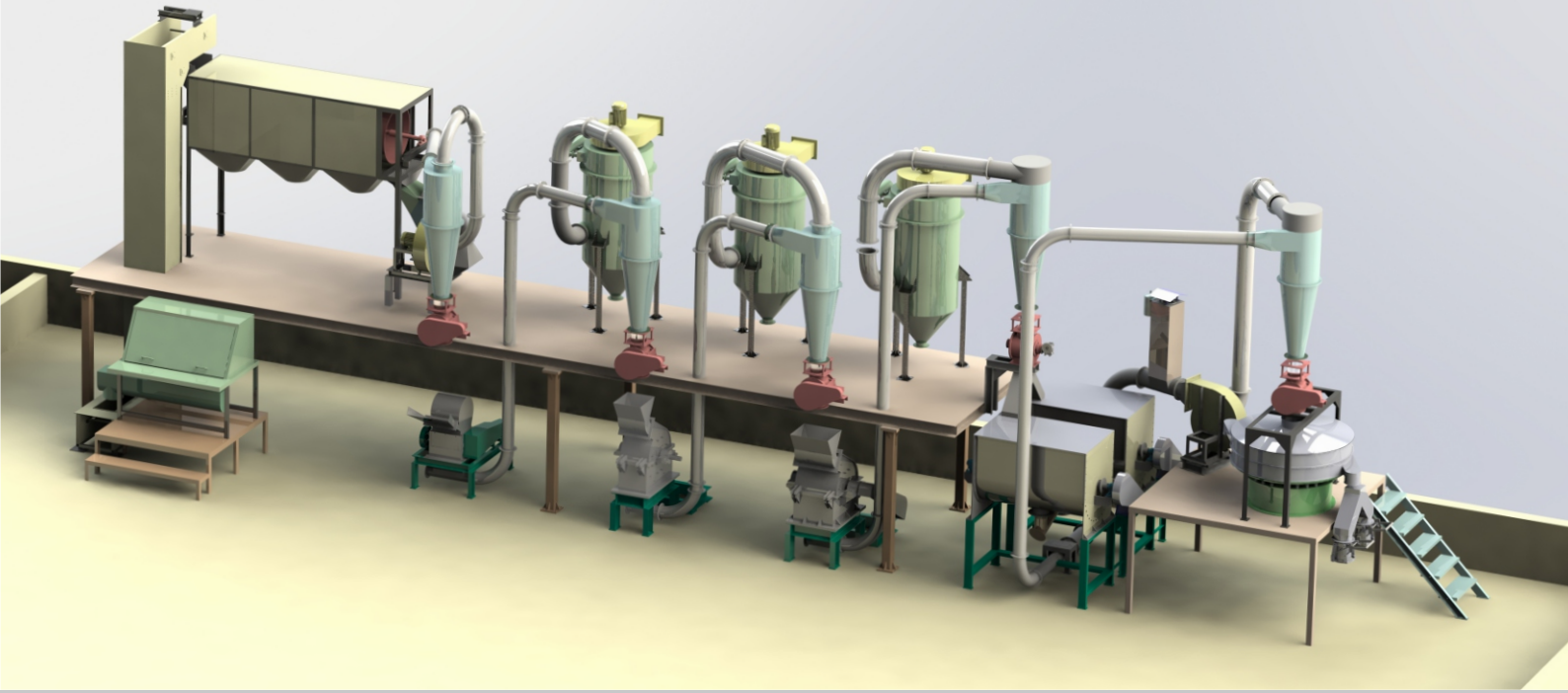
LITHOTECH ENGINEERS LLP



Manufacturer of :

Customized Spice processing systems with latest technology.

Pulverizing | Batching | Conveying | Sieving
Blending | Roasting | & Drying systems.

