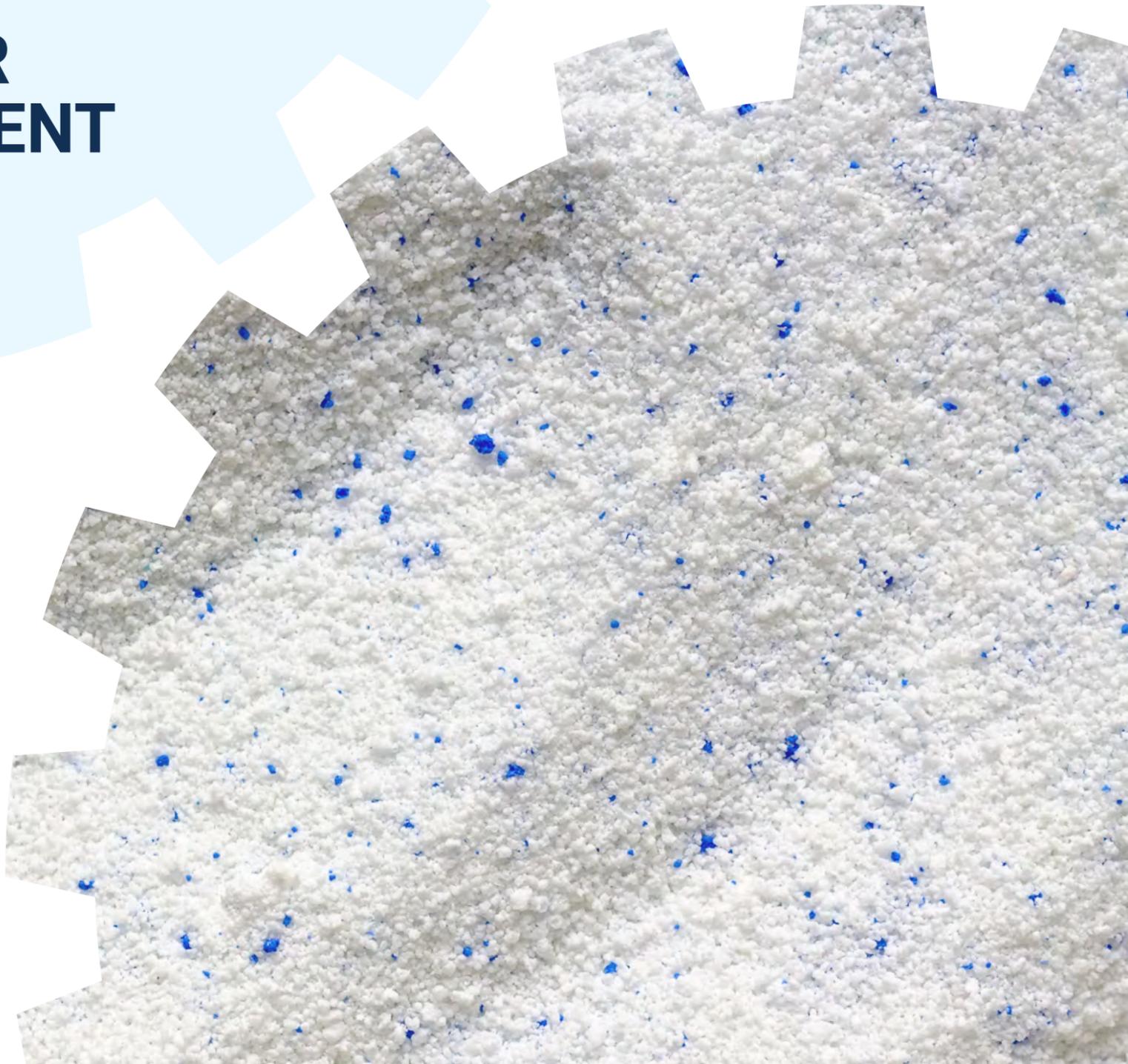


**ENGINEERING**  
ALBEHAR 

# **SOLUTIONS**

FOR DETERGENT SECTOR

# POWDER DETERGENT



## VERTICAL FORM FILL AND SEALING MACHINES (VFFS)

- The packaging of detergent powders present aspects which make it rather particular with respect to other types of powder.
- High-speed production.
- Control of residual powders in the seal using an aspiration system.
- Electrostatic film.
- Density variations of the dosage.



