



**NHM** **limited**  
packaging & technological  
equipment

**2021**

## ABOUT US

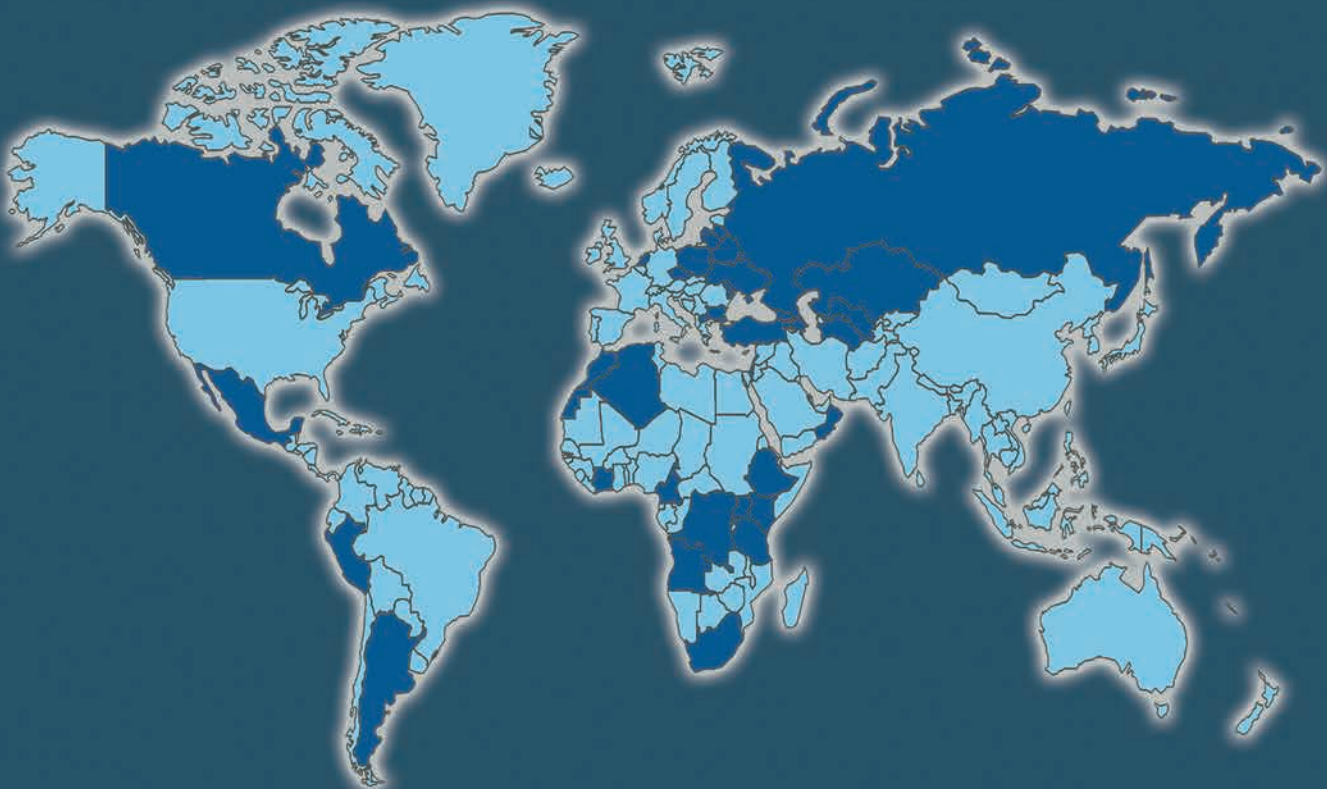
NHM Limited™ (NOVIY VEK) is a leading supplier of packaging and processing equipment for various industries. Our company provides clients with complete array of equipment and services - from pre-sales advice, supply and installation of equipment to full technical support during the warranty and post-warranty periods. We are well known for our quick and accurate response to the needs of all our clients.

