



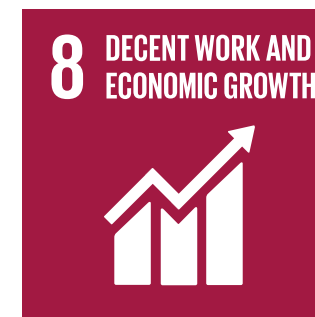
State-of-the Art Processing
Machineries and Spares

Sustainable Food Solutions

The Smartest Way to Invest in **YOUR**
Food Processing Business



THE GLOBAL GOALS

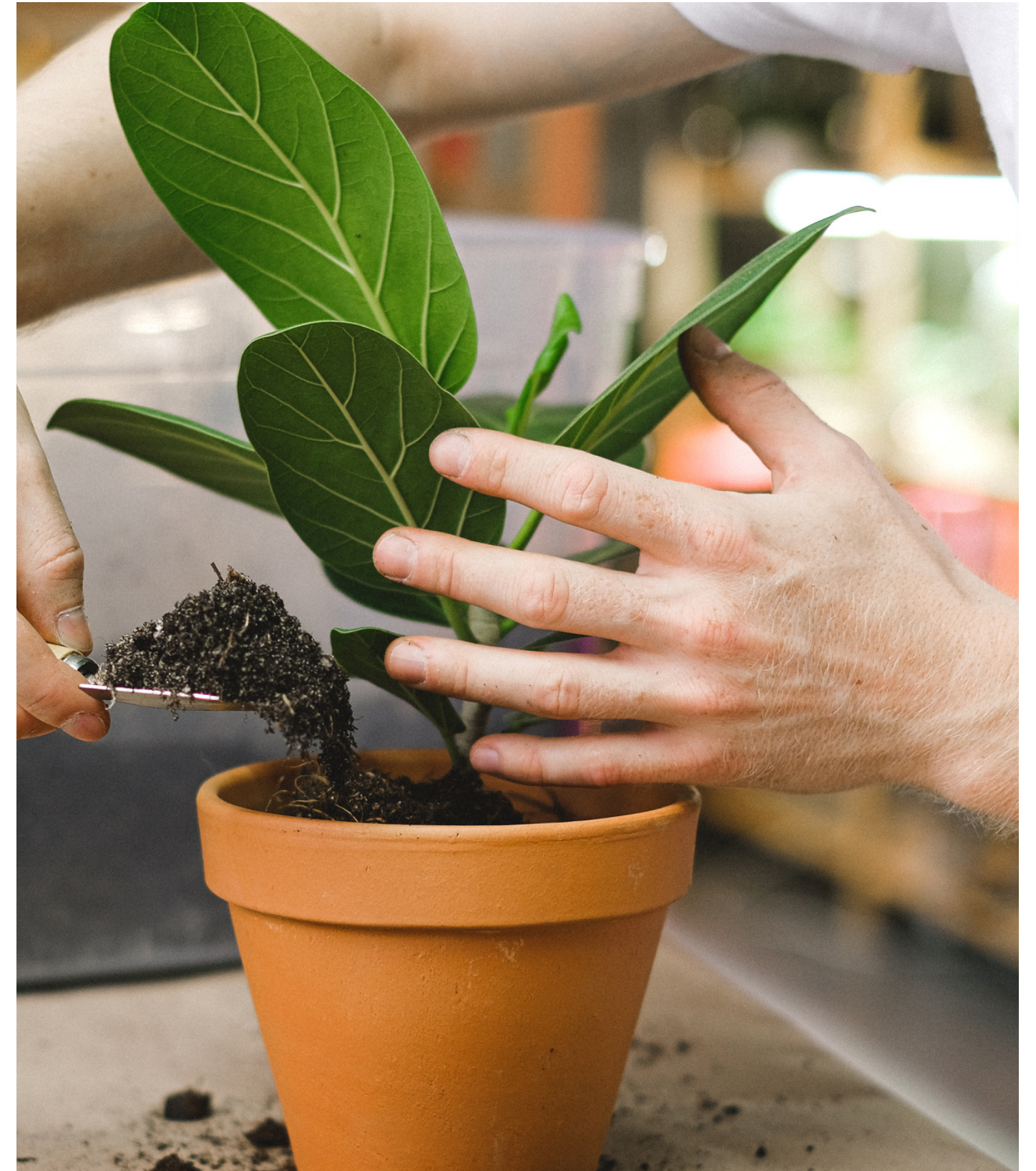


Vision and Mission

With an aim to serve the world through sustainable and integrated solutions, Ideas Innovated brings in two decades of experience in the relevant field.

Our company specializes in state-of-the-art **food processing machineries and turnkey solutions** for plants and equipment which includes tea, rice, pulses, fruits, Vegetables, spices and herbs. Competently headed by a team of specialists in machinery design and manufacture that conform to international standards, it ensures a smarter way for both nature and pocket-friendly solutions.

Mr. Vikramjit Das
Founder & CEO





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SOLUTIONS BEYOND IMAGINATION

Our Expertise

Machine and Processes specially designed for all levels of processing

- Farmers usable small scale low resource utilization products.
- Medium Scale Factory Process with semi-automatic processing products.
- Large Scale Fully Automatic Processing Plants.

Sales and Marketing Assistance with Quality Assurance for end-product and Commitment to cater to the dynamic market needs.

In-house Consultancy for Operational Guidance to ensure quality produce at competitive pricing structure for long-term profitability and sustainability.



Basic PHM Services

1. Harvesting

- Timely Crop Collection
- Weather Monitoring
- Prevent Soil Contamination

2. Drying

- Higher per Unit Value Addition
- Retain Maximum Crop Quality
- Optimum Moisture levels for longer shelf life

3. Threshing

- Lesser Storage Capacity Required
- Reduce susceptibility to pests
- By-product Generation for Alternate Profit Maximisation

4. Cleaning / Winnowing

- Remove Impurities
- Increased Quality
- Better Price Discovery

5. Storage

- Protect Product from Contamination
- Stocking for Transit
- Proper Storage leads to longer shelf life and lower wastage

6. Post Harvest Targets

- Direct Sales to Traders and Mandis
- Safe and Timely Delivery to Processing Plant
- Systematic Consignment Delivery Plan