DAL 1968



# SOLUTIONS FOR PACKING

15 – 200 GRAM

## MAXIMA MODEL



- Continuous motion.
- High speed, volumetric dosing system.
- Speed: up to 100 pack/min.

## SINGLE 300 BC MODEL



- Intermittent motion.
- Speed: 70 pack/min.
- High speed.
- All types of laminated film.

## TWIN MODEL



- Intermittent motion.
- TWIN model with separate panels.
- Speed: 150 pack/min.
- High speed.
- Speed: up to 100 pack/min.



## SMART MODEL 200 GRAM – 5 KGS



- Volumetric dosing system
- Speed: 70 pack/min.
- Bag formats: pillow / Stabulo - 4 corner seal, Doypack bags



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## OLIMPIA MODEL 5 KGS – 20 KGS



- Weighing system using shutter weighers.
- Pack Format: Pillow/Gusset, Stabulo - 4 corner seal.



## READY BIG BAGS FILLING SOLUTION



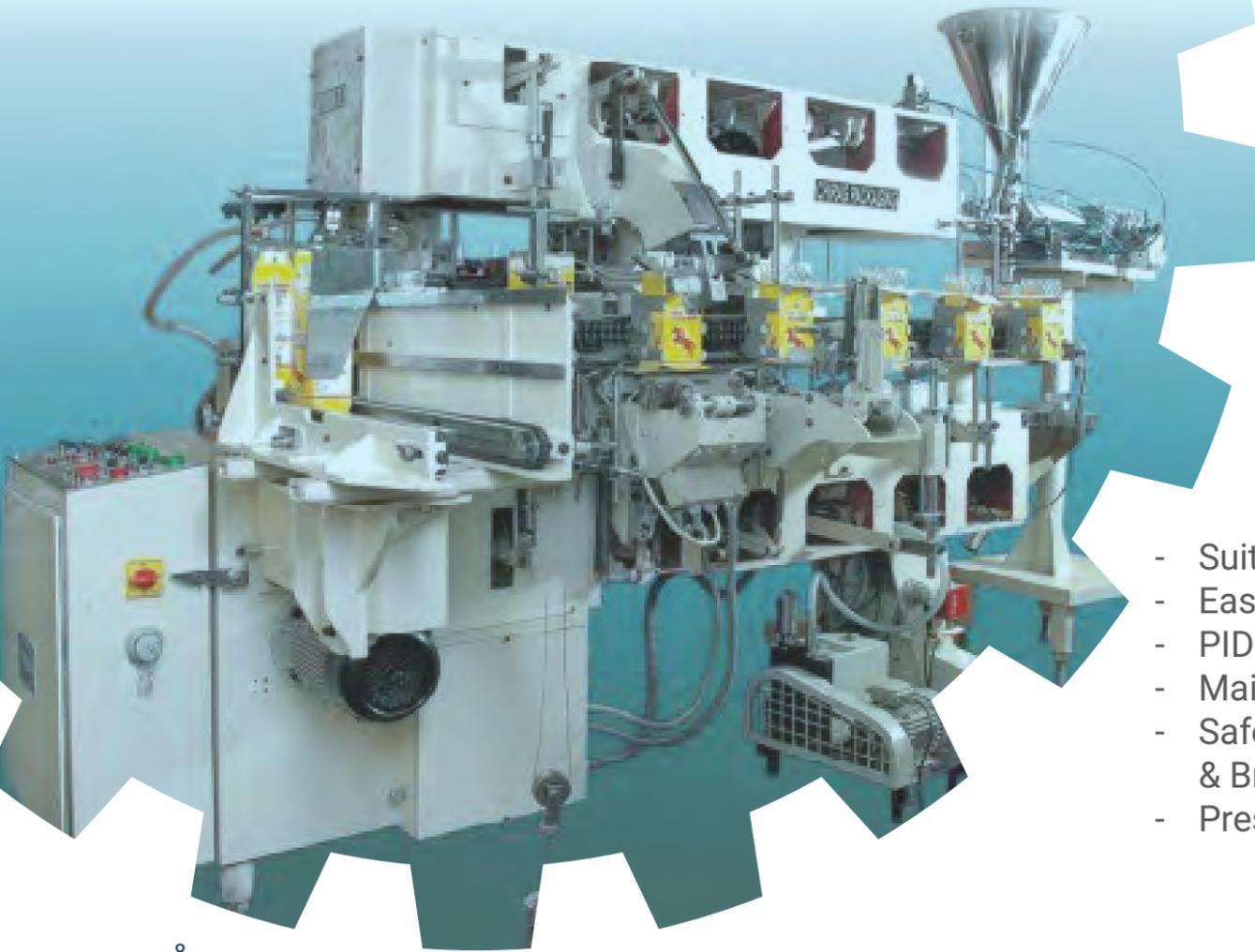
- **Packing range:** 5kg to 100kg.
- Bag type Open Mouth Type
- Speed: 600 Bags/ hr, depending on the products. & bulk density
- **Filling system:** Gravity Feeder  
Automatic Gripping Load Cell Based  
Electronics Controlled(Imported)



