp Paper & Boards Drying



Microwave System for Drying and Sterilization of Tea/Herbs/Flowers



Some Facts about



Microwave Technology

- ❖ Heating and drying has been an enormously imperative procedure in almost all areas of industrial processing.
- ❖ Our Microwave Heating and Drying Equipments are specially designed to provide maximum efficiency and reduce large amount of process time.
- ❖ Maximum powder utilization and volumetric heating are the main key features of the microwave process.
- ❖ No warmup time required hence system is always ready to use.
- ❖ Due to low process time and temperature required, all natural ingredients and sensory are preserved.

Applications of Microwave:

❖ Food Industry:

Large drying time is always been a major limitation of Conventional Drying Processes. But now with the help of Microwave heating system assisted with IR or Hot Air system, process time can be reduced upto 1/4th.

Low product temperature (min 60°C) is maintained to perform drying operations. Thus all natural ingredients and sensory of the food grade products are remain intact.

Microwave Technology provide high depth of heat penetration hence product gets volumetrically heated.

Microwave treatment for Sterilization and Disinfestation food grade products is environmental sustainable, Efficient and safest physical method to inactivate microorganisms and insects of every stage i.e. eggs, larvae, pupae, adults thus drying and sterilization can be achieved in single process.



Batch Microwave System for Pre-Heating of Green Rubber Tyre Prior to Moulding



Continuous Microwave Sterilization System for Agro Food Grains



❖ Rubber Industry:

Microwave heating is a quick and efficient method of heating materials that are difficult to heat by convection or infrared methods, so production rates increase and product quality improves.

This technology has the capability that it penetrates within the rubber material under process and energizes the water molecules present within, this results in very high quality processing in shorter time. As rubber is a poor conductor to heat, this process is very effective. Since different materials absorb microwave energy at different rates, a product with many components can be heated selectively.

Labor intensive steam autoclaves used traditionally for Heating of rubber now can be replaced with highly efficient, high speed microwave curing ovens automated with electronic controls and sensors. Microwave Pre-heating of tyre prior to molding can be able to reduce molding time and improve quality and durability of the tyre.

Conveyorized Microwave System for Sterilization of Rubber Wood





Conveyorized Microwave Hybrid System for
Drying & Sterilization of Neem Leaves



Continuous Microwave Heating System for
Disinfestation of Pistachios



Batch Microwave Hybrid Heating
System for Sterilization of Spices



❖ Wood Industry:

A number of wood species have a very low permeability that causes problems during timber processing. These problems include very long drying times, large material losses after drying, expensive drying processes, and difficult impregnation with preservatives and resins. Furthermore, growth stresses in wood and collapse often lead to drying defects and high material losses in the recovery of sawn timber.

Potential Benefits of Microwave Treatment on wood:

- Consumption of chemicals for the pulp production process is reduced by 25-45% due to the efficiency of the use of chemicals for cooking.
- Accordingly, reducing the need for processing chemicals which provides a reduction in energy cost and increases productivity of the process.
- Increased permeability of wood provides a more rapid contact between the chemical and the structure of the wood, increasing the efficiency of the reaction
- Improving productivity 20-34% for systems with limited performance of the digester



Batch Microwave Heating System for Pre-heating of Rubber Preforms



Conveyorized Microwave Hybrid Heating System for Curing of Rubber Profiles



Feature of the Microwave Heating Systems:

- ❖ Customized Equipments, manufactures according to customers product and process requirements.
- ❖ highly controllable.
- ❖ Work space requirement is very less.
- ❖ Variable Power output (selectable) up to 100%.
- ❖ RF/MW choke/timer provision.
- ❖ Required electrical & thermal safety features for microwave generator.
- ❖ Variable frequency (Belt speed control).