### We specialize in providing consultation and equipment for:

- Food, cosmetic and pharmaceutical industries;
- Household chemicals and detergents;
- Milk, ointments and syrup processing lines;
- End-of-Line packaging solutions.

With more than 20 years of experience in the industry, **NHM Limited™** has accumulated abundant knowledge to propose optimal solutions towards packaging and processing equipment in accordance with customers' requirements. The range and functionality of equipment offered by our company allows you to find an ideal solution, appropriate in price, quality and performance for small & medium enterprises (SME) as well as large production plants.

Our company produces and supplies equipment, provides *commissioning works* and training of personnel as well as warranty and post-warranty service.



## Content

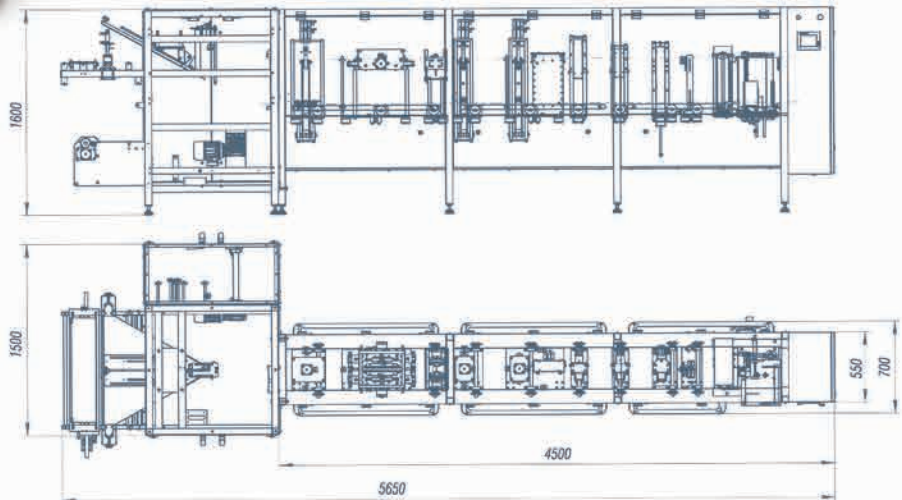
About company.....	1	Automatic Pouch filling machine <b>Milkpack 3000 / 6000</b> .....	18
Automatic bag forming machine <b>ASP</b> .....	3	Automatic Pouch filling machine <b>Milkpack ESL</b> .....	19
High-speed automatic machine <b>ADM-C1</b> for filling pre-made Doypack bag with sealing of spout.....	5	Automatic Tub / Jar filling machine <b>ATM-2</b> .....	21
Automatic machine for filling in pre-made Bags with sealing of spout <b>ADM-SP</b> .....	6	Automatic Tub filling machine <b>CFM-2T</b> .....	22
Automatic machine for filling in pre-made Bags with zip-lock <b>ADM-ZP</b> .....	7	Linear type filling line for Bottles <b>LFC</b> .....	23
Automatic machine for filling in pre-made Bags <b>ADM-AG</b> with auger filler.....	8	Rotary type filling line for Bottles <b>MFC</b> .....	25
Automatic machine for filling in Gualapack Bags through spout <b>ADM-GP</b> .....	9	Automatic machine for filling in moulded plastic Trays <b>AFT</b> .....	27
Automatic Cup / Tub filling machine <b>CFM-2C -WD</b> with weigh filler.....	10	Carton forming machine <b>FM</b> .....	28
Automatic machine for filling in Cups / Tubs <b>CFM-2C</b> with two fillers.....	11	Carton box sealing machine <b>ZY</b> .....	28
Automatic machine for filling of salads in Cups & Tubs <b>CFM-2C-SL</b> .....	12	Semi-automatic Cup filling machine <b>K3</b> .....	29
Automatic Cup / Tub filling machine <b>CFM-2L Ultraclean</b> .....	13	Semi-automatic machine for filling in tubs (buckets) <b>SATM</b> .....	29
Automatic Cup filling machine <b>CFM-3L</b> .....	14	Semi-automatic machine for filling in Bottles, Jars <b>SAB</b> .....	30
Linear type packaging machine for filling in Cups / Buckets <b>CFM-LN</b> .....	15	Semi-automatic Doypack filling machine <b>SAD</b> .....	30
Automatic Pouch filling machine <b>Milkpack 1500</b> .....	17	Fillers for automatic and semi-automatic machines.....	31
		Our clients.....	33
		Our suppliers.....	34