ALBEHAR ENGINEERING

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## CARTOON FILLING MACHINES



- Suitable for packaging all powders
- Easy Change over
- PID Temperature Control
- Main drive with safety clutch
- Safety switches to prevent accident & Break Down.
- Pressure Conveyor

## VACUUM ASPIRATORS

- The industrial vacuum cleaners of the RGS range are the best solution for the maintenance and cleaning of machines and working environments.
- Speed, efficiency and durability over the years are the characteristics of our vacuum cleaners, designed of various powers and capacities to meet every need.
- Our industrial vacuum cleaners are suitable for the suction and removal of solids, liquids and dusts/gases.
- RGS vacuum cleaners guarantee maximum efficiency and safety in every production area.
- All vacuum cleaners can be equipped with a wide range of options and accessories to make the operator's work easy, light and safe.



## PROCESS PLANT

The production of powder detergent is an interesting and relatively simple process, which consists of three main steps: slurry production, spray drying, and post-addition.

### Slurry production

Slurry is best described as a suspension of solids within a liquid. the liquid consists of an aqueous solution of active substance, produced by the in-situ neutralisation of sulfonic acid by caustic soda, combined with sodium silicate, whereas the solid part consists of a combination of sodium sulphate, sodium carbonate, S.T.P., and zeolite.

### Spray drying

The spray tower is essentially a suitably sized steel tube in which the hot air entering the lower part of the tower (prepared by a separate section consisting of a burner, an oven, and two air fans) bakes the droplets of detergent slurry sprayed on top.

As they fall to the bottom of the tower, these droplets form perfect spherical shapes and heat up, causing the water inside to boil.

### Post Addition

Base powder is rarely sold as a final product. Usually, commercial products have complex formulations that require a number of ingredients that cannot be sent to the tower.

This may be due to the heat sensitivity of the ingredients (the enzymes would be deactivated) or the high losses that could occur (the fragrance would evaporate!).

These materials are added to the cold, sifted base powder in Post Addition, the third and final stage of detergent powder production.

This section consists of a continuous mixer in which metered quantities of all ingredients are mixed together and sent downstream for storage and packaging