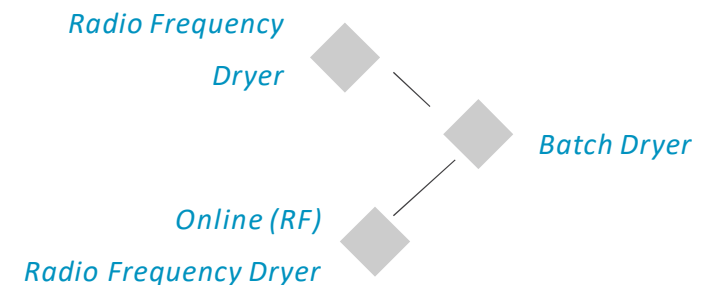
RADIO FREQUENCY HEATING

Specialized in designing & manufacturing
Radio Frequency (RF) heater & Dryer :



- Radio Frequency (RF) heaters came as revolution to in process of heating and drying to reduce the time it used to take with the conventional systems. The demand of situation was good quality oriented manufacturer who can engineer and develop such heating and drying equipment that can fit into the specialized need of the market.
- Kerone is holding vast experience in designing, manufacturing and installation of customized Radio frequency (RF) industrial dryers for various industrial applications based on the need and suitability of client's process requirements. The radio frequency (RF) dryers manufactured in Kerone are strictly follow the defined international standards.

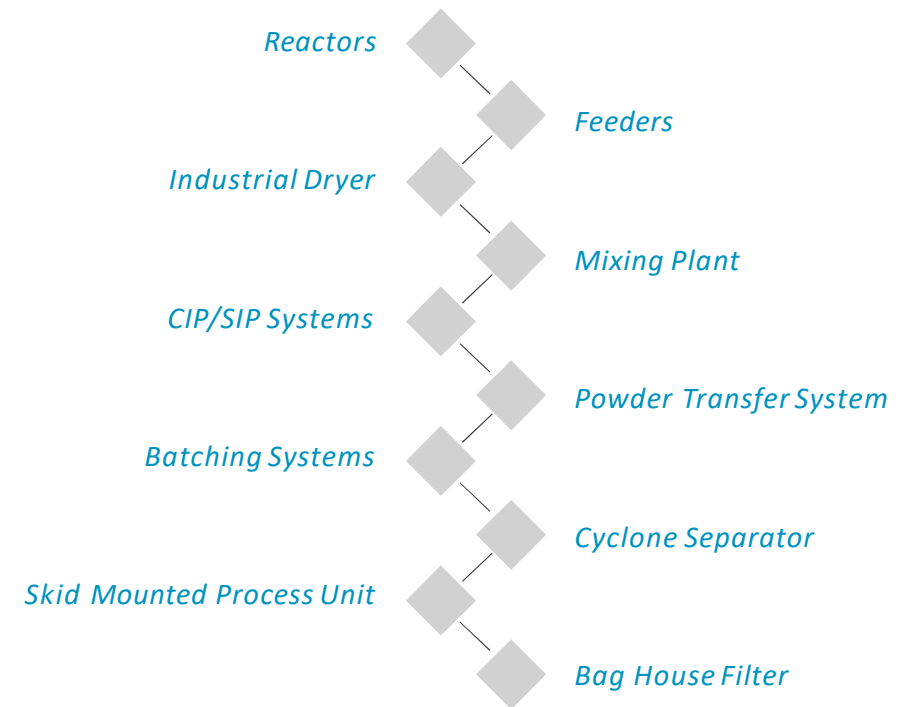
Product Range





PROCESS EQUIPMENTS

The process Equipments/Plants are usually consisting of the following



Wet Laid Paper Manufacturing Pilot Plant



Silicon Encapsulation Plant



POP Bandage Tape Loading and Mixing Plant



❖ Reactors:

Reactors are vessels designed to contain chemical reactions.

