

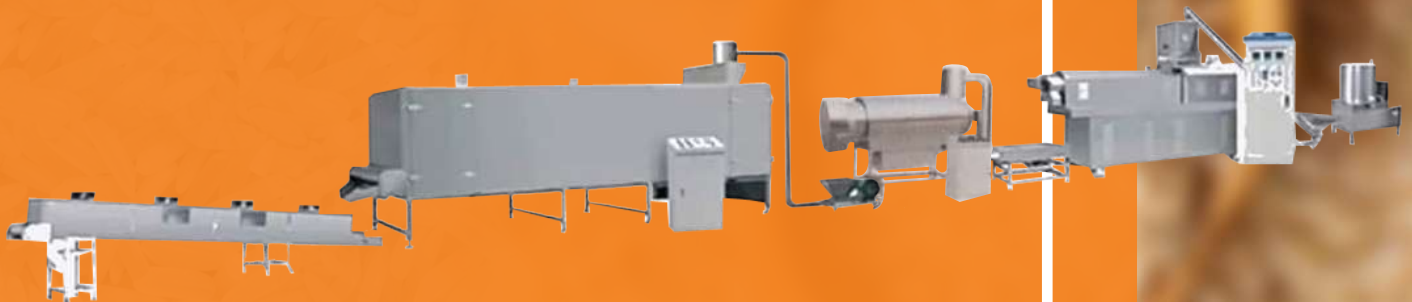
www.salasarextrusion.com



Fortified Rice Processing Plant

For Nutritional Rice

Capacity:
100 kg to 1000 kg per hrs.





SALASAR EXTRUSION

A renowned company, engaged in importing and manufacturing of Fortified Rice Kernels (FRK) Production lines from Foreign Countries. It has developed long-term relationships with many reliable suppliers and satisfied customers. It takes pride in supplying the customers with the right products by matching up to their needs.

Hemant Sarda

Partner

Mr. Hemant Sarda, a qualified Chartered Accountant, an expert with More than 15 Years of experience in the Supplying of Food Processing machineries. He is also the Promoter of **"Salasar Agrotech Pvt Ltd"** It imports Color Sorter Machines, Rice Milling Machines and other Food Processing-Related Machinery from different countries and sells to Indian Customers. He has supplied over 700 Color Sorter Plants & other Food Processing Plants across India. He has broad know-how and international experience in the fields of Management, R&D, Marketing, Manufacturing Product Safety and Quality Assurance in the Food Industry.

Sharvan S

Partner

Mr. Sharvan S, has more than one decade of experience in the food processing sector. He is a Mechanical Engineer and is responsible for enabling, integrating and aiding the business in its technological needs. He is responsible for the overall working of the Company and is instrumental in making its strategic decisions. He has been associated with Standard Machinery, a Bangalore based Company and was handling Sales and technical support for companies like MADDOX (USA), PALLMANN (Germany), AVA (Germany), RADEMAKER (Holland), FEN (Italy) and many more. He was involved in Marketing and Technical Support for more than 12 years and have vast technical experience in Food Processing Machinery lines.





ARTIFICIAL / NUTRITIONAL / INSTANT RICE PROCESS LINE

India is the world's second-largest producer of rice and the largest exporter of rice in the world. Rice production has increased from 53.6 million tons in FY 1980 to 120 million tons in FY 2020-21.

Rice is one of the main produce grains of India. Moreover, our country has the largest area under rice cultivation, as it is one of the principal food crops. It is, in fact, the dominant crop of the country.

Rice Manufacture

In general the only drawback in rice processing is many valuable nutrients are lost during the process of whitening, polishing and storage. Rice fortification presents numerous technical problems. Micro-nutrients cannot be simply added to the kernels, because they do not stay where they are needed and the traditional soaking and rinsing of rice with water prior to cooking removes most of the added nutrients.

Solution is, we use Twin Screw Extrusion technology which takes broken rice as raw material. Finely milling and mixing with nutrients premix, after conditioning with steam and water, flour enters into the extruder to be re-granulated and finally dried. These extruded rice will be mixed with natural rice to get enriched nutritional rice. In the hot extrusion process, rice flour and micronutrients are transformed into a product visually resembling natural rice. Thereby vitamins and minerals are embedded and protected from segregation and from being removed through rinsing or leaching out during washing and cooking.