# LIQUID DETERGENT & COSMETICS



## FILLING MACHINES AND BOTTLING PLANTS FOR LIQUID PRODUCTS MADE IN ITALY: **GENERAL DETERGENT**

SEMI-AUTOMATIC FILLERS  
1/2/8/10 HEADS



AUTOMATIC LINEAR FILLING LINES:  
4/6/8/12 NOZZLES



## MONOBLOCK AUTOMATIC FILLING LINES



## AUTOMATIC LINEAR FILLING LINES FOR BIG CONTAINERS UP TO 1000 L



## FILLING MACHINES AND BOTTLING PLANTS FOR LIQUID PRODUCTS MADE IN ITALY: **ACIDS & ACIDS CLEANERS**

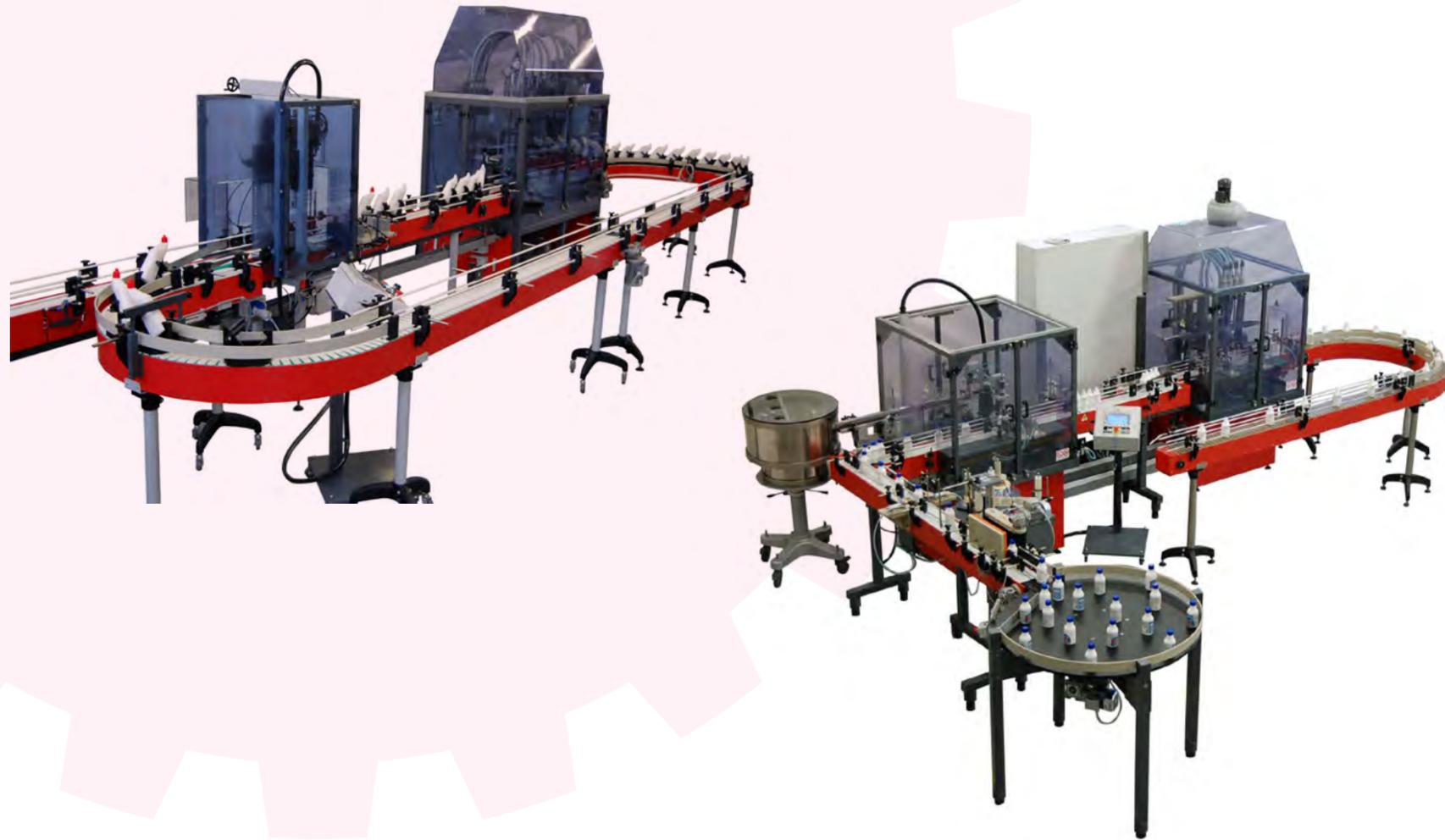
### SEMI-AUTOMATIC FILLERS 1/4/2/8/10 HEADS