We Design and Manufacture Reactor for:

- ★ Chemical
- ★ Pharmaceutical
- ★ Petrochemical



❖ Feeders:

Feeder guides the chemicals, materials and ingredients into a processing machine and equipment

Types of Feeders:

- ★ Continues Feeder
- ★ Batch Feeder



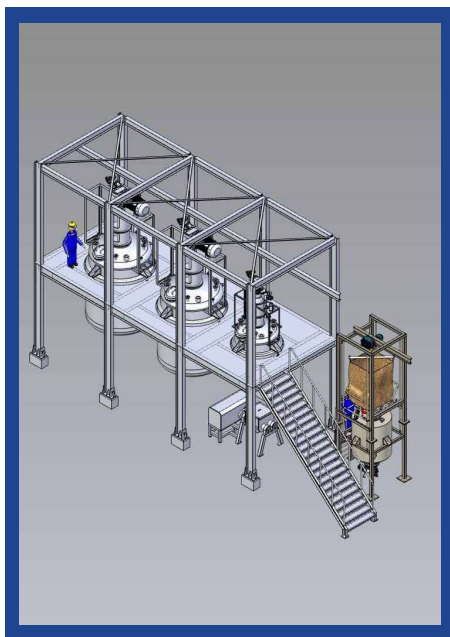


❖ *Mixing Plants:*

Mixing reactors are very commonly used for solid dissolution , product mixing, chemical reactions, batch distillation, crystallization, liquid/liquid extraction and polymerization

Application of Mixing Plants:

- ★ *Chemicals Plant*
- ★ *Paint Manufacturing*
- ★ *Pharmaceutical Industries*



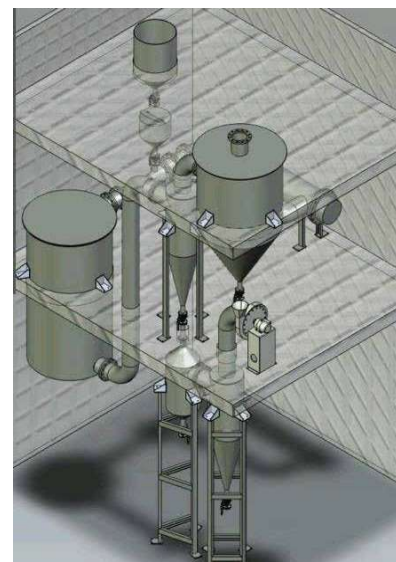
❖ *Powder Transfer System:*



The PTS Powder Transfer System is an extraordinarily efficient and dependable technique of conveying and dispensing dry and wet powders and granules

Main Components:

- A vacuum conveying system utilizing Roots Blower, Modular construction equipment.
- Jet Air Wand with Air regulating Damper.
- Jet Air Wand fitted with stainless steel wire mesh to stop foreign particles entry in to process.
- Entire transfer through electro polished pipe with curvilinear bends and isolating valves both manual and pneumatically actuated.
- Suitable filters pleated 5 micron in the product unloading chamber, pulse jet type for inside cleaning.





❖ Process Plant:

Process Plants are large scale manufacturing setup, the main objective of such setup is to help the companies involved in the large scale manufacturing process.

Industries with its process plants:

- ★ Chemicals Plant
- ★ Biochemical Plant
- ★ Oil Refineries
- ★ Pharmaceutical Plants
- ★ Food & Beverages



❖ CIP/SIP Systems:



The CIP/SIP systems together helps in maintaining the desired level of hygiene, by continuously killing the germs

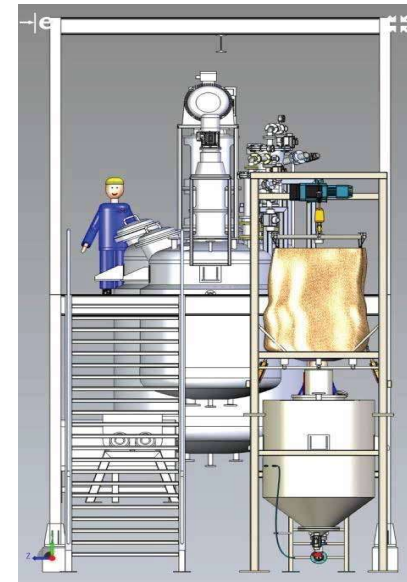
Types of Industrial Dryers:

CIP (Clean-in-Place):

CIP (Clean-in-Place) systems offers the arrangement for cleaning/sterilizing the interior surfaces of vessels, equipment, filters, pipes and fittings, without disassembly them.

