

## Advanced technology and know-how for food processing sector development



Creating added value  
with cereal grains and dried fruits processing



## Innovative technology for energetic cereal bars production



cooking & kneading



transporting & flatening



slicing



This cereal bars production line allows the production of 600 bars of 20 g per hour. Dried fruits, cereal grains and nuts can be processed into 100% natural, nutritious, organic, energetic or dietable bars. The units are particularly suited for intensive commercial operation by 2-3 operators per working shift on only 15 m<sup>2</sup> working area. Entirely manufactured by MIA FOOD TECH, an Italian leading manufacturer in the food industry, this technology guarantees durability, low energy consumption, easy operation and maintenance. Our innovative packaging solutions complete this unit for optimal product quality, long shelf-life and marketability of the finished product. To learn more about the processing steps, please watch the videos on our website.



**Cooker with kneading planetary system** for the production of sweetened creamy, crunchy and spreadable mixture for cereal bars. 1.) the primary ingredients are warmed up, 2.) the binder and mix are loaded into batch; 3.) the receipt is mixed by and cooked. This cooker can also produce jams, melt chocolates, cook and mix creams and flavors.



### Trays and manual rolling pins

Stainless steel tray with plastic handles for transporting and pouring out the creamy sweetened mixture onto the steel table (L/W/H: 530/325/150 mm).

Stainless steel rolling pin to roller out the spreadable creamy product on the table.



### Stainless steel table

Special cooled and un-slide out surface to optimize manual process during rolling and slicing. Lateral guides for the optional motorized sliding cutter.



### 1 Longitudinal and 1 transversal cutting system

Guarded blades used on stainless table for slicing crunchy products into bars and slices after manual rolling operation. Two cutters with different dimensions allow cereal bars in different shapes (square and rectangle). Operator uses the cutting system double handed. As soon as the cutting system is placed over the table, the cutting process by rotation of circular knives is started by pushing the start button from operator panel.



### This turnkey project includes..

- ✓ complete processing equipment incl. working tools, personal protection equipment, connection parts and manuals
- ✓ turnkey solution containing planning the project, defining functionality and profitability, conducting risk analyses, organizing transportation, custom duties, delivery and installation of the system including operational start-up and know-how transfer
- ✓ intensive training courses held by professional technicians, first-hand knowledge about food-safe working methods, operation and maintenance of the processing line as well as of the most important technical specifications
- ✓ comprehensive after-sales services ensuring our customers all benefits of the installation during its entire life cycle. Best customer services including timely technical assistance, reliable product warranties and readily available wear- and spare parts



#### **Cooker with kneading planetary system**

- Bowl capacity: 30 L
- Production capacity: 15 kg/35 min
- Dimensions W/L/H: 1000/1000/1700 mm
- Electrical power: 7.5 kW
- Electrical heating: Dia-thermic oil and digital thermostat
- Cooking Bowl of annealed copper
- Mixing arm: two spatula with a planetary rotational system
- Tipping bowl and head: automatic tipping with gear-motor