### SEMI-AUTOMATIC FULL LINES 8/10 HEADS



## AUTOMATIC LINEAR FULL LINES 4/6/8/10 NOZZLES



## MONOBLOCK AUTOMATIC FILLING LINES



## AUTOMATIC LINEAR FILLING LINES FOR BIG CONTAINERS UP TO 50 L



## FILLERS FOR BIG CONTAINERS UP TO 1000 L



## FILLING MACHINES AND BOTTLING PLANTS FOR LIQUID PRODUCTS MADE IN ITALY: **COSMETICS**

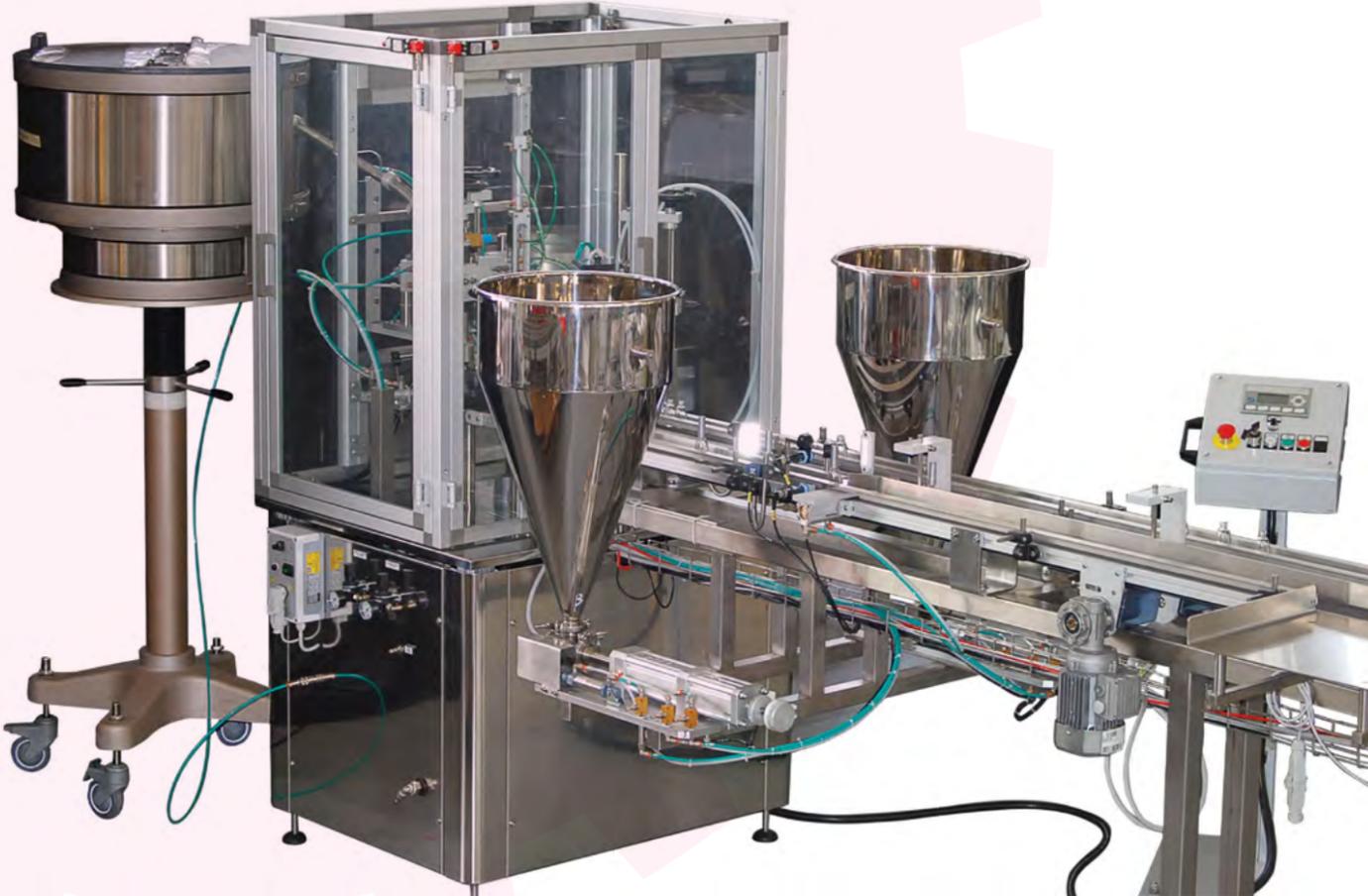
### SEMI-AUTOMATIC FILLERS (50CC-1000CC)