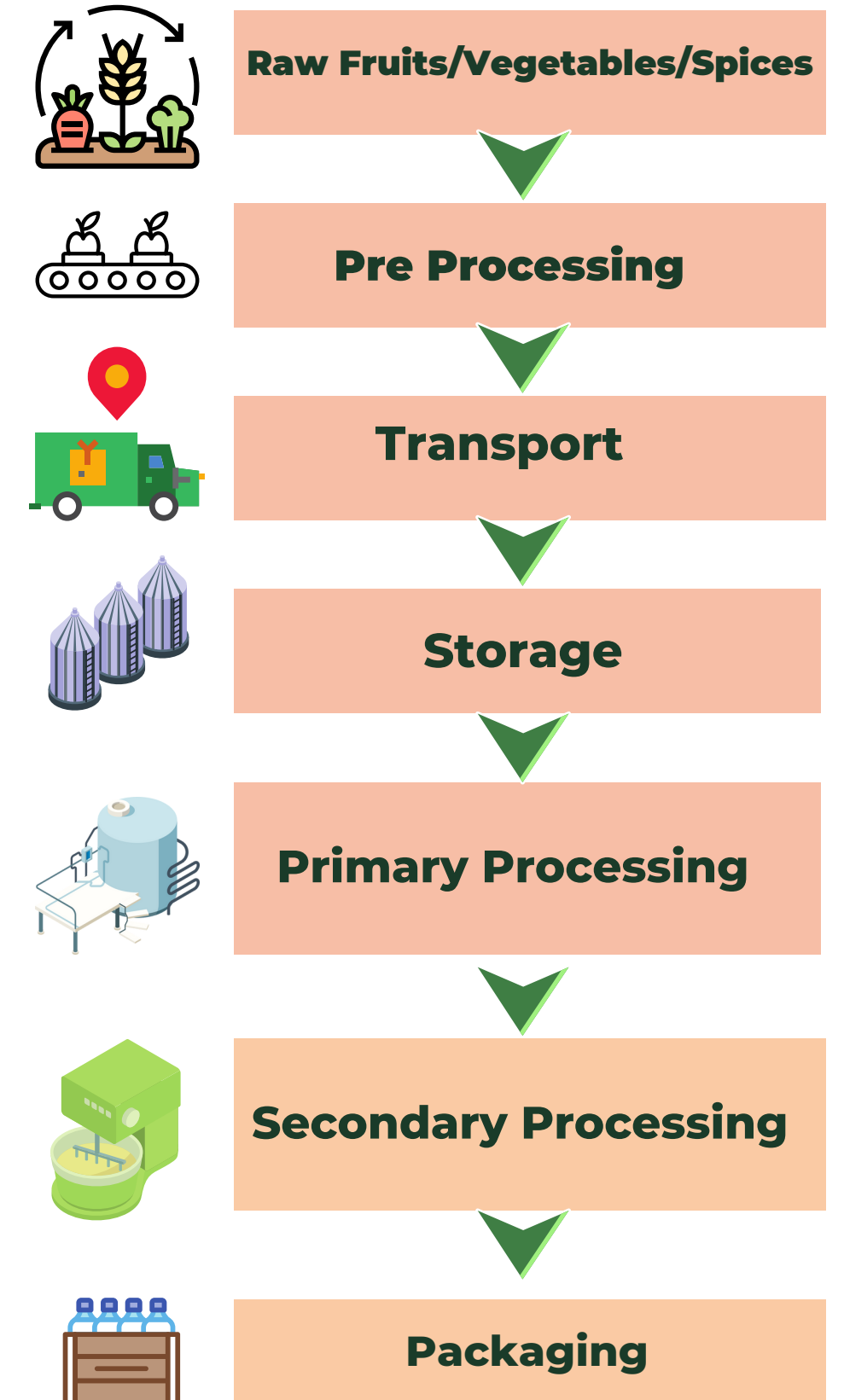
Efficiency through Design

Tailored Solutions based on Product and Geographical Location (Climate, Soil, Consumer Behaviour, Cropping Cycles)

- Every State has its own special product character.
- Special Process for ORGANIC produce to retain freshness and Goodness
- Agroclimatic Conditions and Power Supply Factors

Marketing and Sales Support through retail and wholesale channels through out APAC (Asia-Pacific) and Europe.

Continuous AMC Monitoring and Support for Meeting up with the Changing Market Trends



Ginger Processing

There are many kinds of Ginger variety in the market. Cochin and Calicut Variety are of the best kinds.

Some of the prominent indigenous cultivars are Maran, Kuruppampadi, Ernad, Wayanad, Himachal and Nadia.

States namely *Karnataka, Orissa, Assam, Meghalaya, Arunachal Pradesh and Gujarat* together contribute 65 per cent to the country's total production.

In India, China and Japan, people uses ginger as medical substances. Aromatic and medicinal oils are extracted from ginger, which helps in preparation of *ginger beer, ginger wine*. Ginger powder used in spice mixtures. In many countries, ginger used for making *Biscuits, Cakes, soup and pickle*.



Farm Fresh Ginger



Ginger Processes

Basic Cleaning/Washing

Solar Drying

Bulk Packaging

Transport to Processing Unit

Soaking / Scrubbing / Air Drying

Blanched and Made into Paste

Heat Pump Drying



Ginger Paste

Soaking / Scrubbing / Peeling

Slicing and Drying

Packing

Crushing & Packing

Pulverizing & Packing



Dried Ginger



Crushed Ginger



Ginger Powder

Ginger Process High Value

**Pre Processed
Ginger**



**Soaking Scrubbing
Peeling**



Slicing and Chopping



Essential Oil Extraction

**Ginger
Essential Oil**



Candy and Condiments

**Ginger
Candies**



Oleoresin Extraction

**Ginger Oleoresin
Extract**



Fermentation and Bottling

Ginger Beer



Turmeric Processing

Turmeric (*Curcuma longa*) (Family: Zingiberaceae) is used as *condiment, dye, drug and cosmetic* in addition to its use in *religious ceremonies*. India is a leading producer and exporter of turmeric in the world.

Andhra Pradesh, Tamil Nadu, Orissa, Karnataka, West Bengal, Gujarat, Meghalaya, Maharashtra, Assam are some of the important states cultivating turmeric.

Some of the popular cultivars are *Duggirala, Tekurpeta, Sugandham, Amalapuram, Erode local, Alleppey, Moovattupuzha*, and *Lakadong*.