FINE

Towards Perfection Through Innovation

Office: Unit No. 6, Bldg. 7, Merchant Industrial Estate, Waliv Road, Vasai (E). Palghar-401208, Maharashtra, INDIA

LITHOTECH ENGINEERS LLP

ABOUT US

LITHOTECH ENGINEERS was started in the year 1994. From the very inception the objective was to provide simple and cost effective solutions in the field of **size reduction technology**. We have been very innovative in our approach and are proud to claim that we have not sold just machines but provided optimum solutions . We have a very exhaustive experience of over three decades of providing machineries to process various products major being Spices, Ayurvedic Herbs Roots, Herbal products, Sugar for various applications such as confectionery, Bakery. Homeopathic Medicines, Biscuits, Food colours, pharma, etc.

Presently our major focus is the spice industry which has not seen a major technological upgradation for the past many years. Initially we began with providing only grinding machinery however gradually we have developed and we now provide complete end to end turnkey solutions with complete automation.

We have a Production unit in Vasai (Suburbs of Mumbai) with a strong vendor base to cater to excess demand.

In the food industry especially the spice sector there has been a special thrust on the quality standards being maintained in the food processing industry. Various quality certification agencies have started providing their services as that assists the processor to easily market their product and also get better price for the same. LITHOTECH ENGINEERS has been continuously working and developing on this front and ensured that our machineries fulfill all the quality norms set by the agencies. We have provided **customized cost effective automation** and increased the overall productivity. This is for us an unending process.

To further develop the confidence of our clients we also have a trial demonstration facility where clients can test their material and verify the results before actually placing the order. Also we have a few co-operative clients who allow our prospective clients to see the plant in running condition. This gives our clients more clarity about our machineries and also the processes.

We have supplied our equipments through out the world the major being USA, UK, Saudi Arabia, Qatar, Bahrain, Oman, Tanzania, Malaysia, Singapore, Mauritius, Bangladesh, Sudan, Nigeria, etc.

SOLUTIONS WE PROVIDE

- Grinding / Pulverizing System
- Batching System
- Drying & Roasting System
- Blending System
- Sieving
- Conveying Systems
- Feeding Systems

FEW OF OUR CUSTOMERS

EVEREST, Catch, Reliance Industries Limited, SAINT-GOBAIN, Godrej, CHOKHI DHANI, Flavarich, chukde The safest spices of India, welcome's Natural Spices, RAINBOW MASALA, Allana since 1865, Raptakos, Brett & Co. Ltd., PARAS Inspiring taste, Pitambari INNOVATIVE PRODUCTS, GADRÉ PREMIUM SEAFOOD, Medilife, ORGANIC INDIA, RAJARAM SOLVEX LIMITED, Mother's RECIPE, कुंश, Ravi, JMM, govardhan NATURALS, JUBILANT FOODWORKS, JKH exports exporters, importers & stockists, Rasoi magic MAGIC MEAL MIXES, Pidilite, One Spoon, Nimaris, madhvik

EXPORT CUSTOMERS

Carotino Singapore	Bahrain Dalla Bahrain	DV Enterprises California
Mayil Spices Mauritius	CMCI Saudi	Al Jabor Trading Qatar
Golden Africa Africa	Pran Food Bangladesh	Masud Agro Bangladesh

HAMMER MILL

The most versatile machine that is used to grind almost all materials like spices, foodstuffs, chemicals, ayurvedic herbals, minerals and other miscellaneous materials.

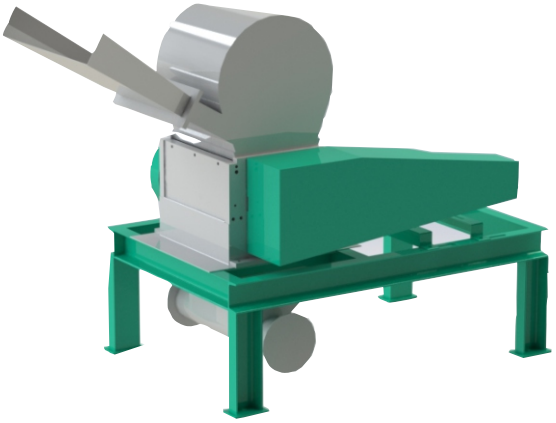
The grinding takes place between the high speed swinging hammers and top/side liners. Once the particle size reduces to that of the perforated screen at the bottom, it will be discharged through the hopper.