NUTRITIONAL RICE

Nutritional Rice is a kind of recomposed fortified rice. The Nutritional Rice process is a way of rice fortification utilized hot extrusion technology not only addresses the problem of hidden hunger but also meets the challenge of implementing rice fortification. The production of Nutritional Rice offers the unique possibility to efficiently fortify rice with multiple micro-nutrients, vitamins and minerals such as vitamin A and B family as well as iron and zinc is chosen for inclusion.

ADVANTAGES

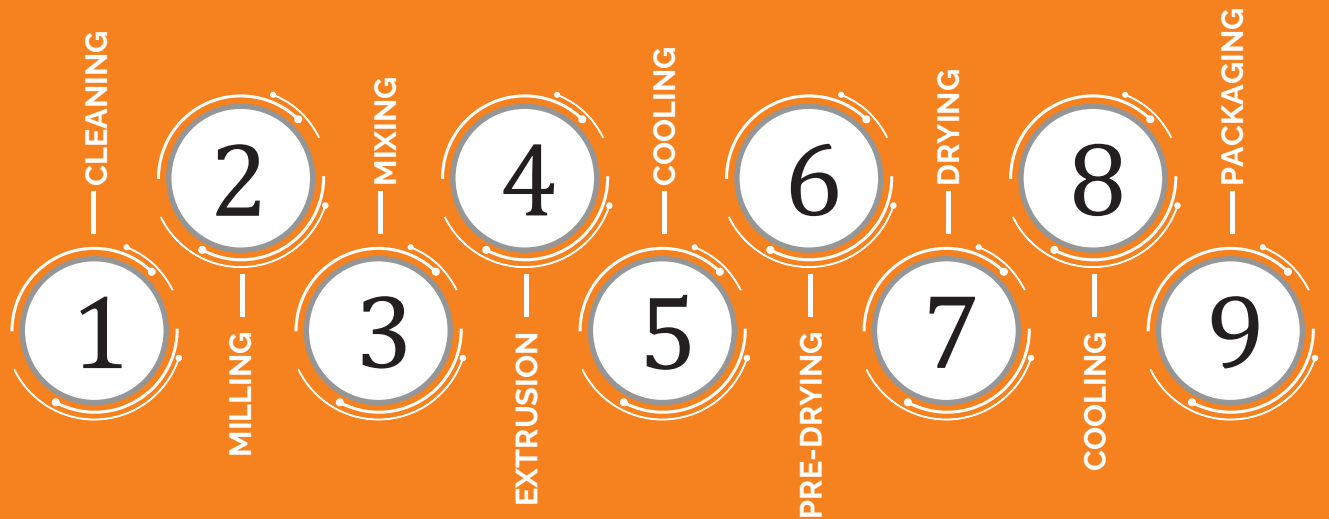
- Fills up the nutritional deficiencies of natural foods like lysine and vitamin in cereals etc.
- Loss of nutrients during processing and storage.
- Nutritional needs of special populations.
- Simplify meal handling and convenient food intake.
- Prevention of malnutrition.
- Improve sensory quality and improve storage.