### SEMI-AUTOMATIC FILLERS (100CC-5000CC)



**AUTOMATIC LINES FOR VERY SMALL SIZES (5CC-50CC)**



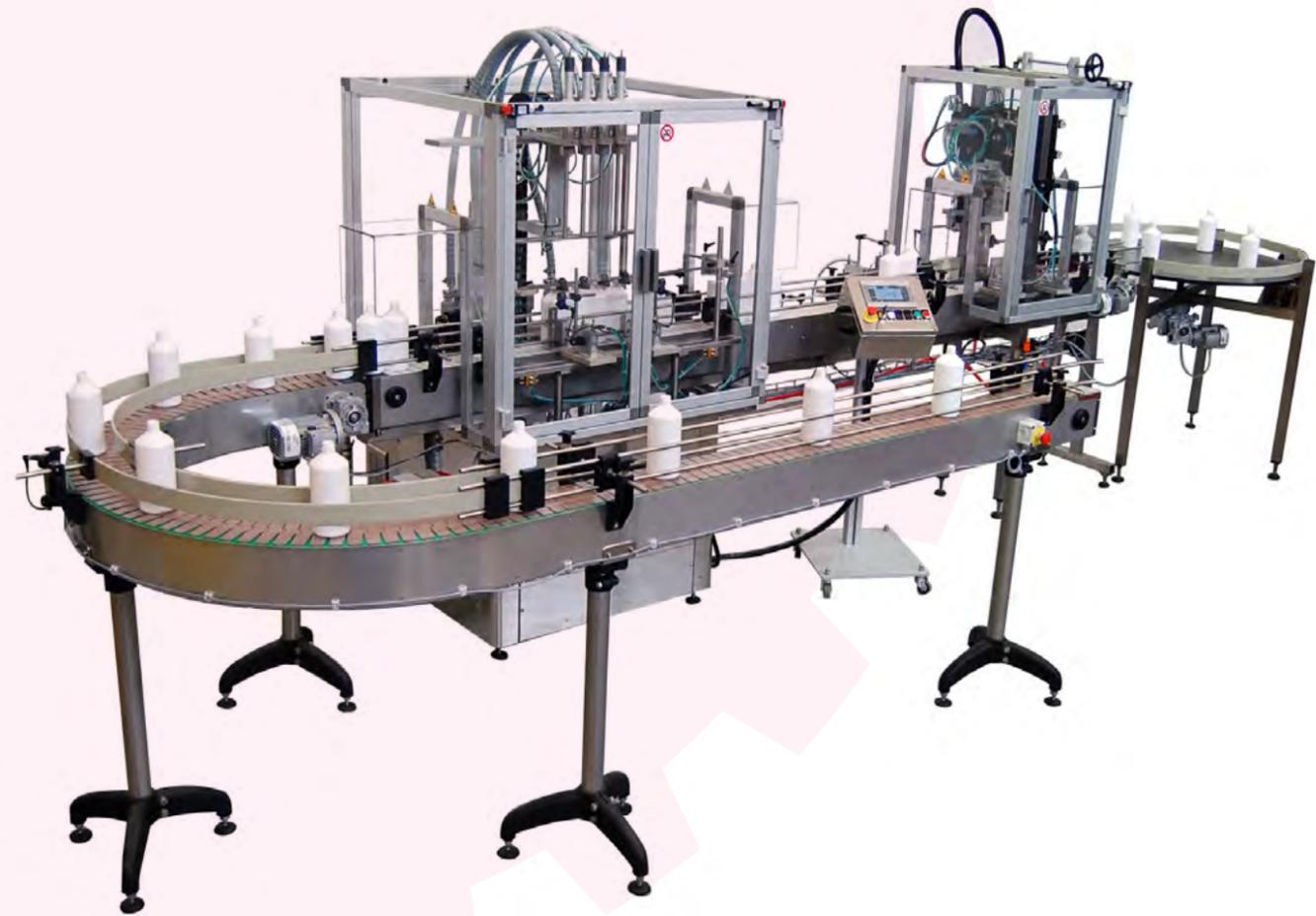
**AUTOMATIC LINES FOR SMALL SIZES (50CC-500CC)**



