

Food



Crushing/crumbling:

Specific structural crushing. Crumblers, crushing roller mills, and grinders for small, medium, and large production capacities.

Mixing:

For continuous mixing of solids with liquids or for moistening of granular/powdery substances. Mealy, granular, fibrous or flaky carrier substances are mixed with liquids free of lumps.

Pelleting:

Processing and compaction of the most diverse products with regard to their structure, bulk density, moisture, binding strength, and particle size. Processing of powdery, fibrous, lumpy and pasty products to uniform pellets of different size.

Drying/cooling:

Individual technical design for the respective product and determination of the drying and/or cooling properties.

Examples of products:

- Instant products (drink powder, vitamin C)
- Chocolate mass
- Spices
- Tea
- Cereals
- Legumes
- Oilseeds



Roasting:

Batch roasting, profile roasting and gentle roasting for all market requirements from conventional to fast roasting.

Crushing:

Different grinding degrees are achieved rapidly and exactly. A wide selection of rollers and a multi-stage, flexibly exchangeable roller system.

Examples of products:

- Coffee, cocoa
- Nuts
- Seeds (e.g. sunflower)
- Cereals (e.g. malt)
- Tea (e.g. hibiscus)



Agglomeration:

Formation of particles from powders. Coarsening of powdery substances with the objective of dustlessness, flowability, adjustment of the bulk and tapped density, improvement of the instant properties and pelletability.

Spray granulation:

Build-up/formation of granulates from liquid raw materials (solutions, suspensions). Round, dust-free granulates are usually produced. In spray granulation (type of encapsulation), the solute is embedded in a solid structure.

Drying/cooling/heating:

Thermal treatment of bulk materials. Adjustment of a desired residual moisture content, interesting for high quality products and in case of special hygiene requirements.

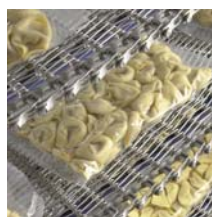
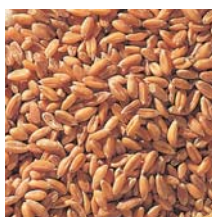
Coating:

Application of a defined, closed coating layer on a solid, granular base substance.

Examples of products:

- Cocoa powder mixtures
- Baby food
- Soups and sauces
- Flavourings
- Citric acid
- Lecithin
- Gelatin
- Lactose
- Flour
- Milk powder
- Enzymes

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Cleaning:

Pre- and fine separation as well as removal of coarse, small, heavy and light impurities. Variable screen decks, different working widths

Sorting:

Precise separation and detection of the smallest size and weight differences for classification of grain fractions prior to processing. Separation and classification of products with screening machines and sifters

Shelling:

Controlled shelling and splitting of different cereals and pulses, removal of mycotoxin layers, different shelling degrees

Whitening:

Flexibility and control in the processing of different varieties with different whitening degrees by the shape and the adjustable gap between rotor and screen

Cooking/hygienizing:

Gentle and uniform long-term conditioning by means of separate control of temperature, moisture, retention time, mechanical impact, and pressure. Hygienic treatment, improved nutrient utilisation, starch modification, degradation and inactivation of inhibitors, protein solubility

Extrusion:

The components are kneaded and cooked, at the outlet they are shaped and cut. Flexible shaping for different products with hydraulically adjustable die.

Examples of products:

- Wheat, bulgur
- Durum wheat
- Barley
- Rye
- Sorghum
- Oats
- Pulses
- Buckwheat
- Rice
- Oilseeds (sunflower seeds, rape seeds, soybeans)
- Tea & spices
- Cereals & snacks



Freezing/cooling:

Determination of the freezing and/or cooling properties for the individual technical design for the respective product.

Examples of products:

- Bakery products
- Pasta
- Partly prepared meals and ready meals
- Pizza
- Fish, meat & poultry
- Fruit, vegetables & mushrooms
- Potato products & chips
- Ice cream

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