INSTANT RICE / INSTANT PORRIDGE

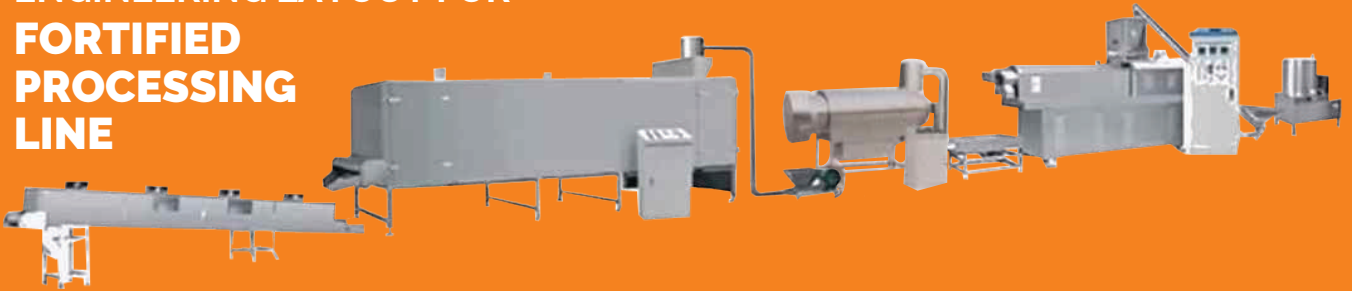
Instant, convenient and time-saving. You can enjoy delicious soup in a few minutes. It's as good as mother's soup. No need self-heat packs, only boiling water. Open outer package, put instant rice and vegetable packs inside and boiled water to water level. Mix rice evenly, wait 10 mins, then you can enjoy the yummy rice!



PROCESS TO MAKING FORTIFIED RICE



ENGINEERING LAYOUT FOR FORTIFIED PROCESSING LINE



Products:

Artificial Rice, By changing the moulds and screws, this line can produce various puffed snacks or co-extrusion snacks, like puffed rice, cheese ball, cheetos, corn sticks, puffed rice etc.

CONCEPT

Enrichment of reconstituted rice with certain Vitamins and trace elements

PICTORIAL VIEW



Fortified Vitamin AB 12 B1 Rice

Cooked Rice 1% nutritionally fortified rice



Material that can be used for Extrusion Process

Rice flour, broken rice, rice bran, Black rice flour, black sesame flour, millet flour, rice flour, buckwheat flour, oat flour, jujube powder, Purple sweet potato powder, purple flour, barley flour, red bean flour, mung bean flour, sorghum flour, black bean flour etc.

WE HAVE DIFFERENT CAPACITY OF

FORTIFIED PROCESSING LINE

Nutritional Rice / Artificial Rice /
Instant Rice Process Line

We have capacity from 100-1000 kg per hour
and more

| ECO | | | | COMBO | | SMART | | ULTRA | | | |
|---|----|-------------------|---|-------------------|---|-------------------|----|-------------------------------------|----|-------------------------------------|----|
| 200 | | 400 | | 400 | | 400 | | 500 | | 1000 | |
| Cap 150-200 kg/hr | | Cap 300-400 kg/hr | | Cap 300-400 kg/hr | | Cap 300-400 kg/hr | | Cap 500-600 kg/hr | | Cap 800-1000 kg/hr | |
| NOTE: Capacity depends on different type of rice used and its moisture and required output size of rice and quality. | | | | | | | | | | | |
| Grinder | 1 | Grinder | 1 | Grinder | 1 | Grinder | 1 | Grinder | 1 | Grinder | 1 |
| Mixer | 1 | Mixer | 2 | Mixer | 1 | Mixer | 1 | Mixer | 1 | Mixer | 1 |
| Screw Conveyor | 1 | Screw Conveyor | 2 | Screw Conveyor | 1 | Buffer Tank | 1 | Buffer Tank | 1 | Buffer Tank | 1 |
| Extruder | 1 | Extruder | 2 | Extruder | 1 | Screw Conveyor | 1 | Screw Conveyor | 1 | Screw Conveyor | 1 |
| Vibrator Cooling | 1 | Vibrator Cooling | 2 | Air Conveyor | 1 | Extruder | 1 | Extruder | 1 | Extruder | 1 |
| Air Conveyor | 1 | Air Conveyor | 1 | Vibrator Cooling | 1 | Air Conveyor | 1 | Vibrator Cooling | 1 | Vibrator Cooling | 1 |
| Oven 7L*8M | 1 | Oven 7L*10M | 1 | Air Conveyor | 1 | Vibrator Cooling | 1 | Air Conveyor | 1 | Air Conveyor | 1 |
| Cooling | 1 | Cooling | 1 | Oven 7L*10M | 1 | Air Conveyor | 1 | Fluid Bet 7.5M | 1 | Fluid Bet 7.5M | 1 |
| | | | | Cooling | 1 | Pre-Dryer | 1 | Air Conveyor | 1 | Air Conveyor | 1 |
| | | | | | | Fan Conveyor | 1 | Oven 5L*9 | 1 | Oven 5L*7.5 | 1 |
| | | | | | | Oven 3L*14M | 1 | Z & Cooling | 1 | Fan Conveyor | 1 |
| | | | | | | Cooling | 1 | | | Oven 5L*9 | 1 |
| | | | | | | | | | | Z & Cooling | 1 |
| | 12 | | 8 | | 9 | | 12 | | 11 | | 13 |
| Power - 130 KW | | Power - 240 KW | | Power - 260 KW | | Power - 260 KW | | Power - 220 KW+ Steam 1500 kg/hr | | Power - 400 KW+ Steam 2000 kg/hr | |
| 3500 sq ft | | 4000 sq ft | | 3500 sq ft | | 4000 sq ft | | 6000 sq ft | | 8000 sq ft | |