The fineness of the material can be controlled by changing the speed of the rotor (hammer), content of serrations on liners, number of hammers and diameter of perforation on the screen.



Models	FC-1206	FC-1508	FC-1512	FC-2215	FC-2221	FC-3621
Power (H.P.)	10	20	30	40	60	75
Capacity (Kgs/Hr.)	50-60	100-125	200-250	300-350	400-500	600-1000
Fineness Achievable	Upto 100 Mesh BSS					

CHOPPER



Chopper has been specially designed for granulating & cutting various materials like foodstuffs, agro, ayurvedic herbs, etc. into small pieces of required size with minimum of powder content. There is no heat generation while grinding thereby retaining important properties like aroma taste flavour and colour.

Some typical applications are making crushed chillies for pizza toppings, chopped / minced / granulated onions, tea-cut herbal products, granulating of food colours, gum, asafoetida, crushing of various ayurvedic herbs for Extraction purpose, etc.

Models	FCH-8	FCH-12	FCH-16	FCH-24	FCH-32
Power (H.P.)	3	5	7.5	20	30
Capacity (Kgs/Hr.)	75	150	300	800	1200
Fineness Achievable	1mm to 5mm with minimum powder				

MICRO PULVERIZER

It is utilized for soft materials like chemicals, dyestuffs, foodstuff, pharmaceutical, bulk drugs, etc. for fine grinding. Since the machine is used vastly for chemicals &bulk drugsand other heat sensitive materials, it has a built in water jacket to control the temperature in the grinding chamber.

The grinding takes place through attrition between the high speed swinging hammers and the serrated liners. Due to the very high speed and a small chamber, a higher fineness is achieved as compared to hammer mill.



Models	FMP-1	FMP-2
Power (H.P.)	7.5 + 0.5	15 + 1
Capacity (Kgs/Hr.)	100	200
Fineness Achievable	100 to 200 Mesh BSS	

LITHOTECH ENGINEERS LLP

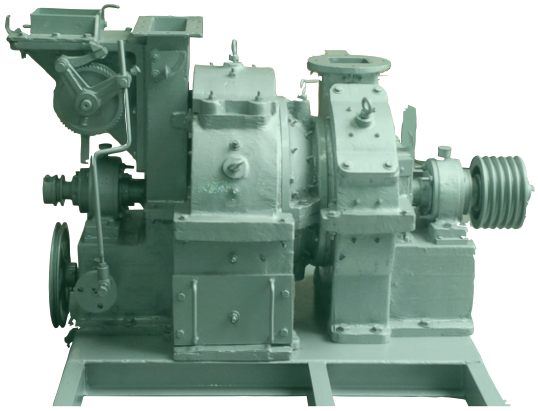
PIN MILL

This machine is used for very soft materials like sugar, salts, chemicals, dyestuffs, etc for medium fine to fine grinding. This material is centrally fed into the machine chamber. The grinding takes place between a high speed rotor consisting of a large number of pins and a stationary stator. The discharge takes place through the perforated screen throughout the periphery.



Models	FPP-300	FPP-450
Power (H.P.)	10	25
Capacity (Kgs/Hr.	150-200	400-450
Feed size (mm)	15	15
Fineness Achievable	30 to 120 Mesh BSS	