Note: Not all packages shown in this catalog are made on equipment of NHM Limited™- Noviy Vek

# Automatic Bag forming machine ASP

Automatic machine for forming various kinds of bags from film roll, such as *Doypack* (standard, *shaped*, with spout or *zip-lock*), packet with *K-seal* and *Sachets* with 2 or 3 side sealing.



## Features:

- Closed type packaging machine with protective acrylic doors fitted with sensors;
- Stainless steel frame;
- Programmable Logic Controller (PLC) with colour touch screen (HMI);
- Fast and user-friendly changeover process;
- Possibility of working with different packet types & formats;
- Ease of operation and maintenance.



## Type of bags possible on machine



### Main machine operations:

- Controlled unwinding of film roll;
- Making of round holes for bottom sealing (for Doypack bags only);
- Film folding;
- Bottom sealing;
- Vertical sealing;
- Cooling of vertical sealing area;
- Cutting of bags;
- Stacking in magazine.

### Optional equipment:

- Module for making bags with *zip-lock*;
- *V-notch* for ease in bag opening;
- *Euro-slot* hole or *Round* hole for display hanging;
- Bag with rounded corners;
- Module for making shaped bags;
- Module for handle punching;
- Changeover parts for making 2 / 3 sided sealed *sachets*;
- Quick changeover parts for bags with different dimensions;
- Bags with cut corner for subsequent spout placing and sealing;
- Spout sealing unit (top or corner);
- Figured sealing of various shapes on top part of the bag;
- UV-lamp for film sterilization.

### Technical data (standard configuration):

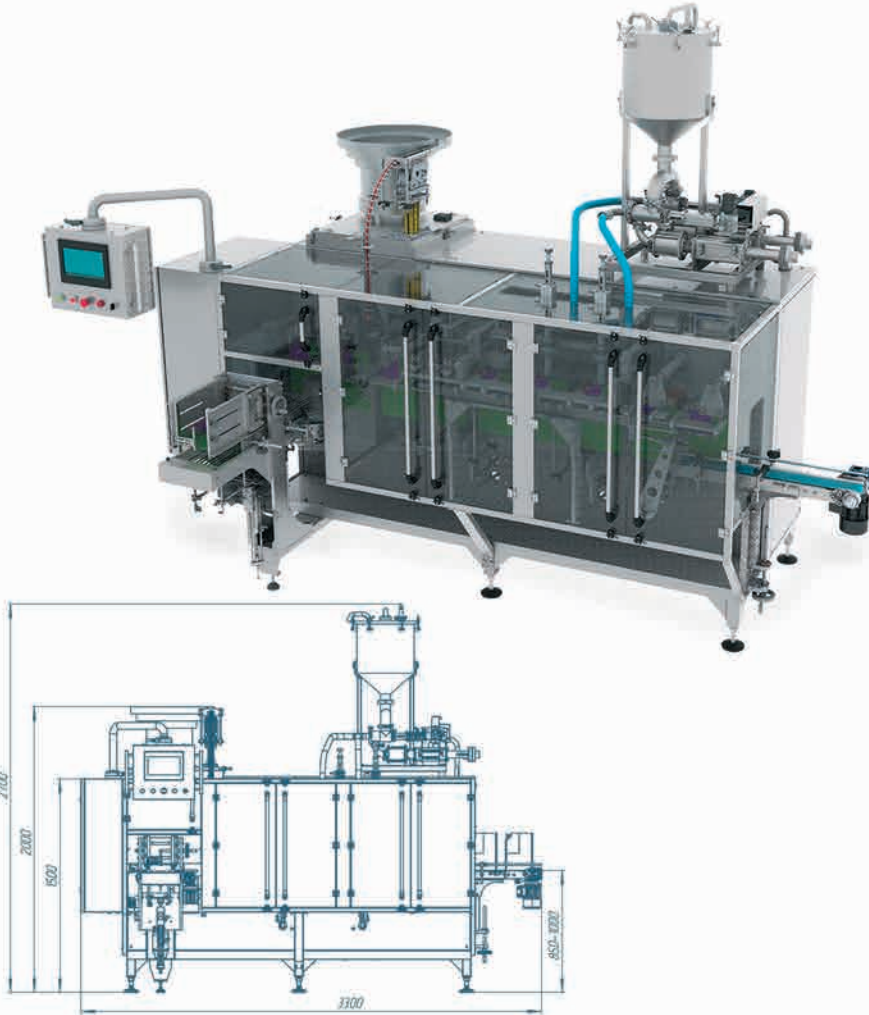
Speed*, max.....	up to 50 packets/min.
Packet size, max. (WxH).....	240 x 350 mm
Packaging materials .....	Multi-layered films
Film thickness .....	80 – 200 micron
Film roll diameter, max. ....	500 mm
Film roll width, max. ....	800 mm
Electricals**.....	380 V, 2,5 kW
Compressed air consumption**.....	800 litres/min. at 6 bar

