

CHILLI PACKAGING



AATMANIRBHAR BHARAT

**PM Formalisation of Micro Food Processing
Enterprises Scheme (PM FME Scheme)**

IMPORTANCE OF PACKAGING

- Packaging is an important part of food manufacturing process. It protect the food products from physical ,chemical, biological damages.
- Without packaging, materials handling would be a messy, inefficient and costly exercise and modern consumer marketing would be virtually impossible.
- Packaging Institute International defined packaging as the enclosure of products, items or packages in a wrapped pouch, bag, box, cup, tray, can, tube, bottle or other container form to perform one or more of the following functions: containment, protection, preservation, communication, utility and performance. If the device or container performed one or more of these functions, it was considered a package.

NEED OF PACKAGING

- **CONTAINMENT** : protecting the environment from the myriad of products that are moved from one place to another.
- **PROTECTION** : to protect its contents from outside environmental influences such as water, water vapor, gases, odors, microorganisms, dust, shocks, vibrations and compressive forces.
- **CONVENIENCE** : Products designed to increase convenience include foods that are prepared and can be cooked or reheated in a very short time, preferably without removing them from their primary package.

TYPES OF PACKAGING

- **PRIMARY PACKAGING** : Primary package are those package which directly came into contact with food products. It provides first or initial layer of protection to the food products. Examples of primary packaging includes parchment paper, greaseproof paper, paperboard cartons, and plastic pouches.
- **SECONDARY PACKAGE** : Secondary package are those package which surrounds or contains the primary package. Ex. Corrugated case, Boxes
- **TERTIARY PACKAGE** : It contains number of secondary package together. Mainly used for bulk handling of food products.

PACKING MACHINES USING FOR CHILLI POWDER

- ✓ Different types of packing machines are used for packaging chilli. In market, chilli is normally available in two forms.
 1. Green chilli
 2. Dry red chilli
- ✓ Fresh harvested and sorted green chillies as well as well dried chillies are usually packed in Thermocol boxes, plastic trays, carton board, sacks, plastic trays etc for export purpose.
- ✓ Materials used for packing depends on the export place and distance to be travelled to avoid any damage to the product.

PROCESS DETAILS TILL PACKAGING

- (i) Washing: First of all, the spices are washed with water under high pressure to remove impurities.
- (ii) Peeling & Cutting to Small Pieces: Some spices require peeling and cutting to small pieces. Such spices are peeled with hand knives.
- (iii) Drying: Spices are spread on the floor to provide sun drying. At times, mechanical dryers are also used. Tray type dryer is most suitable.
- (iv) Grinding/ Pulverising: Spices are grinded in dry form.
- (v) Mixing: After all the above operations, various spices for different purposes are mixed together.
- (vi) Packaging: At the end, spices powder are packaged in automatic form, fill and sealing machine.
- (vii) Transportation and Marketing: Thereafter, the products are transported and supplied to the bulk purchasers.