IMPEX MILL

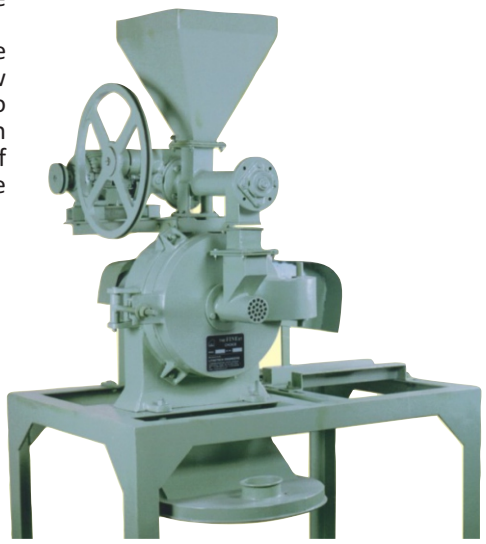


Impex Mill is a screenless pulverizer suitable for grinding hard and brittle materials like turmeric, minerals, etc. to a fineness of 100 to 300 Mesh BSS. It is done by continuous impact of rotating hammers against grinding liners. The raw material is fed into the rotary feeder from inlet hopper and spills into the grinding chamber. Strong hammering action breaks lumps into small particles. At the same time the blower sucks the air towards the whizzer classifier. Whizzer classifier doesn't allow oversize particles to pass and returns it into the grinding chamber, where after regrinding the desired fineness is achieved.

Models	FIM-15	FIM-22	FIM-25	FIM-32	FIM-36	FIM-42
Power (H.P.)	10	20	30	60	75	100
Capacity (Kgs/Hr.)	50	100	200	500	600	700
Fineness Achievable	Upto 80 - 250 Mesh BSS					

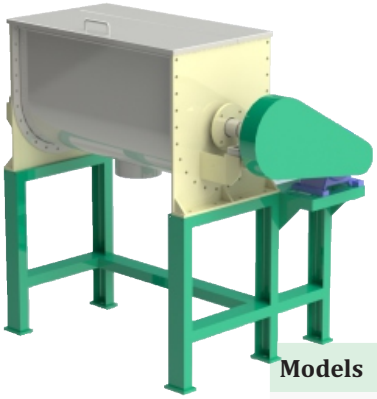
ULTRA FINE MILL

This is a screenless pulveriser used for grinding soft to medium hard materials into super fine powder. The machine have built-in water jacket to keep down the temperature in the machine chamber.
This machine is generally used for superfine grinding of food dyes, industrial dye intermediates, pharmaceuticals drugs, chemicals, etc. The feed is through the feeder screw that feeds material centrally into the machine chamber. The grinding takes place due to attrition between a high speed rotating rotor having six wear resistant tips and side liners on both side of the tips and also a turbo effect. The annular gap plate controls the flow of materials through the mill. In other words it regulates the fineness of the material. The powder is discharged through the bottom hopper.



Models	FUM-300	FUM-400
Power (H.P.)	10 + 0.5	20 + 0.5
Capacity (Kgs./Hr.)	50-75	125-150
Max. Feed size	Upto 6 mm	
Fineness Achievable	150 to 300 Mesh BSS	

RIBBON BLENDER



The Ribbon Blender uniformly blends different spices / materials. The dimensions and configuration of the ribbons are carefully balanced to provide a movement of material within the blender that avoids dead spots and gives rapid product discharge.

The outer ribbon moves the material from ends to the centre while the inner ribbon moves it from centre to the ends this cross movements allows homogeneous and a perfect blend.

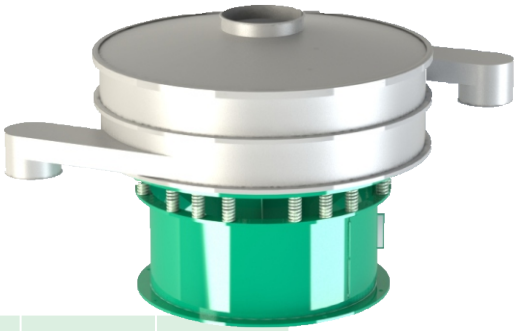
It is manufactured in Stainless Steel Contact parts.
Note: Models above FRB-250 are 'no load start'

Models	FRB-125	FRB-250	FRB-500	FRB-750	FRB-1000	FRB-2500	FRB-4000
Volume (Litres)	125 L	250 L	500 L	750 L	1000 L	2500 L	4000 L
Capacity (Chilly / Coriander powder)	50	100	200	300	500	1000	2000

GYRO VIBRATORY SIEVE SEPARATOR

Gyro Vibratory Sieve Separator are self-constrained, compact, production machines which make precise mechanical separations according to particle size through efficient use of multiplane inertial vibrations techniques. They are designed and built to solve the most difficult classifying, separating and dewatering problems.

