

## Knowledge and technology for coated nuts & seeds production

### A business case study



### Creating added value with nuts & seeds

With this comprehensive food processing line, nuts and seeds can be roasted and covered with sweet or salty coatings and packed into flexible pouches that ensure long shelf-life in ambient temperature without any additives, colorants and preservatives. Intensive training courses held by technicians will provide first-hand knowledge, operation and maintenance of the processing line, food-safe processing and packaging methods. The final result is 100% natural, nutritious, healthy and attractively packed coated products.

All processing and packaging units are manufactured by leading European companies in the food industry and meet all European Economic Community (EEC) hygienic and safety standards. Advanced technologies guarantee durability, reliability, low energy consumption and easy operation and maintenance. The extremely solid and reliable technology is particularly suited for professional applications characterized by highly intensive 24/7 use in commercial environments. A team of 3-4 members can produce up to 40 kg/h of finished and packed product within 80 m<sup>2</sup> working space for processing, packaging and storage for raw and finished products.

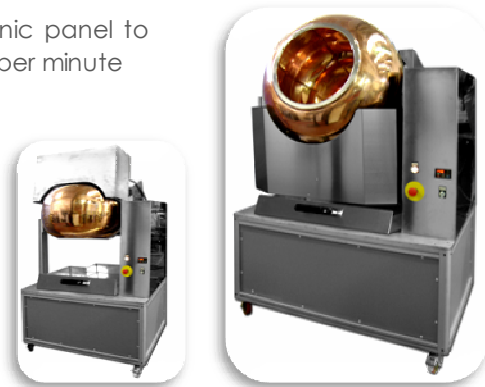
Our advanced semi-automatic packaging solutions for pre-made flexible pouches guarantee optimal product safety and quality, long shelf-life, attractive branding and marketability of the finished products. The high-quality and energy-efficient diesel generator set completes this production line and ensures continuously reliable energy provision.

## Coating pan for production of coated products

Coating Pan for production of coated products like seeds and nuts covered by cooked sweet or salty mixtures such as salted or caramelized nuts, dragees, pralines and various other products. The products are filled into the pan and coated in the copper pan with a special receipt, sugar and water.

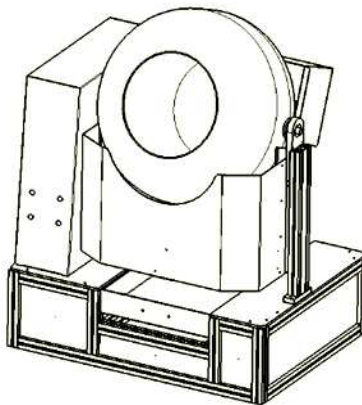
This unit is manufactured by a leading Italian company in the food industry since over 40 years. Its technology is particularly suited for intensive commercial operation and guarantees durability, low energy consumption and easy operation and maintenance.

- Nominal production capacity up to 40 kg/h
- High versatility and flexibility through electronic panel to control rotation speed from 2 up to 15 rounds per minute
- Working cylinder in copper
- Automatic revolving and discharging of pan
- Power: 0.55 kW
- Voltage: 380 V
- High power gas burner (0.55 kW)
- L/W/H: 1140/860/1700 mm
- Weight: 150 kg

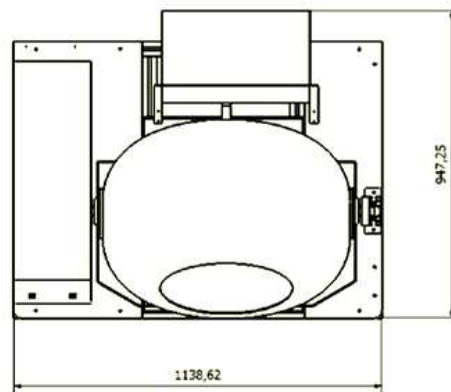


### Schematic layout

Front view



Top view



### Processing steps



nuts & seeds



pour nuts into pan



add mixture

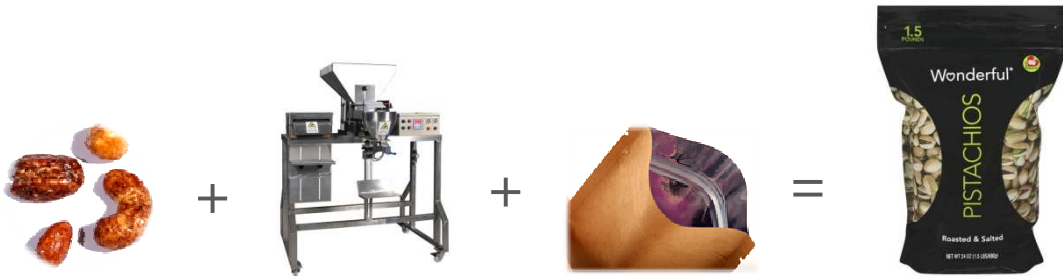


mix product  
while pan rotates



receive  
coated product

## Semi-automatic dosing, filling and sealing unit for pre-made pouches



This semi-automatic packaging unit doses and fills the coated products into pre-made flexible pouches of many different materials, sizes and functions. The operator simply holds the empty pouch below the dispenser and seals the pouch with the integrated manual impulse sealer after automatic filling of the defined quantity.