SIP (Steam-In-Place):

SIP (Steam-In-Place) Systems are liable for frequently steaming parts of product contact, vessels, flow paths, and sample ports.

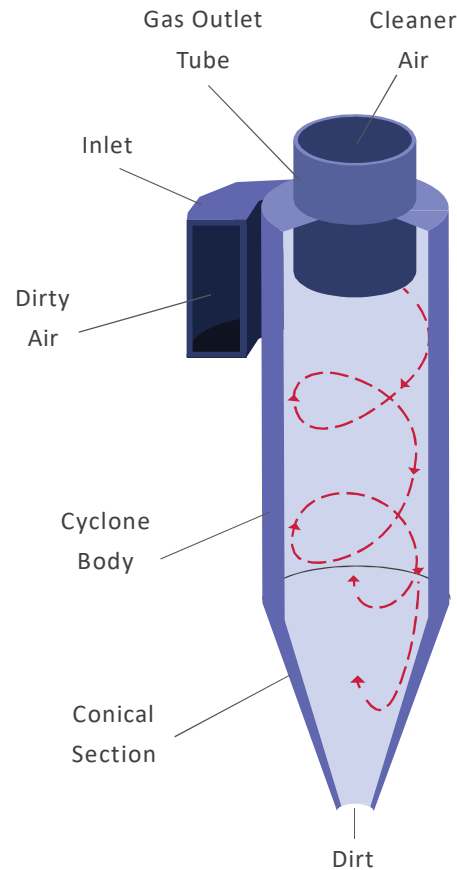


❖ Cyclone Separator:

Cyclone Separator is used to separate the solids from the air, gas and liquids without any filter.

Operating Principle:

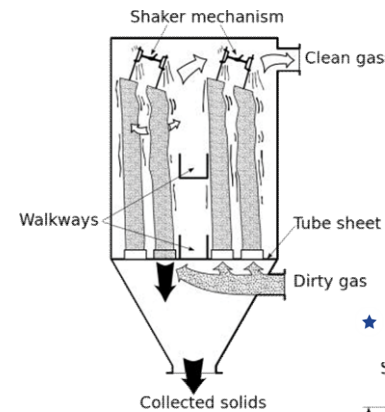
Cyclone separator operates on the principle of the centrifugal force. The separation depends on both the particles size and the density of the particles.



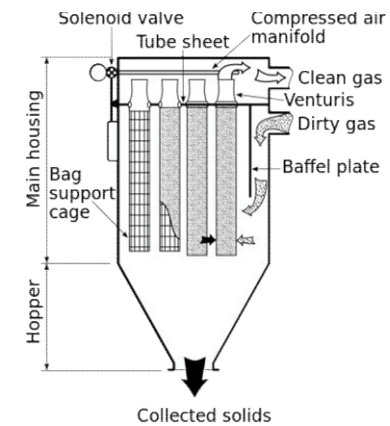
❖ Bag House Filter:

The Bag house or fabric filter is an air pollution controlling mechanical setup; it removes the contaminations from the air/gas released from the industrial processes.