Fresh Turmeric Washing



Turmeric Cooking

Turmeric Drying

Turmeric Polishing

Turmeric Grinding

Turmeric Powder



Turmeric Process

Steam Distillation

Turmeric Oil

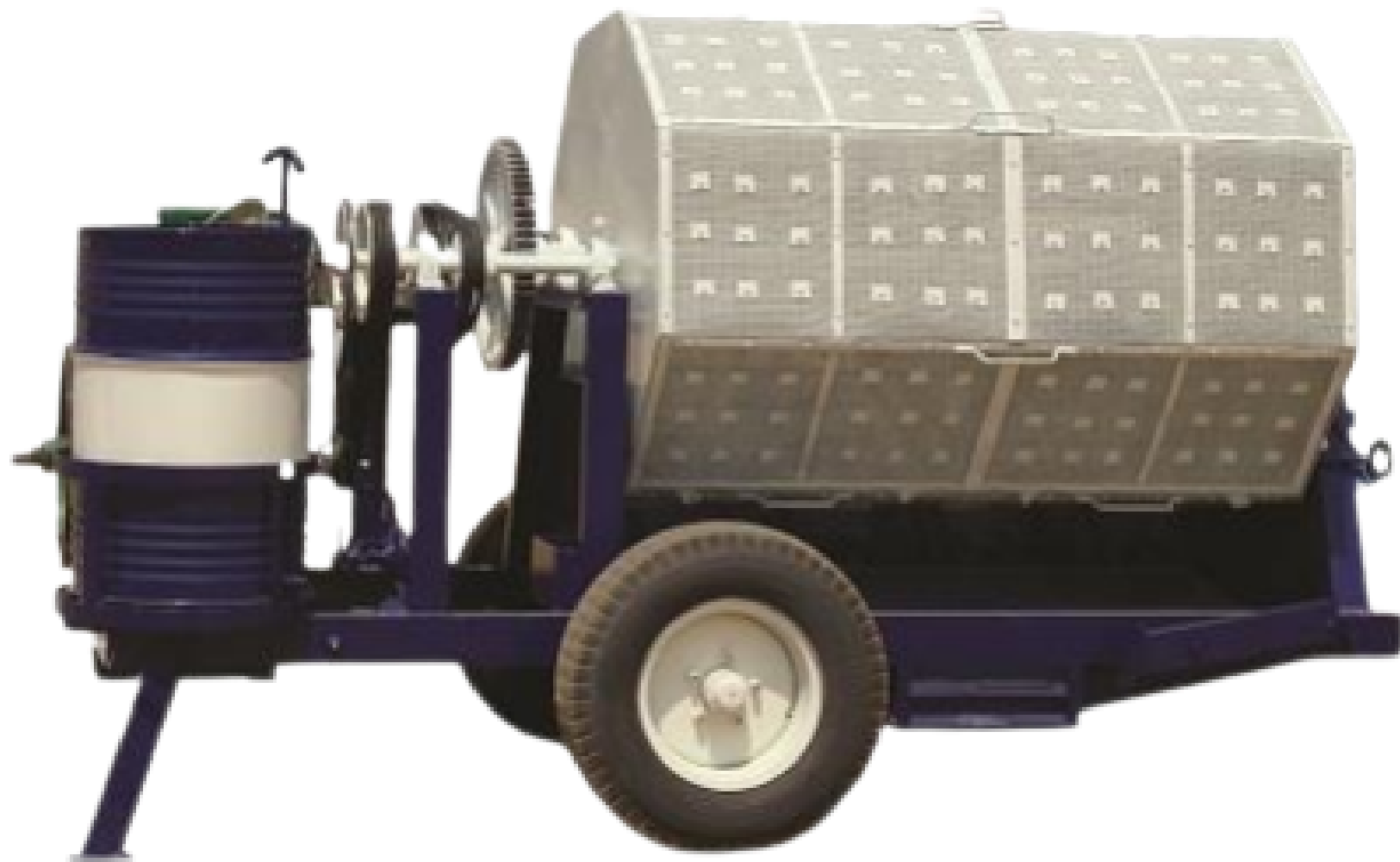


Solvent Extraction

Curcumin Extract



Turmeric Polishing



- Polishes 1100 kgs/hr
- 12 HP Diesel Engine Motor and Manual Options available
- Fixed and Mobile Options Available
- Designed with high quality steel meshes, sheets, cast pulleys and bearings
- Removes all dust particles, sediments from Turmeric

Turmeric Polishing



- Cooking 1100 kg/Batch
- 12 HP Diesel Engine Motor and Manual Options available
- Fixed and Mobile Options Available
- Heating Fuel Liquid/Solid/ Electric Options available
- Designed with high quality steel meshes, sheets, cast pulleys and bearings
- Removes all dust particles, sediments from Turmeric

Chilli Processing

India is the world's *largest producer, consumer and exporter* of chillies.

Indian chillies are world famous for two important commercial *qualities of color and pungency levels*. Indian chilli is mainly exported to Asian countries like *China, Sri Lanka, Malaysia, Bangladesh, Singapore, Thailand, UAE*, etc. In India, major chilli producing states are Andhra Pradesh, Telangana, Madhya Pradesh, Karnataka and the North Eastern States.

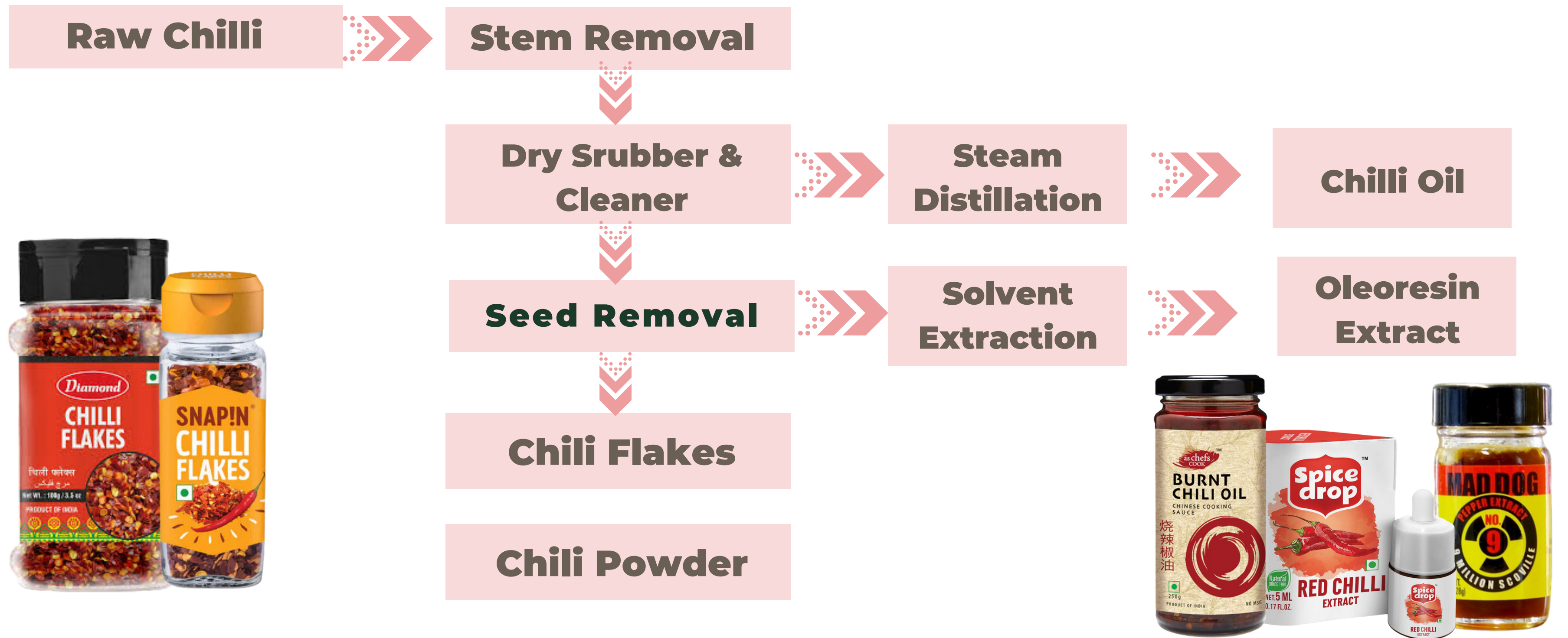
Some of the popular varieties are *BIRDS EYE CHILLI(DHANI), BYADAGI (KADDI), KASHMIR CHILLI, NALCHETTI, TOMATO CHILLI (WARANGAL CHAPPATTA), JWALA*