\* Depends on dimensions and type of bags, film specifications and optional parts.

\*\* Depends on the final configuration of the machine.

# High-speed automatic machine ADM-C1 for filling pre-made Doypack bag with sealing of spout

This automatic machine is designed for filling liquid, pasty products into pre-made *Doypack* with a volume of up to 2000 ml with sealing of corner or top spout. Types of packages: standard "Doypack"; *Sachet* with 2 / 3-sided seal; bags with *K-seal* type bottom.



## Features:

- Universal piston filler for liquid and viscous products;
- Unit for cutting packet corner (for corner spout application);
- Spout orientator;
- Spout sealing unit;
- Seal cooling unit;
- Programmable logic controller (PLC) and Touch screen (HMI);
- Fast and user-friendly changeover for different bag sizes within 20 minutes;
- Main frame and protective panels are made of stainless steel;
- Closed-type machine, doors are equipped with security sensors.

## Optional equipment:

- Expiry date on top seal by heat embossing;
- Inkjet printer;
- Fillers:
  - Piston filler;
  - Flow meter.
- UV-lamp for spout sterilization;
- Product hopper with heating jacket and stirrer;
- Connection for CIP.

## Technical data (standard configuration):

Speed*, max.,*	up to 40 packets/min.
Packet size, max. (WxH)	190 x 300 mm
Packaging material	Pre-made <i>Doypack</i> and <i>Sachet</i>
Film thickness	80 – 200 microns
Electricals**	380 V, 5 kW
Compressed air consumption**	700 litres/minute at 6 bar