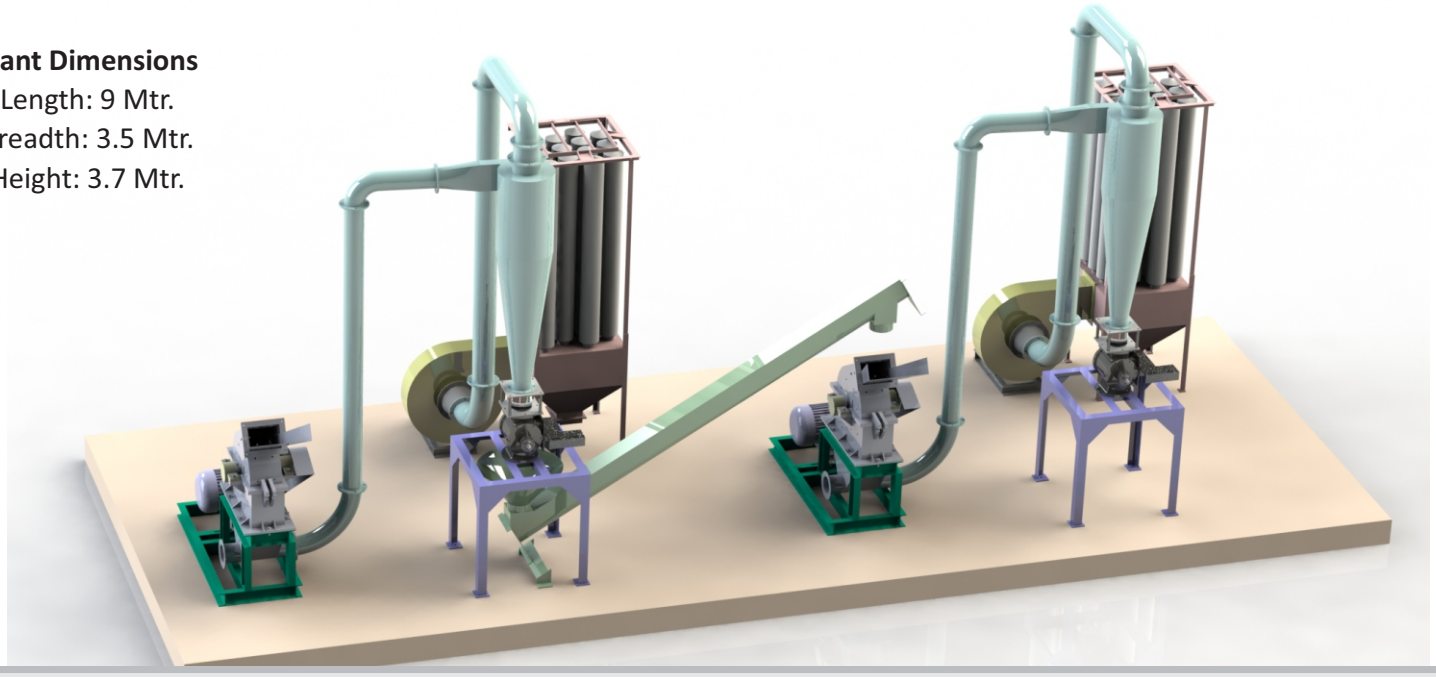
Material to be screened is fed to the top screen. Oversize particles are moved by the multiplane motion to the screen periphery where it gets discharged. Undersize particle or liquid passes rapidly through the screen. Gyro Sieve Separators are equipped to handle upto four screens



Models	FGS-600	FGS-750	FGS-900	FGS-1200	FGS-1500	FGS-1800	FGS-2400
Power (H.P.)	0.5	0.75	1	2	3	5	7.5
Diameter of Deck (mm)	600	750	900	1200	1500	1800	2400
Capacity	Will depend on screen size and feed material properties.						