Chilli Process



Chilli Processing



Fruit Processing

India is the *second largest producer* of fruits and vegetables in the world after China.

However due to lack of proper infrastructure in Good Management Practices and Streamlined Supply Chain, around *18% of our produce gets wasted* every year.

Fruit processing industries can also help farmers to get sure income for their produce and also *avoid market glut between Harvesting and Consumption*.



Fruit Process

Fresh Fruit Washing



SORTING



PEELING

JUICE EXTRACTION



Purification & Filtration



Juice Material



Cylindrical Fresh



Slicing



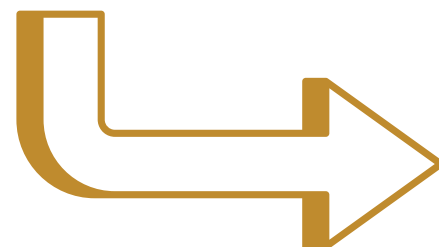
Sterilization



Whole Process



Segmentation

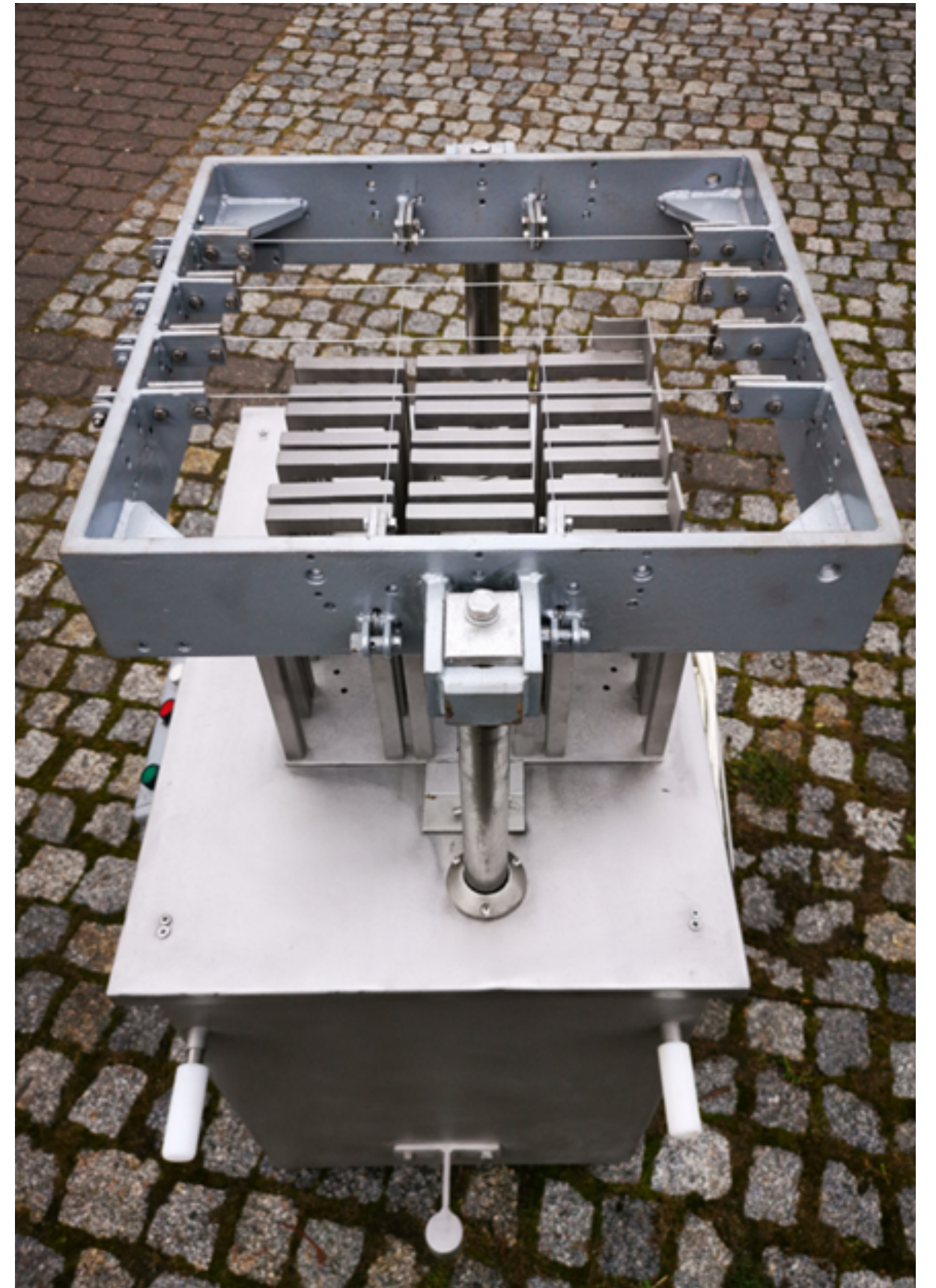


Packaging

Machines

Pneumatic/ Mechanical Dicing Machine

- Custom Built as per need
- Low Power and Single Phase Operations



Machines

Water Based Washing Line

- Relatively easy to set up
- Low Power cost



Machines

Drum type of washing machine

Spray pipe: Dia. 45x30mm,
SUS304

Water tank: SUS304 plate,