This unit is manufactured by a leading Italian company in the food packaging sector since over 20 years. The solid technology is particularly suited for intensive operation and accurate weighing, filling and sealing results.

Technical specifications:

- Nominal capacity 8-10 bags / min
- built entirely in stainless steel AISI 304
- hopper and support structure
- two vibrating channels for high weighing accuracy
- digital display for programming the desired weight
- integrated manual impulse sealer
- power consumption 1 kW
- 220 V electrical operation 50/60 Hz



## Pre-made flexible pouches

High-quality flexible pouches for coated products ensure optimal food safety, quality and long conservation in ambient temperature without any additives and refrigeration. A large variety of pouch materials, formats, functions and designs can perfectly be adapted to the product to be packed. Long shelf-life of the packed products, reduced production energy, decreased storage space, and lower transportation costs make flexible pouches an economical and environmentally responsible packaging solution

### Stand-up pouch incl. reclosable Zipper



Material:  
PET/ALU/PE 12/8/70 µm  
Size: 130 x 170 + 70 mm  
Design: custom made  
Print: 4 color flexo print

### Flat pouch PET/PE



Material:  
PET/PE 12/50 µm  
Size : 140 x 200 mm  
Design: custom made  
Print: 4 color flexo print

## Energy-efficient diesel generator set

This reliable and high efficiency generator set combines high-quality materials and advanced technology. Its nominal power perfectly suits for the complete processing line and is designed to operate reliably in challenging applications and to have low life cycle costs.

This unit is manufactured by a leading Spanish company in the energy generation sector since over 65 years. Its technology is particularly suited for continuous operations with high energy reliability.

### Specifications

- Nominal power 7 kVA
- Gen-set 50 Hz
- Continuous 1500 rpm
- Open set (without canopy)
- Minsel engine
- Air cooled
- Three phase
- Remote-Manual panel
- Stand-by 6.2 kVA
- Continuous 5.8 kVA
- Weight 135 kg
- Dimensions L/W/H 823/620/750 mm
- Acoustic power 108 dB



We kindly invite you to contact us to learn more about our packaging and energy solutions for this processing line.

## BACKGROUND INFORMATION

Nuts such as hazelnuts, almonds, peanuts, cashew nuts or walnuts constitute a majority of daily sustenance in many countries. Covering these nuts with different mixtures and packaging them in attractive pouches can considerably improve marketing and increase food security and public health conditions. NOMADES Swiss enables farmers and SMEs to take advantage of all kind of nuts that are naturally grown in their regions while paying attention to develop with them processing concepts respecting social and ecological concerns.

Our projects focus on the transformation of locally produced raw materials of any kind into natural products without any additives, preservatives or colorants. As the processing technology we propose can be adapted for different production capacities as well as for a diversity of nuts, our solutions help extend production over the harvest time frame, add value to the raw materials and ensure year-round employment and food security. This helps maximizing 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.

Foods and beverages are highly sensitive products that need optimized packaging solutions which combine functionality, durability, aesthetics and marketability. NOMADES Swiss is analyzing the markets since over a decade and knows that packaging is a crucial bottleneck in many agricultural value chains. Therefore, we have developed packaging solutions for difficult working environments for fresh and processed fruits and vegetables, fruit juices and vegetable purees, spices, dried fruits and nuts, cereal grains, pet foods, non-foods like agrochemicals and pharmaceutical products.

Especially the food segment requires extremely high durability to allow hot filling and pasteurization. Hygiene standards, food safety, laminate adhesion, food protection, presentation as well as protection during handling and storage are essential factors in the food sector. NOMADES Swiss can provide packaging solutions for the food, pharma and non-food industries. Our integrated packaging approach guarantee optimal product conservation without refrigeration and protect the products from UV rays, humidity and heat. Besides hygienic, protection and durability concerns, our packaging solutions provide consumer-friendly packaging design and branding strategies for optimal marketability of the end-products.

We kindly invite you to explore our website

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