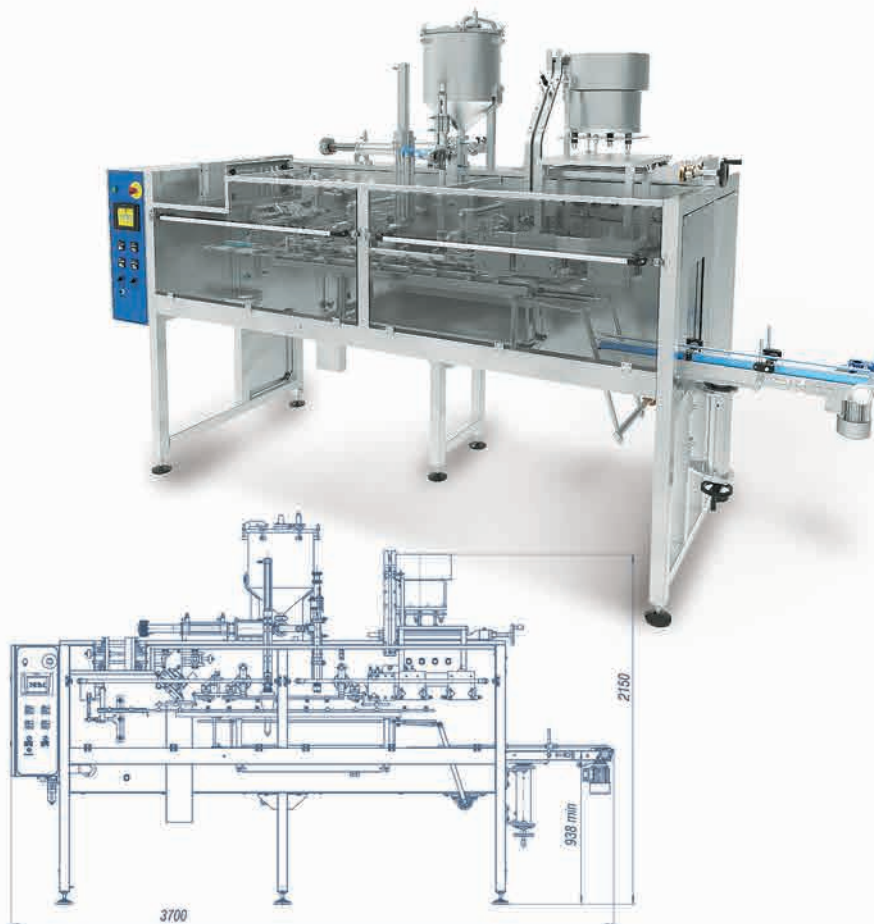
\* Depends on product & film specifications, bag dimensions and optional parts.

\*\* Depends on the final configuration of the machine.



# Automatic machine for filling in pre-made Bags with sealing of spout ADM-SP

This automatic machine is designed for filling liquid, pasty or dry products into pre-made *Doypack* with a volume of **up to 2500 ml** with sealing of corner or top spout. Types of packages: standard "Doypack"; *Sachet* with 2 / 3-sided seal; bags with *K-seal* type bottom.



## Features:

- Universal piston filler for liquid and viscous products;
- Unit for cutting of packet corner;
- Spout orientator;
- Spout sealing unit;
- Seam cooling unit;
- Programmable logic controller (PLC) and Touch screen (HMI);
- Fast and user-friendly changeover for different bag sizes within 20 minutes;
- Main frame and protective panels are made of stainless steel;
- Closed-type machine, doors are equipped with security sensors.

## Optional equipment:

- Expiry date on top seal by heat embossing;
- Inkjet printer;
- Fillers:
  - Piston filler;
  - Flow meter;
  - Servo Liquid filler;
  - Weigh filler;
  - Volumetric cup filler.
- Product hopper with heating jacket and stirrer;
- UV-lamp for spout sterilization
- Connection for CIP.