TH=1.5mm

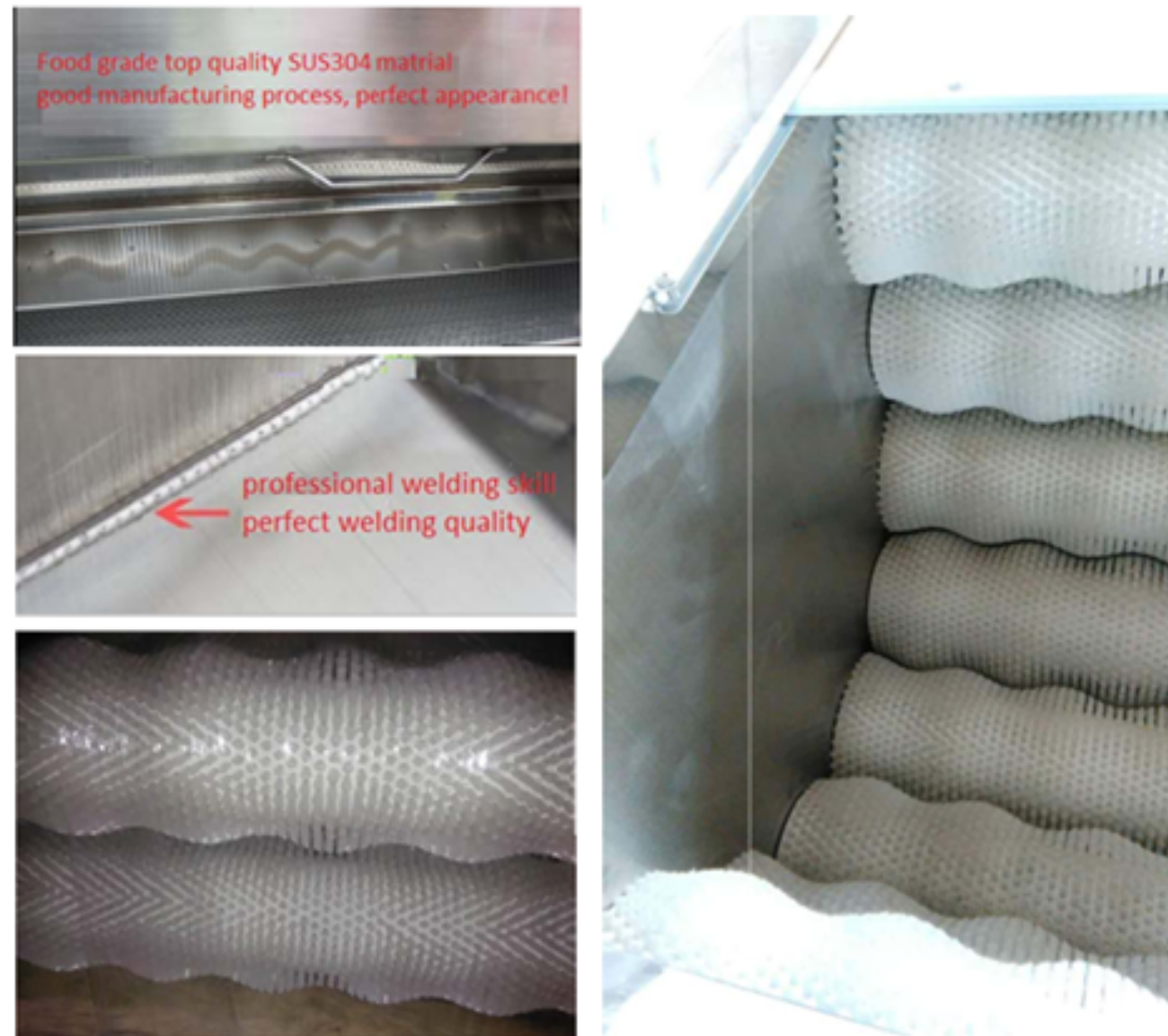
Washing drum: SUS304,
Stamping round hole
Electric power: 415V, 3PH, 50Hz



Clean ginger
(after 2 stages washing)



Machines



Brushes



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Ginger Peeling Machine



Ginger after peeling

Dewatering & Surface Drying Machine



Machines

ITEM	PARAMETER
Dimensions (L*W*H)	5000 * 1300 * 1500 mm
Rated Power	12.75 kW
Steel Material	TH = 2.0 mm, SUS304
Mesh Belt Material	W = 800mm, SUS304
Weight	1300 kg
Layout of Air Fans	Upper belt - 6 rows 12 sets Under Belt - 3 row 6 sets
Processing Capacity	1000kg/hr
Stepless speed Adjusting Motor Power	0.75kW

Machines

Cutting/Slicing Machine



Multifunctional vegetable and fruit, root slicing, shredding and dicing at other side of cutter. Such as potato, taro, sweet potato, onion, bamboo shoots, ginger, apple, carrot and papaya. You can have different size and shape by changed correspondence cutter.

Slice: 2-10 mm (customizable)

Shred: 2-10 mm (customizable)

Dice: 8mm, 10mm, 12mm, 15mm, 20mm (customizable)