**LINEAR AUTOMATIC LINES HIGH VISCIOUS PRODUCTS (50CC-2000CC)**

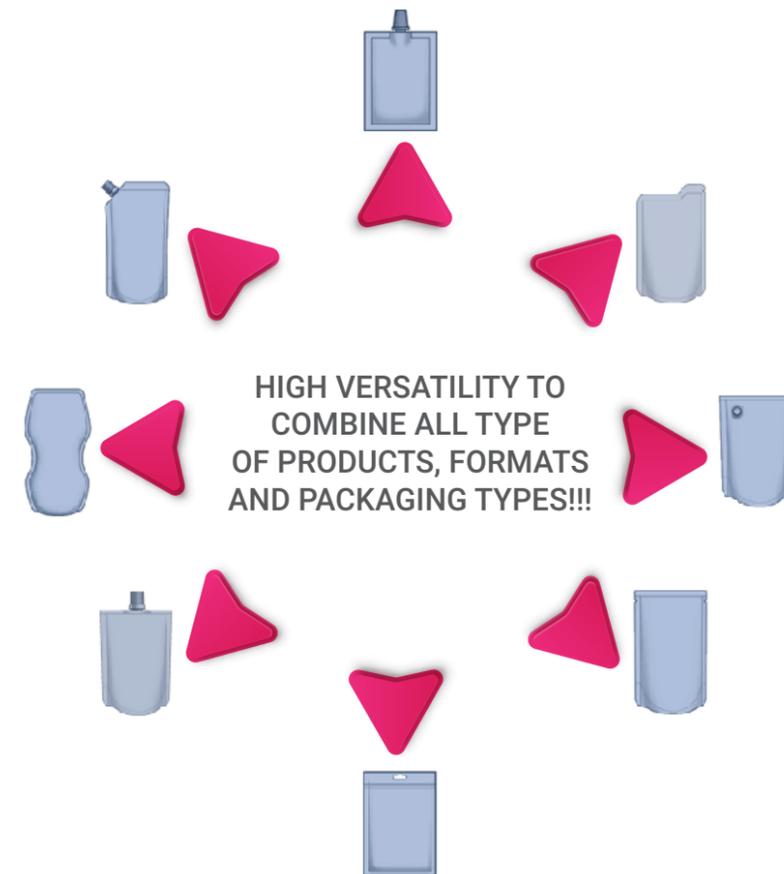


## LINEAR AUTOMATIC LINES 4/6/8/10 NOZZLES (200CC-5000CC)



## HORIZONTAL POUCH MACHINERY DETERGENT & COSMETICS

### HFFS FOR DOYPACK & SACHET (10CC-2000CC)





PRE-MADE POUCH MACHINERY (PMP) (10CC-2000CC)  
DETERGENT & COSMETICS

- This machine is suitable for flat bags, self-supporting bags, zipper bags and other heat-sealed composite bags.
- Scope of application: Suitable for packaging liquid detergent, creams, viscous products.

AUTOMATIC LINES FOR SMALL SIZES  
(50CC-500CC)

Tube Filling Machine is newly designed machine. Based on foreign advanced technology, we made some improvement on its configuration and operation; it fill 200 tubes/min using servo motor, with high accuracy and stability. It has complete safety measures to protect equipment and personnel safety.