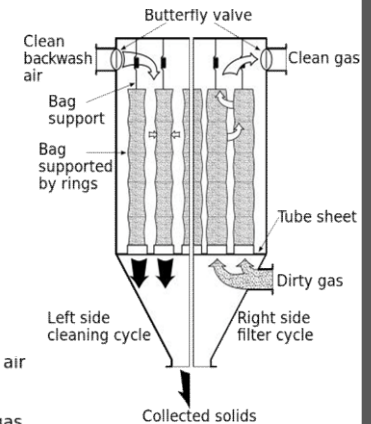
★ Mechanical Shaker Baghouse



★ Reverse Jet Baghouse



★ Reverse Air Baghouse





SPECIAL PURPOSE MACHINE

Designing & manufacturing Special Purpose Machines across industries for various applications:

Design for Specialized Needs

Special purpose machines are those machines which are especially designed and built to answer the specialized needs.

Across Industries

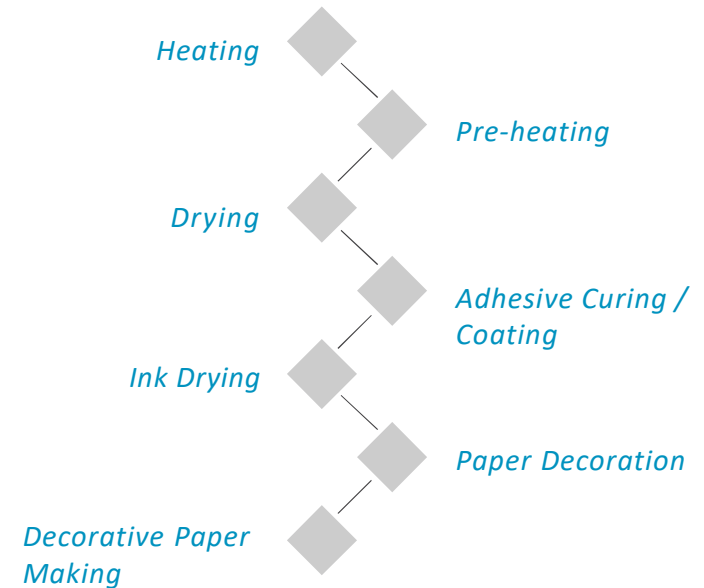
We provide design and build various heating systems for various special purpose applications across the industries.

Critical Project for KERONE

Every single special purpose machine is treated and handled as a critical project for KERONE.

PAPER INDUSTRY

- ◆ *Infrared Paper Coating & Drying Machine processes have proved its importance in today's time where the paper industry has undergone tremendous change and conventional drying method is replaced by high intensity electrical infrared drying and coating.*
- ◆ *High intensity infrared drying allows evaporation of eight to ten times more water than conventional drying method per square meter which provides for improved quality, fast immobilization, space saving as well as simplified sheet runs.*