## Technical data (standard configuration):

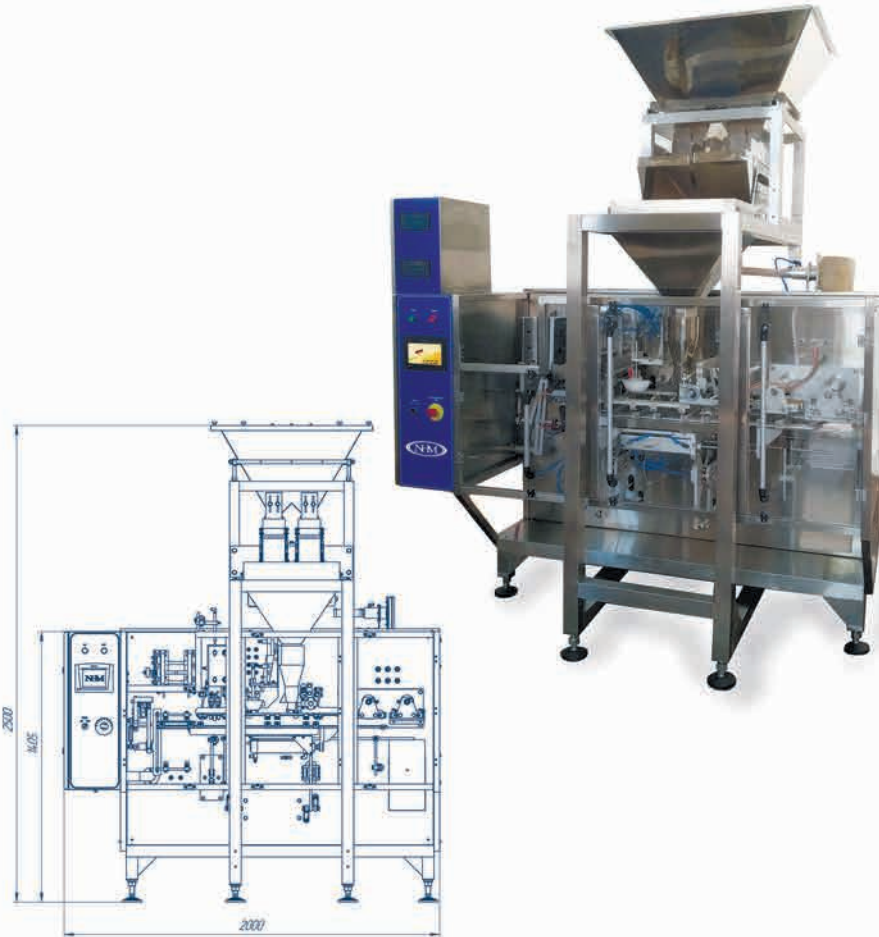
Speed*, max. ....	up to 20 packets/min.
Packet size, max. (WxH).....	240 x 350 mm
Packaging material.....	Pre-made <i>Doypack</i> and <i>Sachet</i>
Film thickness.....	80 – 200 micron
Electricals**.....	380 V, 3 kW
Compressed air consumption**.....	800 litres/minute at 6 Bar

\* Depends on product & film specifications, bag dimensions and optional parts.  
 \*\* Depends on the final configuration of the machine.



# Automatic machine for filling in pre-made Bags with zip-lock **ADM-ZP**

This automatic machine is designed for filling of dry products (granular and pieces) in pre-made *Doypack* (standard, figured or bag with zip-lock), *Sachet* with 2 / 3-sided seal, bags with *K-seal* type bottom.



## Features:

- Electronic weigh filler for dry granular products;
- *Zip-lock* opening unit;
- Entire machine frame and protective side panels are made of stainless steel;
- Fast and user-friendly changeover for different bag sizes within 20 minutes;
- Programmable logic controller (PLC) and Touch screen (HMI);
- Closed-type machine, doors are equipped with security sensors.

## Optional equipment:

- Expiry date on top seal by heat embossing;
- Inkjet printer;
- Fillers:
  - Electronic weigh filler (linear up to 4 heads or **Multihed**);
  - Volumetric cup filler;
- Nitrogen gas flushing;
- Automatic bucket elevator for product infeed.

## Technical data (standard configuration):

Speed*, max.,*	up to 20 packets/min.
Packet size, max. (WxH)	160 x 240 mm
Packaging material	Pre-made <i>Doypack</i> and <i>Sachet</i>
Film thickness	80 – 200 microns
Electricals**	380 V, 2 kW
Compressed air consumption**	850 litres/minute at 6 bar

\* Depends on product & film specifications, bag dimensions and optional parts.