RED CHILLI PACKING MACHINE



Automatic Red Chilli Packing Machine

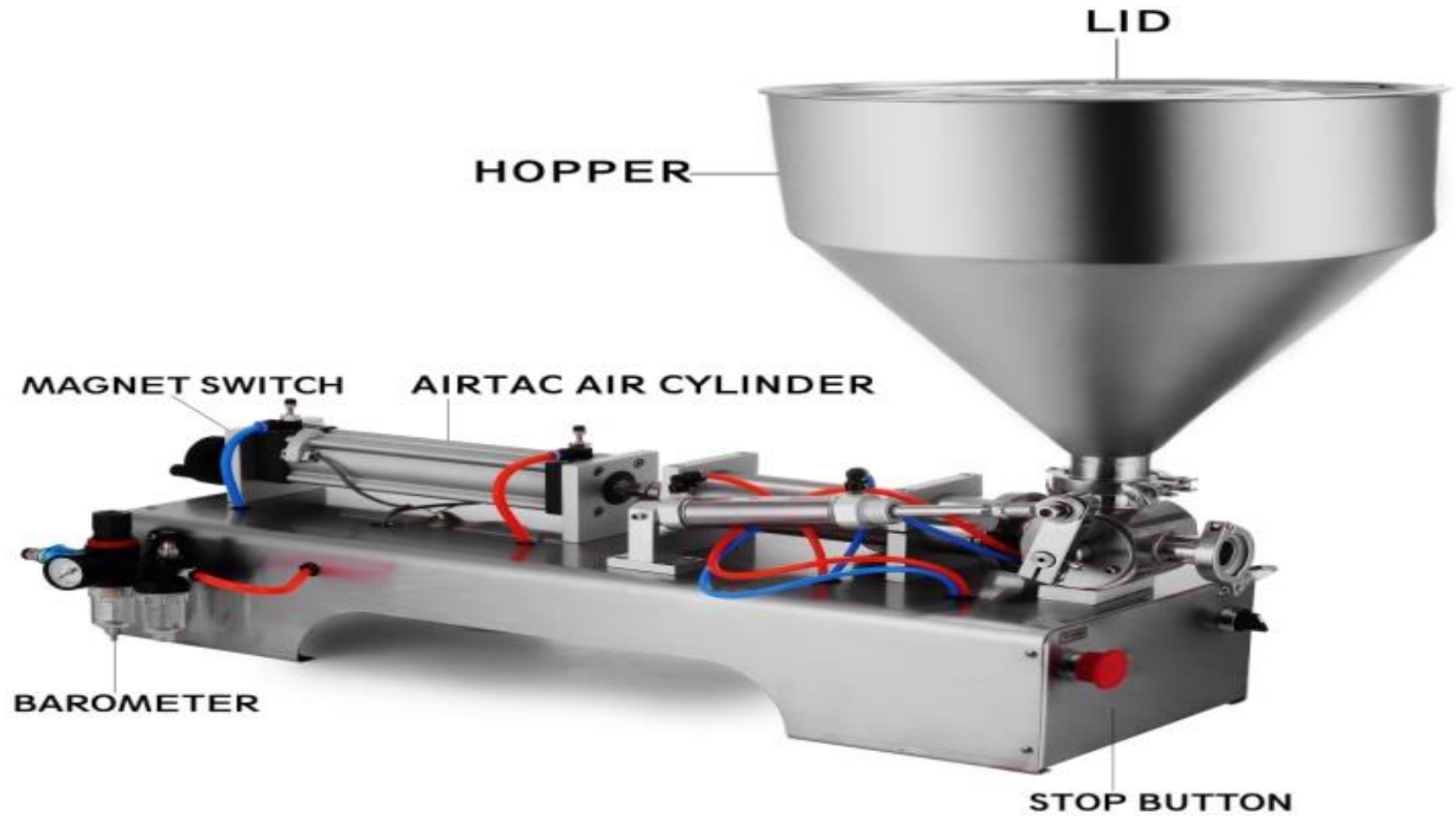
GREEN CHILLI PACKING MACHINE



CHILLI SAUCE BOTTLE FILLING EQUIPMENT



CHILLI PASTE FILLING MACHINE



CHILLI SAUCE PACKING MACHINE



CHILLI POWDER PACKING MACHINE



SELECTION OF PACKING MATERIAL

- Carton box
- Thermocol box
- Plastic pouch
- Net bags
- Plastic container
- Gunny bags



Carton board



Thermocol box



Net bags



Plastic pouch



Plastic box



Gunny bags

DIFFERENT TESTS CARRIED OUT TO ASSURE THE QUALITY OF PROCESSED CHILLI

- ✓ **Moisture test**
- ✓ **Ash test**
- ✓ **Acid insoluble ash content**
- ✓ **Volatile fat Content**
- ✓ **Refractive Index**
- ✓ **Microbiological parameters**

DIGITAL MOISTURE TESTING MACHINE



ASHING FURNACE



NIR FOR ACID INSOLUBLE ASH CONTENT



FAT EXTRACTOR MACHINE



REFRACTIVE INDEX MACHINE





PACKAGING & LABELING LAWS - FSSAI

General requirement for packaging:

- A utensil or container made of the following materials or metals, when used in the preparation, packaging and storing of food shall be deemed to render it unfit for human consumption:—
 - (a) containers which are rusty;
 - (b) enameled containers which have become chipped and rusty;
 - (c) copper or brass containers which are not properly tinned

PACKAGING & LABELING LAWS - FSSAI

- **Labeling should contain following information:**
 - ✓ Name of the food product.
 - ✓ List of ingredients.
 - ✓ Nutritional information.
 - ✓ Declaration of VEG and NON VEG.
 - ✓ Declaration of added food additives.
 - ✓ Name and address of manufacturer.

PACKAGING & LABELING LAWS - FSSAI

- ✓ Net quantity
- ✓ Code number
- ✓ Lot number/ Batch number.
- ✓ Date of manufacturing.
- ✓ Best before date
- ✓ Country of origin.
- ✓ .Number of pieces
- ✓ Bar Code
- ✓ Brand Name etc



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