TECHNICAL PARAMETERS OF




NUTRITION RICE/ARTIFICIAL RICE/ GOLDEN RICE PROCESS LINE

(150-200 KG/H)





| S.NO. | EQUIPMENTS | IMAGE | QTY. | TECHNICAL PARAMETERS |
|-------|--|---|------|--|
| 1 | Grinding Machine |  | 1 | <p>Power: 11.00 KW Fineness of Powder: 60-80 mesh Capacity: 150-200 kg Suitable for Grain, Rice, Corn, Beans</p> |
| 2 | Flour Mixer |  | 1 | <p>Installed Capacity: 4KW Power Consumption: 3.5KW Output: 40-50kg/7minutes Dimension: 1100mm × 600mm × 800mm Functions: Mixer makes the raw material adding to water and other chemical additive fully mixed</p> |
| 3 | Screw Conveyor |  | 1 | <p>Installed Capacity : 1.1 KW Power Consumption : 1.1 KW Output : 200 Kg/batch Dimension: 2400 mm x 1200 mm x 2800 mm Function: Sending the raw material from mixer to Extruder</p> |
| 4 | PLC Based 70mm Double Screw Extruder with Cooling Jacket |  | 1 | <p>Model: SE-70 - 60 Twins Screw Extruder Impelled : 45 KW Dimension: 2700 mm x 1100 mm x 2100 mm Diameter of Screw: 70 mm and length 150 mm Functions: Make the rice powder into the shape of Rice Kernel</p> |

TECHNICAL PARAMETERS OF NUTRITION RICE/ ARTIFICIAL RICE/ GOLDEN RICE PROCESS LINE



| S.NO. | EQUIPMENTS | IMAGE | QTY. | TECHNICAL PARAMETERS |
|-------|--|---|------|--|
| 1 | Vibrate Cooler |  | 1 | Main Motor: 0.55 KW Capacity: 400 kg/ h Dimension: 1800mm x 1000mm x 1200 mm Used to spread product to the next device Function: Moves Extruded Rice Kernels to air conveyor |
| 2 | Vibrate Cooler |  | 1 | Main Motor: 0.55 KW Capacity: 200-300 kg/ h Dimension: 1000mm x 1000mm x 1200 mm Used to spread product to the next device Function: |
| 3 | Pre Drying Roller |  | 1 | Power : 20 KW Dimension: 2900mm x 800mm x 1850 mm |
| 4 | 8M 5 Layer Dryer (Electrically Operated) |  | 1 | Power : 66 KW Dimension: 8000mm x 1200mm x 2300 mm Function: It drags the extruded Rice to get the designed level of moisture in the rice kernel |
| 5 | Cooling Conveyor |  | 1 | Power: 1.50 KW Capacity: 400 kg/h Dimension: 5500mm x 600mm x 700 mm |

