



Expanded Snacks

Innovative shapes, tempting textures, trendsetting color combinations ... expanded snacks offer unlimited variety. Challenged to create original snacks, processors value the versatility and flexibility of Clextral twin screw extruders to help them stay ahead in the dynamic snack food market.

For nearly three decades, Clextral has helped snack manufacturers create extruded snacks that are flavorful and fun to eat; exploring new ingredients and processing techniques.

Our efforts in snack extrusion have resulted in a new class of extruders ... technologically advanced, yet easy-to-use systems with unique advantages for snack processors, including:

- Simple operation with repeatable results
- Infinitely variable production parameters to achieve specific texture, density and mouthfeel requirements
- Advanced technology to process bi-colour and bi-texture snacks
- Ingredient flexibility to process virtually any cereal grain and granulation
- True process flexibility with modular, segmented barrel design plus quick change die and cutter designs to quickly adapt to product trends
- High quality, low maintenance design and construction
- Output from 100 to 2,000 kg/h

Clextral's high speed rotary cutter features a flow-through design and tri-level adjustability for optimum precision in cutting complex snack shapes.

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Snack processing lines

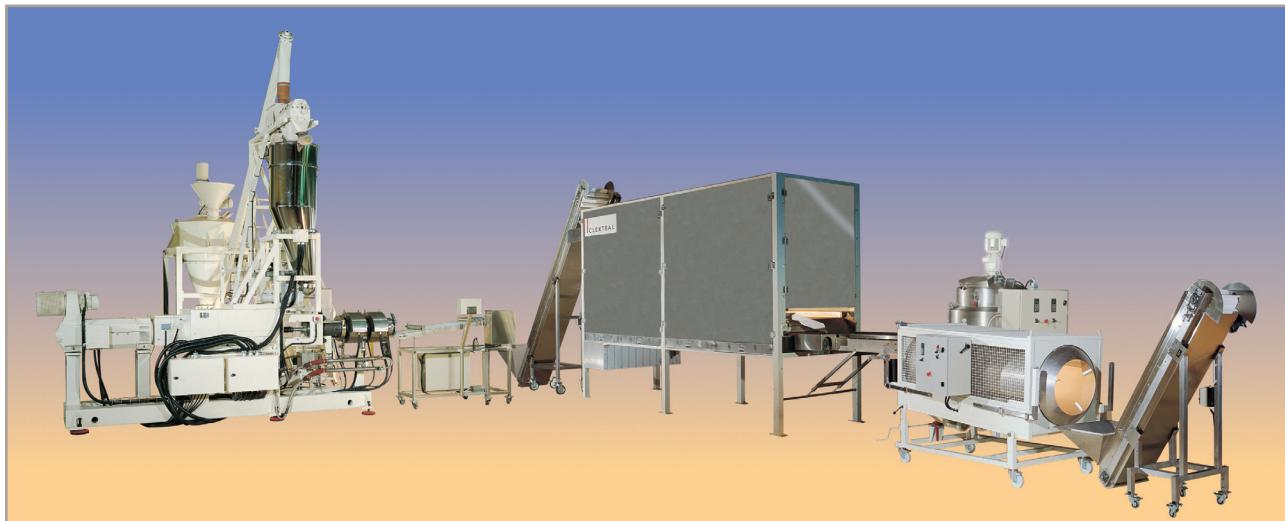
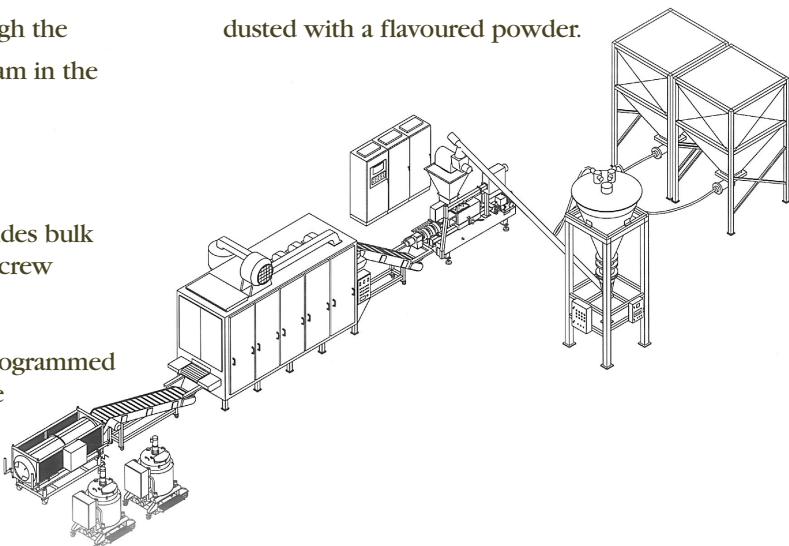
Dry ingredients are blended and metered into the extruder barrel simultaneously with the liquid ingredients. A homogeneous dough is created by the co-rotating action of the screws. The extrudate is subjected to heat and shear to gelatinize the starch and "cook" the product. Finally, the positive pumping action of the screws forces the dough through the die. Expansion takes place as the steam in the extrudate flashes off.

A typical snack processing line includes bulk ingredient storage and feeder, twin screw extruder, dryer and coating drum.

Automation control systems offer programmed start up and shut down, monitor line performance, generate production reports and provide automated recipe storage and recall.

The product is shaped at the die by a combination of expansion, die aperture and die face cutting, or formed into strands for post-extrusion shaping and cutting. The extruded snack enters a belt dryer which decreases the moisture content.

Finally, the product enters a coating drum where it receives a liquid flavour coating. The snack may be dusted with a flavoured powder.



Complete processing lines include equipment, engineering services, commissioning, product specifications, on-site training and maintenance.

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