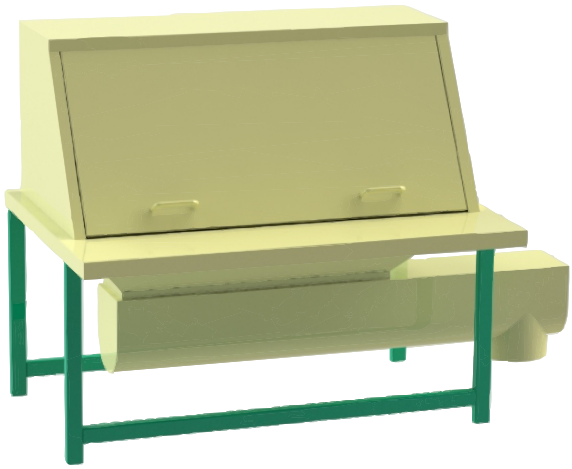
TWO STAGE SPICE PLANT

Plant Dimensions
Length: 9 Mtr.
Breadth: 3.5 Mtr.
Height: 3.7 Mtr.



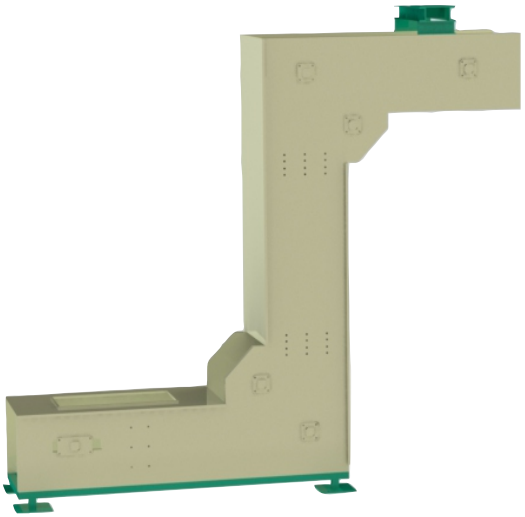
FEEDING AND CONVEYING SYSTEM

DUMPBOOTH



This equipment ensures proper feeding mechanism with controlled feed rate and dust free atmosphere. Raw materials which are normally in gunny bags are emptied on the grid inside the dump booth. Around 3 bags can be unloaded simultaneously. There is a hood above which if connected to the suction line would collect the dust generated during emptying the bags. The material slides in the screw conveyor mounted below it which conveys the materials at uniform feed rate. The speed is controlled through VFD depending upon the application. The simultaneous feeding of different spices ensures blending prior to grinding. This reduces the blending time during final blending operation.

Z TYPE ELEVATOR



Z type elevators are useful for delicately conveying granular products under most hygienic conditions. The overlapping buckets designed ensures no spillage, whereas the specially designed food grade PP buckets eliminates the chances of product contamination. The modular structure of the elevator ensures a high degree of flexibility regarding conveying to horizontal and vertical distances. The drive unit comprises of rugged chain and sprocket mechanism. The buckets are mounted on extended pins on the chains.

SCREW FEEDER



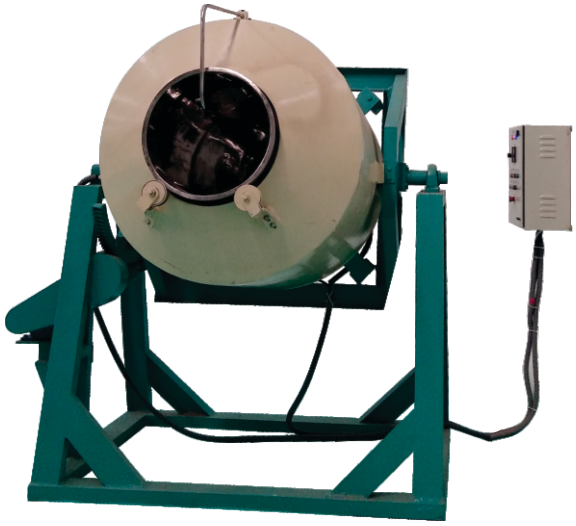
It comprises of a spiral flights fixed on a rod enclose in a pipe driven by a geared drive unit. The speed can be varied by Variable Frequency Drive. Material is received from feed hopper at the inlet at one end and discharged into the subsequent at the other end.