TECHNICAL PARAMETERS OF NUTRITION RICE/ARTIFICIAL RICE/ GOLDEN RICE PROCESS LINE (450-600 KG/H)

| S.NO. | EQUIPMENTS | IMAGE | QTY. | TECHNICAL PARAMETERS |
|-------|----------------------|---|------|--|
| 1 | Grinding Machine |  | 3 | <p>Power: 5.5KW Fineness of Powder: 60-120 mesh Capacity: 100-300KGH Dimension: 550mm × 600mm × 1200mm Suitable for Grain, Rice, Corn, Beans</p> |
| 2 | Flour Mixer |  | 3 | <p>Input Voltage: 415V Installed Capacity: 4 KW Power Consumption: 4 KW Output: 40-50kg / 7minutes Dimension: 1200mm × 650mm × 1300mm Functions: Mixer makes the raw material adding to water and another chemical additive fully mixed Features: 1.This part that contacts mixer to material adopts the stainless-steel material. 2.The discharge hole adopts the new handle-opened design, good seal and avoids leaking the material.</p> |
| 3 | Screw Conveyor |  | 3 | <p>Input Voltage: 415V Installed Capacity : 0.75KW Power Consumption : 0.75KW Output : 80-300Kg/batch Dimension: 1550mm × 725mm × 2600mm Function: Screw conveyor can not only convey on the level but also by any angel these materials can be conveyed in the stainless steel roller without leaking, dust pollution; meanwhile it can send the self-mixer to the feeding machine or the conditioner and directly send the discharge hole of the inflating extruder.</p> |
| 4 | Twins Screw Extruder |  | 3 | <p>Model: SA - 70 Twins Screw Extruder Main Power: 37kw Heating Power: 18KW Cutting Power: 0.75KW Feeding power: 0.75KW Oil Pump: 0.37KW Dimension: 3200mm × 930mm × 2200mm, Diameter of screws: 70mm and length:1408mm, Function: - rice powder, corn powder, millet powder, wheat powder, oats, buck wheat, bean, starch etc. • Series of double-screw extruder mainly consist of feeding system, extruding system, cutting system, heating system, lubricating system and controlling system. • Automatic lubricating and forced cooling make sure that extruder performs safely and extends using life. • Feeding system, extruding system and cutting system all adopt frequency conversion timing to gain powerful drive, stable perform, and electricity saving. • Screw are made of alloy and processed by special technique to possess high intensity, abrasion resistant and longer using life.</p> |



| S.NO. | EQUIPMENTS | IMAGE | QTY. | TECHNICAL PARAMETERS |
|-------|--|-------|------|---|
| 5 | Vibrate Cooler | | 2 | <p>Main Motor: 0.75kw Capacity: 250kg/h Dimension: 1600mm × 900mm × 900mm Used to spread the product to the next device averagely</p> |
| 6 | Air Conveyor | | 2 | <p>Power: 0.75kw Capacity: As per the extruder Dimension: 1400mm × 450mm × 1900mm Function: Conveying Snacks to Drying Oven 1. Air conveyor conveys the food relying on the wind-force from the blower. 2. It is more suitable for the long-distance conveying Features: 1. Low energy-consumption, high efficiency. 2. No leaking material and no pollution when the food is conveyed in the sealed stainless steel</p> |
| 7 | Drying Roller | | 2 | <p>Main Motor: 15kw Dimension: 2700mm × 700mm × 1700mm</p> |
| 8 | 10 M 7 Layer Dryer (Electrically Operated) | | 1 | <p>Electric Load : 127 KW Dimension : 10000 mm × 1200 mm × 2400 mm For Dryer: Aluminum Silicate as thermal insulation materials inside the body cover • This kind of oven has a wide range of application. It can dry all shapes of puffing food, including strip, lump, granular materials etc. as well as other types of materials. Users can choose different types with different layer, length, and heating mode. • It has compact design and easy operation. • The oven is droved with double pitch roller chain and heats materials circularly. It runs smoothly, never obstruction. • Roasting temperature and time can be adjusted, effect of roasting is perfect. • With high efficiency fuel saving system, reason able heat distribution, material is heated equally, low energy but large output.</p> |
| 9 | Cooling Conveyor | | 2 | <p>Power: 0.75kw, Dimension: 4000mm × 900mm × 700mm 4 sets blowers</p> |



Our Network



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Authorised Agent for the Area