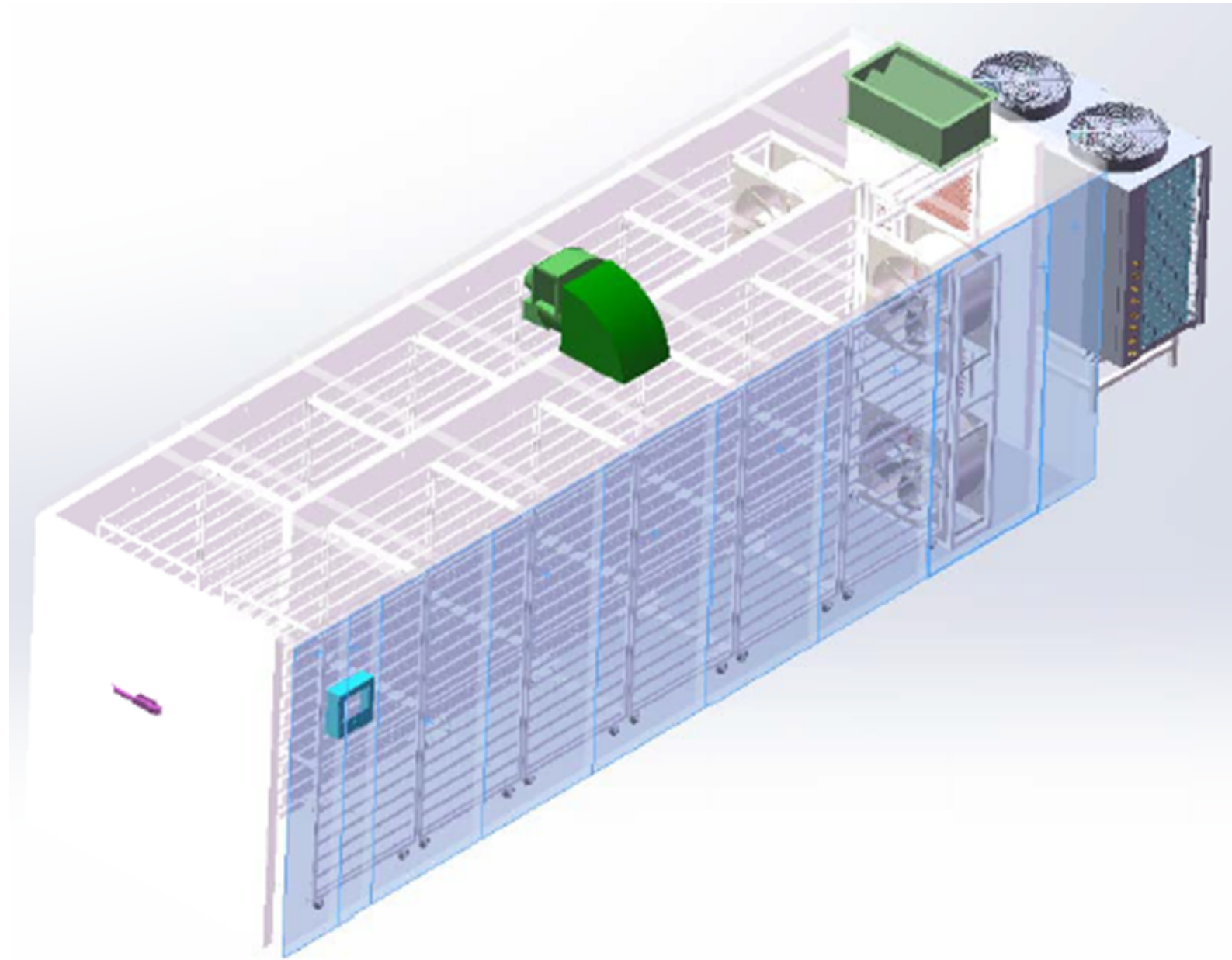




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Machines

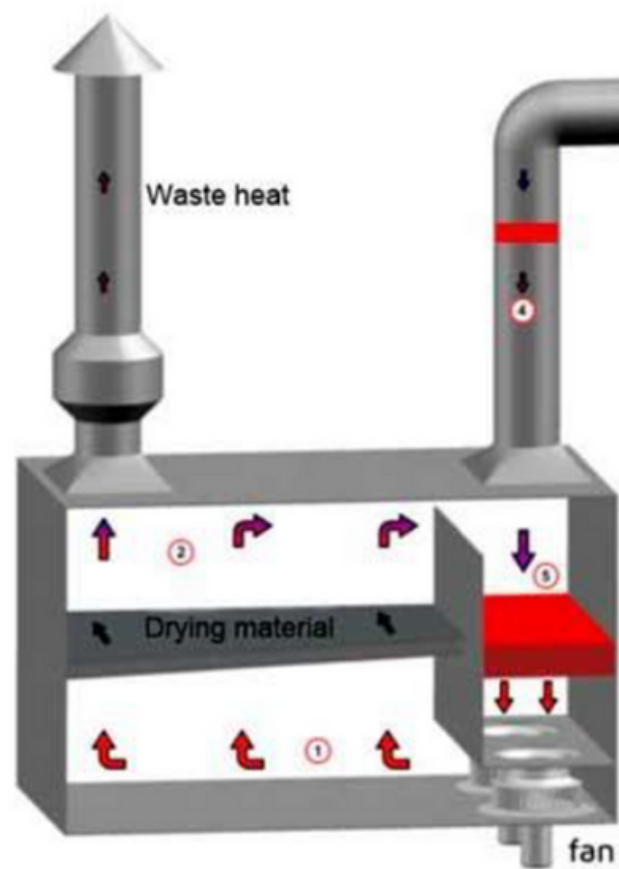
Heat Pump Dryer



Heat Pump Dryer

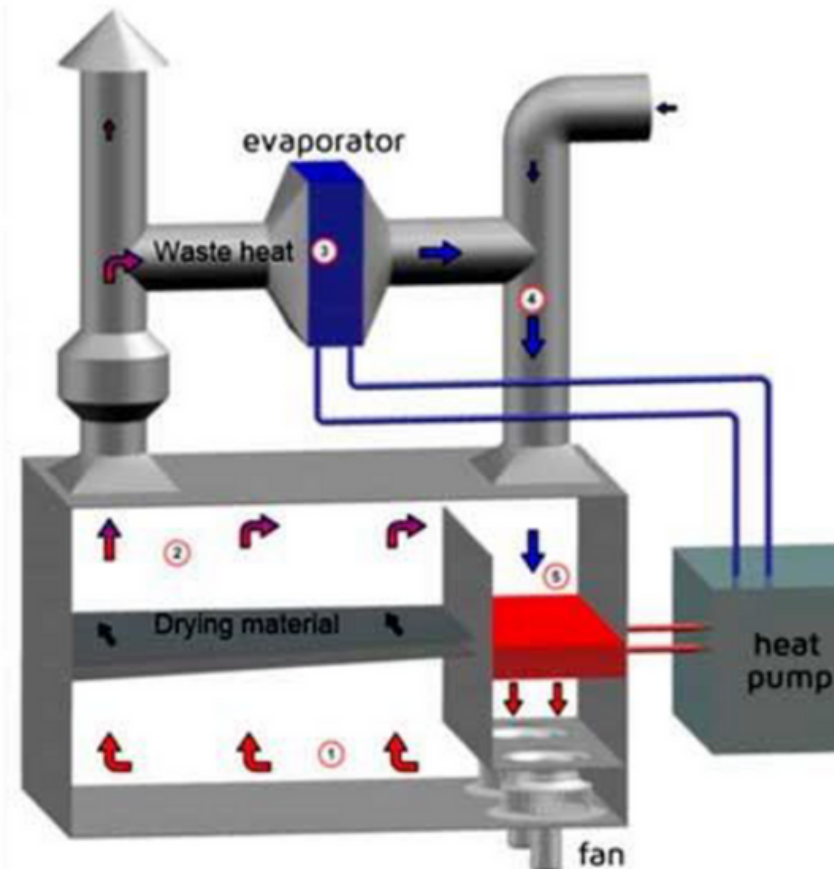