VIBRATORY FEEDER



This comprises of horizontal tray mounted fibre glass strips to ensure flexible linear motion. The vibration to the tray is given by an electromagnetic coil mounted below it. Due to the high frequency linear vibration of the tray, material gradually moves the material from the hopper into the tray and discharges at the other end

ROTARY ROASTER



- The Uniformity of product is achieved by 3 dimensional agitation by the agitating blades
- Enables even distribution and roasting of the material, achieving uniformity in the quality of the product, at all the times.
- Products in the drum, even during the short period of their presence in the heater, rapidly undergo roaster due to heat inertia.
- This device has a downward rotational discharge system that minimizes the time spent in the drum and thereby preventing transformation of the product due to the remnant heat in the roaster, avoiding the product from being burnt.

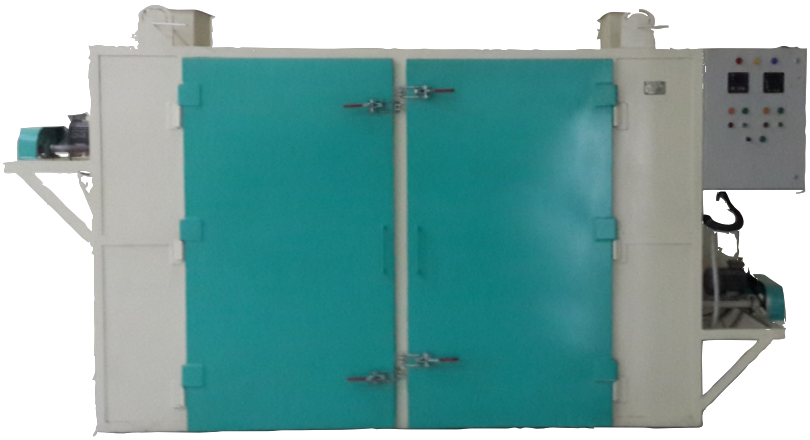
Model	FRR-125	FRR-250	FRR-500	FRR-900
Capacity (coriander)	10 - 15 Kg.	25 - 30 Kg.	50 - 55 Kg.	90 - 100 Kg.
Electrical Heater	9 KW	15 KW	21 KW	36 KW
Drive Unit	2 H.P.	3 H.P.	5 H.P.	5 H.P.
Drum Tilting	Automatic with drive unit (optional)			

ROTARY CASCADE DRIER

The rotary cascade dryer is a highly efficient drying system used in various industries. It operates by cascading material through a rotating drum, exposing it to hot air or gas for moisture removal. This design ensures excellent heat transfer and uniform drying. The dryer's versatility enables it to handle a wide range of materials and moisture contents, while its compact design and high thermal efficiency result in reduced energy consumption. With adjustable parameters for precise control, the rotary cascade dryer is a reliable solution for efficient and quality drying processes in industries such as agriculture, food processing, and chemical manufacturing.



TRAY DRIER



Tray drier is an Insulated Chamber within which hot air is continuously circulated. Forced convection heating takes place to remove moisture from the solids placed in trays.

Trolleys containing trays are dragged inside the drier.

Electrical heating elements are used to generate heat inside the drier.

Models	FTD-24	FTD-48	FTD-96	FTD-192
No. of Trays	24	48	96	192
Doors	Single	Single	Double	Double

Customized Layouts



Almond Processing System
DV Enterprises - USA



Fully Automatic Spice Plant



Chilly Grinding System
Rashi Agro - Gujarat



Sand Drying &
Sieving Plant - Qatar

Global Presence







Contact Us.

+91 74 48 094882
+91 93 24 531059
sales@lithotech.in
www.lithotech.in