#### **Stainless steel table**

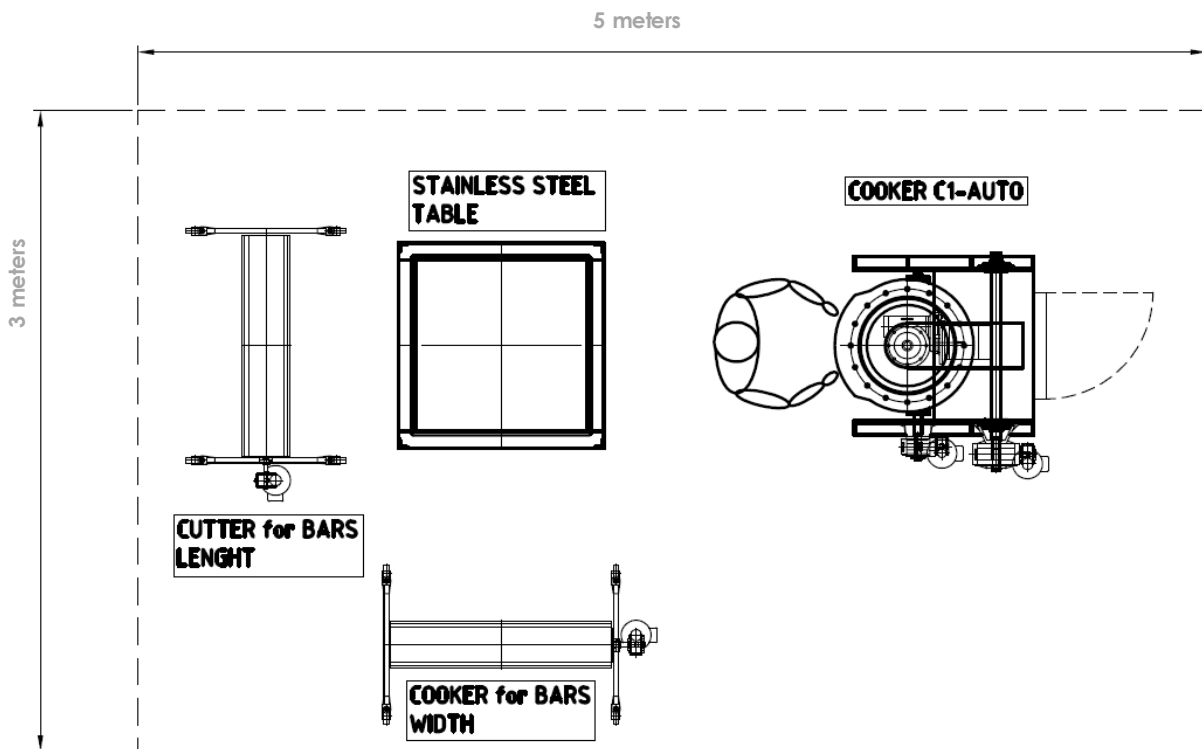
- Standard dimension: 800x800 mm (adaptable to customer request)
- Heating or cooling of the surface by a stainless steel serpentine under the working area with 1/2" NPT size to be connected to existing thermo-regulation system.
- Surface with special un-slide system to optimize manual processing.
- Four special table angles for optimized product thickness during manual rolling system.



#### **Manual cutting system**

- Manually operated cutting system
- Electrical timing switch on operator panel for automatic switch on/off knives rotation.
- Circular knives under safety-guards.
- Two cutting systems for rectangular cereal bars
- Distance between knives define final crunchy product's dimension (request by customer).
- Electrical timing switch on operator panel for automatic switch off knives rotation after cutting process.

## SCHEMATIC LAYOUT



## BACKGROUND INFORMATION

In many countries, grains such as rice, wheat, millet, or maize constitutes a majority of daily sustenance. The flaked, puffed and extruded cereal grains, with the addition of some nutrients, can considerably improve food security and public health conditions. NOMADES Swiss enables agricultural producers and agribusinesses to take advantage of all kind of grains naturally grown in their regions. While doing so, we pay attention to develop with them processing concepts respecting social and ecological concerns.

Our projects focus on local transformation of locally produced raw materials of any kind into natural products without additives and preservatives. The processing technology can be adapted for different production capacities as well as for a diversity of ingredients. This helps extend production over the harvest time frame, ensure year-round employment and food security. Positive impacts for the weakest and poorest producers by giving them a guaranteed and fairly priced outcome to their production and employment opportunities on the plant site.

NOMADES Swiss can provide tailor-made and extremely solid cereals processing units for the cleaning, washing, extrusion, batch cooking, flaking, puffing, and toasting of wheat, oat and corn flakes, rice, maize, barley, quinoa, multigrain, and filled or spray-coated cereals. As moisture-proof packaging is critical for optimum texture, crispness and shelf-life, we also provide innovative packaging solutions. Continued support for our clients with comprehensive after-sales services guarantees that our customers profit from sustainable solutions.