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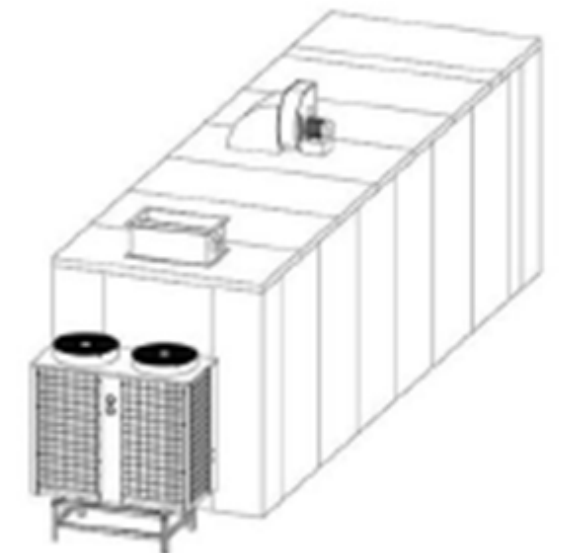
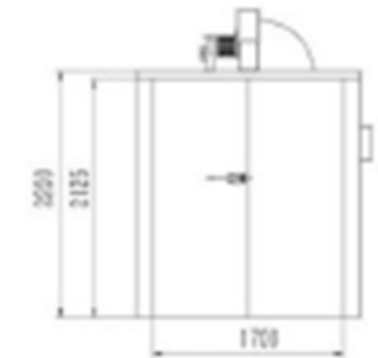
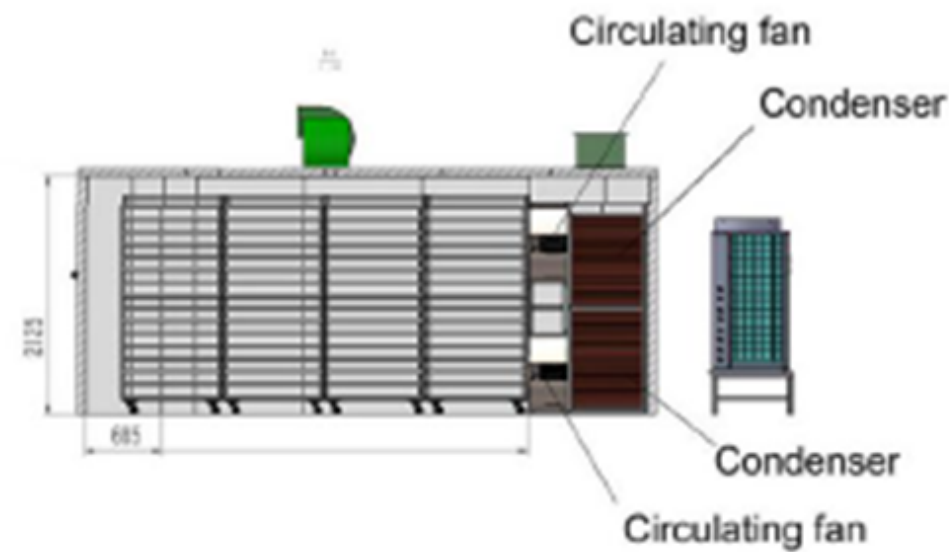
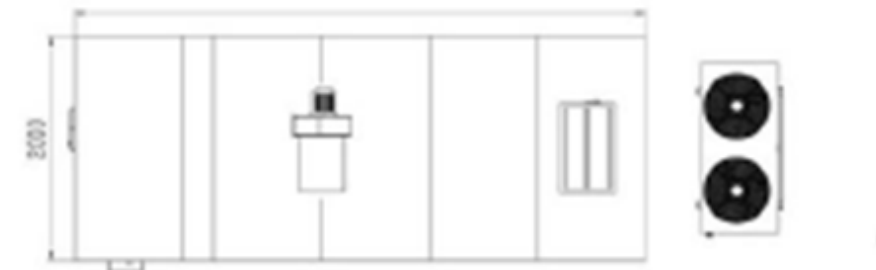
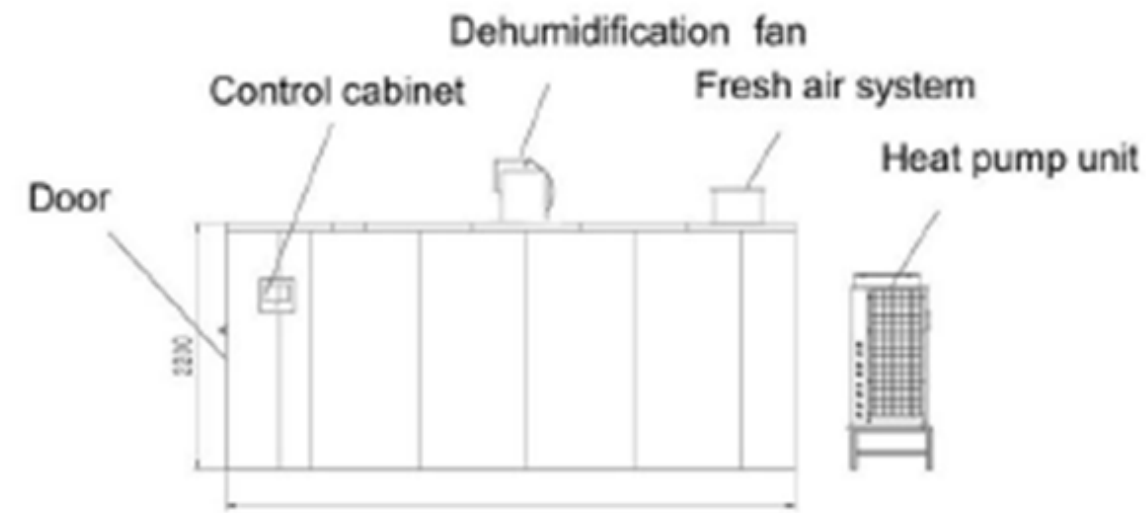