◆ Gravure coating plant for paper



◆ Coating Plant for Label Stocks



◆ Adhesive coating plant for medical tapes



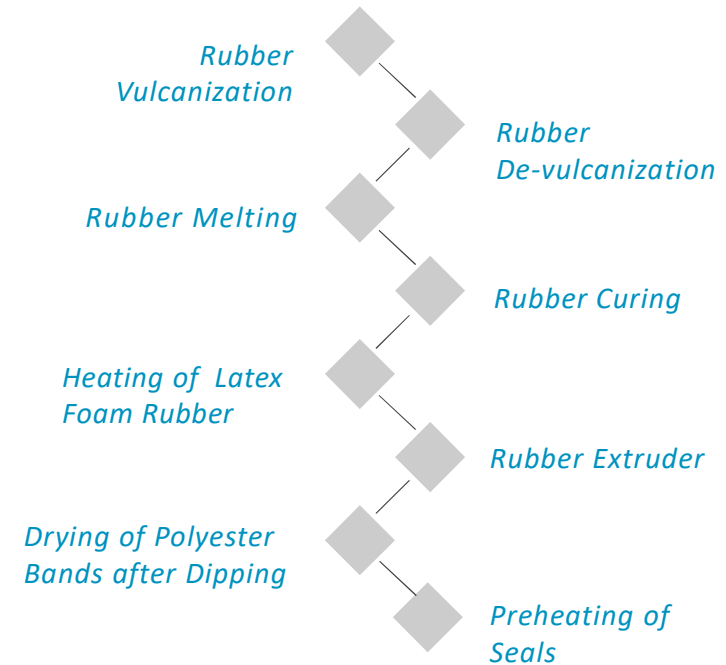
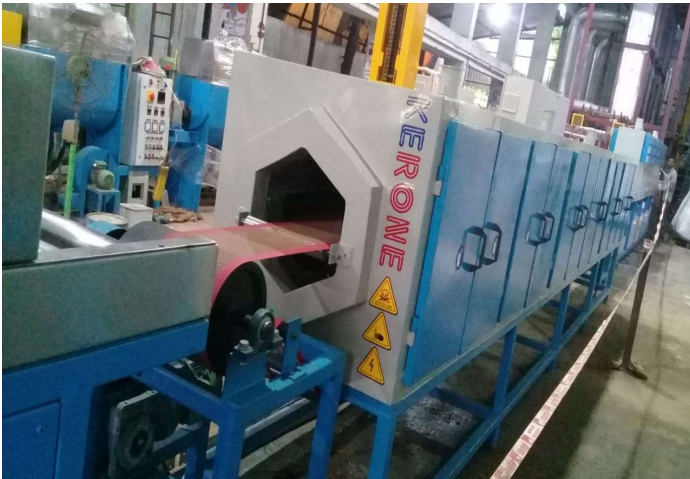
◆ Filter Paper Corrugation Plant for Automotive



◆ Filter Paper Coating & Corrugation Plant for Automotive.



- At Kerone, we are helping many rubber processing giants with its highly advanced and sophisticated microwave and IR based heating solutions for Heating, Pre-heating and vulcanization processing.
- For rubber manufacturers vulcanization is very critical process as it gives the strength and durability that is required for any rubber to get moulded and utilise for any application.
- Continuous microwave vulcanization curing plants designed by Kerone is very cost effective solution for the processors of rubber as our Continuous Microwave+IR vulcanization curing systems accelerator the process of vulcanization by putting rubber under high temperature and pressure, this results in high quality processed rubber.





FOR RUBBER INDUSTRY

Batch Microwave System for Pre-Heating of Rubber Tyre Prior to Moulding



Continuous IR Heating System for Curing of Automotive Rubber Gaskets



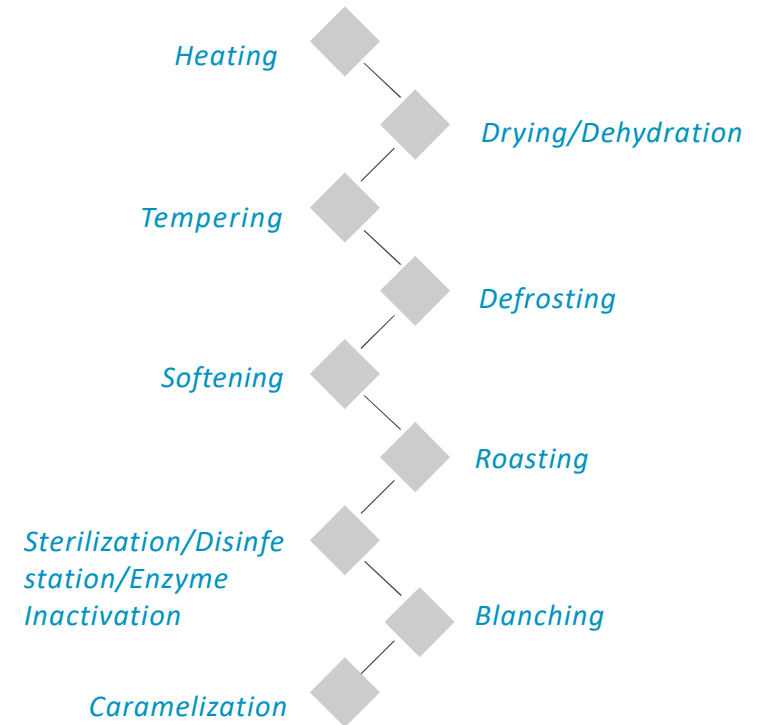
Batch Gas Convection Heating System for Automotive Gasket Curing