## LIQUID SOAP PRODUCTION PLANTS

- Our company specializes in the manufacture of customized plants and machinery dedicated to the production of Personal Care and Household soap. Based on individual requirements, our company designs and builds custom compound plants using different types of basic elements such as reactors and mixers, agitators, homogenizers, recycle pumps, heat exchangers and so on.
- Liquid soap can be divided into two major product groups: Personal Care and Household.
- The Personal Care category includes all products used for personal care, such as **shampoo, shower gel, conditioner, body lotion, and face cream**; whereas, the



Household one includes the full range of household care products, **such as dishwashers, floor cleaners, liquid detergents, and fabric softeners.**

- All of our equipments are developed in accordance with national and international safety regulations and is manufactured using the best materials available, including stainless steel and carbon steel, to provide customers with maximum reliability, durability, and overall quality.

## SLEEVE SOLUTIONS



ORIGINAL BOTTLE SLEEVE



FULL BODY SLEEVE



UNDER LAP



BODY SLEEVE



TAMPER EVIDENT SLEEVE



MULTI PACK SLEEVE

# SOAP BARS



## BAR SOAP PRODUCTION SAPONIFICATION PLANTS

- Batch and continuous saponification

- Finishing line:

- Mixers
- Refiners.
- Rolls mills.
- Vacuum plidders.
- Cutters.
- Stampers.
- Pilot plants.



## FLOW PACKAGING MACHINES FOR SOAP:

A horizontal wrapping machine suitable for wrapping various products using only heat-sealable films designed to handle up to 400 pieces of soap per minute. With manual feeding and automatic feeding systems.

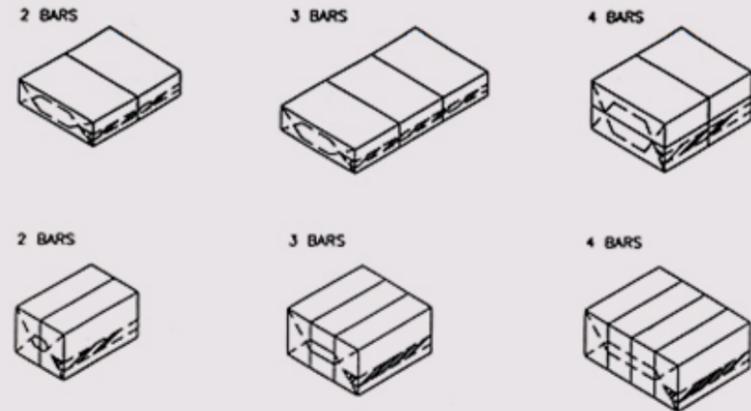
### Features:

- Machine Designed for Toilet Bar Soap/Multi-Purpose Laundry soap/Hotel Soap and detergent bar soaps.
- Heavy duty from structure.
- No soap no wrap interlock.
- Directly linkable to stamping machine/ bar cutter with linkup conveyor for automatic feeding of soap bars.
- Designed to handle soft bar soaps



## SOAP OVERWRAP MACHINES

Detergent Bar wrapping Machines has been designed to pack Detergent cakes/ Laundry cake in single wrap of wrapping paper. Machine has been designed to handle heat seal-able wrapper, laminates and Poly coated wrapping material. The machine is built from high precision components having the desired metallurgical and heat treatment characteristics, resulting in lower wear and tear, high life and less maintenance. The final result is a design of a robust, highly reliable, low maintenance, operator friendly machine having a high productivity and efficiency with negligible rejections.



## CARTONER MACHINES FOR SAOP:

cartoner is mainly used for toothpaste and toilet soap, It is designed with hot glue sealing or tucker type sealing systems. The control parts are of international famous brand and with English touch screen, which is very convenient to operate and the range arrive for high speed.



## PAPER WRAP MACHINE WITH STIFFENER:

- MACHINE DESIGNED FOR TOILET BAR SOAP WITH ADDING STIFFENER.
- SERVO AXIS FOR WRAPPER AND STIFFENER .
- HEAVY DUTY FORM STRUCTURE.
- NO SOAP NO WRAP INTERLOCK.
- DIRECTLY LINKABLE TO STAMPING MACHINE/ BAR CUTTER WITH LINKUP CONVEYOR FOR AUTOMATIC FEEDING OF SOAP BARS.
- DESIGNED TO HANDLE SOFT BAR SOAPS