drawing 1: traditional hot air dryer

VS



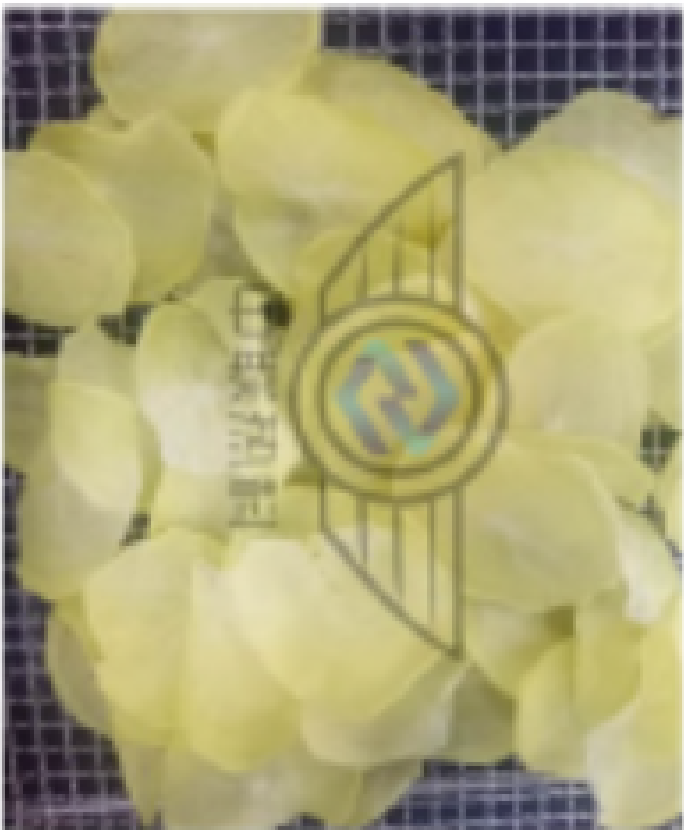
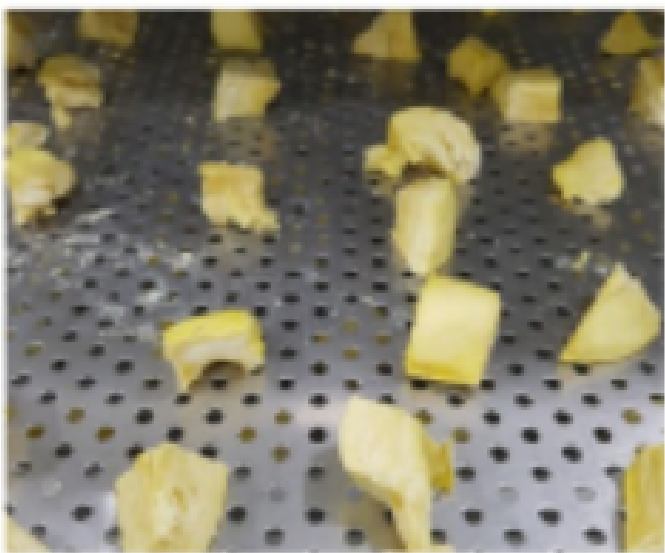
drawing 2: heat pump dryer



Heat Pump Dryer Comparision

Item	HPD Drying	Hot Air Drying	Vacuum Drying	Freeze Drying
SMER (kg/kWh)	1.0 - 4.0	0.1 - 1.3	0.7 - 1.2	0.4 and lower
Operating Temperature (°C)	-10 to 80	40 to very high	30 - 60	-35 to >50
Operating % RH range	10 - 80	Varies depending on temperature	Low	Low
Drying Efficiency	Upto 95	35 - 40	Upto 70	Very Low
Drying Rate	Faster	Average	Very Slow	Very Slow
Capital Cost	Moderate	Low	High	Very High
Running Cost	Low	High	Very High	Very High
Control	Very Good	Moderate	Good	Good

Heat Pump Drier Product Sample



Machines

Colour Sorter



Sorting Examples



Machines

Coarse Crusher



Model	BSC-200	BSC-300	BSC-400
Capacity(kg/h)	80-300	100-800	200-1000
Size of input granules (mm)	<100	<100	<100
Crushing Fineness(mm)	0.5-20	0.5-20	0.5-20
Speed of principal axis(rpm)	960	960	960
Motor power(KW)	3	5.5	7.5
Overall Size(L*W*H) (mm)(Type B)	900*600*1140	900*700*1440	900*800*1440
Weight(Kg)	200	300	3800

Model	BSC-600
Capacity(kg/h)	500-1500
Size of input granules (mm)	<100
Crushing Fineness(mm)	0.5-20
Speed of principal axis(rpm)	960
Motor power(KW)	11
Overall Size(L*W*H) (mm)(Type B)	1000*900*1440
Weight(Kg)	500

Machines

Hammer Mill



**Standard
Hammer Mill**

Model	BS-180	BS-250	BS-300	BS-350
Feed size (mm)	< 10 (granule) < 15*40*2 (leaf)	< 10 (granule) < 15*40*2 (leaf)	< 10 (granule) < 15*40*2 (leaf)	< 10 (granule) < 15*40*2 (leaf)
Grind fineness (mesh)	10-120	10-120	10-120	10-120
Capacity(kg/hr)	3-50	10-100	20-200	30-300
Grind chamber diameter (mm)	200	270	330	380
Rotor speed (rpm)	5900/8600	4200/6200	2600-5100	2200-4400
Motor (kw)	2.2	5.5	7.5	11
Overall size (mm)	840*470*1020	930*600*1200	1000*650*1500	1150*700*1600
Weight(kg)	112	210	296	430



Grinding Machine

Machines

Hammer Mill



3-stage Hammer Mill



Grinding Machine

Model	BSDF-350	BSDF-450	BSDF-550	BSDF-650
Rotor speed(rpm)	3500-4500	3300-4200	2900-3600	2400-3100
Grind motor(Kw))	15	30	37	45
Feed motor(Kw))	0.25	0.25	0.25	0.25
Discharge motor(Kw)	0.75	0.75	1.1	1.1
Blower(Kw)	7.5	15	18.5	18.5
Grind fineness(mesh)	20-120	20-120	20-120	20-120
Capacity(Kg/hr)	100-200	300-500	400-800	600-900

Model	BSDF-750
Rotor speed(rpm)	2100-2700
Grind motor(Kw))	55
Feed motor(Kw))	0.25
Discharge motor(Kw)	1.5
Blower(Kw)	22
Grind fineness(mesh)	20-120
Capacity(Kg/hr)	800-1300

Sterilization & Packaging

Sterilization is the most crucial element of any Food Processing Industry. This is where we at IdeasInnovated, provide tailormade solutions based on various factors such as - *agroclimatic conditions, shelf life required, level of automation* intended.

You intend to *maximise production* and *reduce wastage*, hence we design highly efficient semi-auto and automatic Sterilization and Packaging Solutions that considers *Sustainable* and *Long Term Profitability* with *minimum Working Capital Requirement*.



Fumigation Chamber



Steam Sterilization



**Irradiation
Sterilization**

Packaging



Multi Head FFS Packaging Machine



Multi Track FFS Packaging Machine

Packaging



Automatic FFS Vacuum Filling Machine



ADVANTAGES OF VACUUM PACKING

1. Vacuum Food Sealers Save You Time
2. Vacuum Sealers Save You Money
3. Vacuum Sealers Preserve Food
4. Improved Final Product Presentation
5. Vacuum Sealing Extends Shelf Life
6. Efficient Food Organization
7. No Chemical Preservatives Required

Types:

1. Semi-Auto Vacuum Packing Machine
2. Fully Auto Vacuum Packing Machine



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Thanks