Conveyorized Microwave Hybrid Heating System for Curing of Rubber Profiles



- ◆ The food industry is a complex and much of the food energy consumed by the world population. The food industry is taken into consideration electro-magnetic heating is useful in many processes like as post bake drying, softening, defrosting , roasting etc.
- ◆ Heating equipments manufactured by Kerone are totally safe to handle. As heating is carried out at low temperature in our equipments the important properties of food products like smell, color, shape etc. remain unchanged.
- ◆ **Technology options available :**
For every specific target substance or material, we provide different technological options to choose from.
Continuous conventional dryer, Hot air assisted drying, Vacuum assisted E-drying, Hybrid approach i.e. Used RF/MW technology in your pre-post stage of your existing plant and MW technology for Sterilization & Disinfestation.





ADC 2019 SOME OF OUR INSTALLATIONS

INDUSTRIAL DRYERS

- ◆ *Infrared Heating System for Preheating of Non-woven Laminates prior to Moulding*



Hot Air Dryer



- ◆ *Imperial and Band Dryer Food Industry*



◆ *Microwave Dryer*



◆ *Conveyorized Infrared Dryer*



◆ *Radio Frequency Dryer*



◆ *Box Convection Dryer*



◆ Tray Dryer



◆ Microwave Dryer



◆ Rotary Dryer



◆ Fluidised Bed Dryer



◆ Tunnel Hybrid Dryer



◆ Flash Dryer



◆ Rotary Drum Dryer



◆ Batch Dehydrators



Continuous Microwave Sterilization System (Throughput 250kgs/hr)



Continuous Microwave System for Disinfestation of Pistachios (Throughput 2-2.5TPH)



Batch Microwave Heating System



Conveyorized Microwave System



Lab-scale Batch Microwave Heating System



Process :	<i>Batch Convection Heat Treatment for Drying of Jarosite Slurry</i>
Requirement:	<i>Final product must have moisture content less than 20%</i>
Sample Preparation:	<i>Lime solutions of having pH around 12 has been prepared and added in given Jarosite slurry until it attains pH 7. The final slurry of pH 7 is then dried with uniform thickness of 6 mm</i>

BEFORE AND AFTER PICTURES OF TREATED SPCIMEN SAMPLE:



Initial Moisture Content: 63%



Final Moisture Content: 8%

RESULTS AND OBSERVATIONS:

There is complete drying with required final moisture at 55°C in 1 hour for 1kg of sample . It has been observed that there is no colour change with free flowing texture.

Process :	Batch Convection Heat Treatment for Drying of Instant Noodles
Requirement:	<i>Final product must have moisture content between 8-10%</i>
Sample Preparation:	<i>Steamed noodles cakes (whole) have been dried without adding any additive to achieve even drying characteristics.</i>

BEFORE AND AFTER PICTURES OF TREATED SPECIMEN SAMPLE:



Initial Moisture Content: 30%



Final Moisture Content: 9%

RESULTS AND OBSERVATIONS:

There is complete drying with required final moisture at 70°C in 5 hour for 1.5kg of sample . It has been observed that there is little colour change with required brittle texture.

Process :	Batch Microwave Heat Treatment for Sterilization of Chickpea Protein Powder
Requirement:	Sterilization without degrading Protein
Sample Preparation:	For this experimental run, Chickpea Protein Powder has been sealed packed in microwave transparent bags and placed in microwave heating system for different setting parameters to achieve sterilization treatment.

BEFORE AND AFTER PICTURES OF TREATED SPCIMEN SAMPLE:



OBSERVATIONS MICROBIOLOGICAL TEST RESULTS:

It has been observed that there is no damage to sample with required product temperature.

Parameters	Sample No. 1	Sample No. 2
Batch Size (grams)	500	500
Microwave Power(kW)	0.9	0.8
Product Temperature(°C)	60-70	60-70
Cycle Time(minutes)	12	15
Protein	85.60%	84.06%
TPC CFU/g	830	640
Yeast & Mold CFU/g	Absent	Absent

Process :	<i>Continuous Infra-red Heat Treatment for Drying of Metal Slime</i>
Requirement:	<i>Final moisture of product should be equal to or less than 10%</i>
Sample Preparation:	<i>The experiment has been performed on metal slime without adding any additive under continuous infrared heating system to speed up the drying rate with 20 mm thickness of layer.</i>

BEFORE AND AFTER PICTURES OF TREATED SPECIMEN SAMPLE:



Initial Moisture Content: 32%



Final Moisture Content: 8.5%

RESULTS AND OBSERVATIONS:

There is complete drying at 160°C in 10 minutes for 800 grams of sample. It has been observed that there is no burning effect with required final moisture content.

Process :	Batch Microwave Heat Treatment for Rubber Preheating
Requirement:	<i>Temperature of core of product after treatment must be range between 60-70°C</i>
Sample Preparation:	<i>For this experimental run, rubber slabs has been placed on turntable in microwave system and then microwave heating treatment has been given for various parameters to achieve the requirement.</i>

PICTURES DURING TRIALS:



RESULTS AND OBSERVATIONS:

It has been found that preheating of natural rubber, which is having low elastic properties, when exposed to microwave radiation, it get more resilience and elasticity. The requirement of core temperature is successfully achieved with temperature gradient 8°C in 2 minutes.

Process :	<i>Continuous Microwave+Infrared Heat Treatment for Drying of Neem Leaves</i>
Requirement:	<i>Treated leaves should be almost dry with minimum moisture content</i>
Sample Preparation:	<i>For this experimental run, Neem leaves on conveyor has placed in such a manner that it forms uniform layer for air to circulate for achieving even drying characteristics.</i>

BEFORE AND AFTER PICTURES OF TREATED SPECIMEN SAMPLE:



Initial Moisture Content: 60%



Final Moisture Content: 7%

RESULTS AND OBSERVATIONS:

It has been observed that there is uniform heating and no burning effect with required moisture content and crunchy texture in 16 minutes of 3 kW microwave power and 60°C IR temperature.



Since the last 42 years, accuracy, efficiency, machine quality and output quality are not just words but KERONE's lifetime commitment towards our profession since its inception, creating a base of more than 1000 loyal customers. Our systems are used to meet the varying demands of numerous industrial applications – all with a level of precision that manufacturers seek. Fulfilling demands as per client's specification has been our USP and we strive to carry the same forward. We also provide detailed assistance for installation without much hassle of complex functioning of the machinery. We always strive to achieve more than client satisfaction with our timely delivery, quality and efficiency towards all equipment manufactured by us.



Trusted
PARTNERS





Our CLIENTS





Our
CLIENTS





UNIT I

B/10, Marudhar Industrial Estate, Goddev Fatak
road, Bhayander(E), Mumbai-401105

Phone : +91-22-28150612/13/14

UNIT II

Plot No. B-47, Addl. MIDC Anandnagar,
Ambernath (East), Dist. Thane- 421506

Phone : +91-251-2620542/43/44/45

UNIT III

Kerone Engineering Solutions LTD.,
Plot No. W-104, Addl. Midc Anandnagar,
Ambernath (E), Dist. Thane (India)- 421506

Phone : +91-251-2620546

UNIT IV

Kerone Engineering Solutions LTD.
(EMitech) , Viale della Palma, 7, 70033
Corato BA, Italy (Europe)

UNIT V

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

EMAIL

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

WEBSITE

www.kerone.com | www.kerone.net | www.keroneindia.com