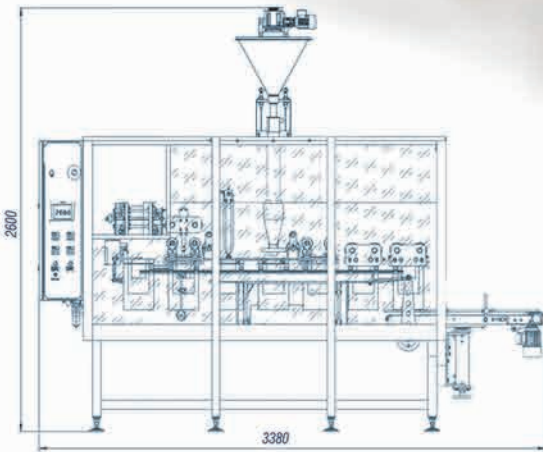
\*\* Depends on the final configuration of the machine.





# Automatic machine for filling in pre-made Bags ADM-AG with auger filler

This automatic machine is designed for filling of powdered products such as milk powder, powdered coffee, spices, cocoa powder, etc. in pre-made *Doypack* (standard or bag with zip-lock), *Sachet* with 2 / 3-sided seal, and bags with *K-seal* type bottom.



## Features:

- Auger filler for powdered products;
- Automatic product infeed system;
- *Zip-lock* opening unit;
- Entire machine frame and protective side panels are made of stainless steel;
- Fast and user-friendly changeover for different packet sizes within 20 minutes;
- Programmable logic controller (PLC) and Touch screen (HMI);
- Closed-type machine, doors are equipped with security sensors.

## Optional equipment:

- Expiry date on top seal by heat embossing;
- Nitrogen gas flushing;
- Inkjet printer.

## Technical data (standard configuration):

Speed*, max. ....	up to 20 packets/min.
Packet size, max. (WxH) .....	240 x 350 mm
Packaging material .....	Pre-made <i>Doypack</i> and <i>Sachet</i>
Film thickness .....	80 – 200 microns
Electricals** .....	380 V, 3 kW
Compressed air consumption** .....	600 litres/minute at 6 bar

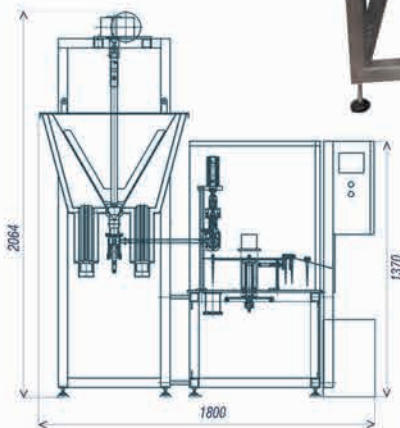
\* Depends on product & film specifications, bag dimensions and optional parts.

\*\* Depends on the final configuration of the machine.



# Automatic machine for filling in *Doypack* Bags through top spout **ADM-GP**

This machine is designed for filling of liquid and viscous products in pre-made *Gualapack* bags with pre-sealed top spout with further capping on spout neck.



## Operation Principles:

- Manual operations: bag feeding, screw cap orientation;
- Automatic operations: vacuuming and filling of bag with product, inert gas flushing, cap placing and screwing, outfeed of filled bag;
- Automatic turret rotation.

## Features:

- Main frame and protective panels are made of stainless steel SS 304;
- Programmable logic controller (PLC) and Touch screen (HMI);
- Flow meter or volumetric piston filler for liquid and viscous products made from stainless steel;
- Vacuuming and inert gas flushing system;
- Cap magazine with orientation & feeding;
- Cap placing & closing unit.

## Technical data (standard configuration):

Product to be packed .....	Liquid and viscous products
Speed*, max. ....	20 packets/min.
Packaging type.....	Pre-made bags with top spout
Filling temperature, max. ....	90°C
Filling range.....	100 – 250 ml OR 200 - 500 ml.

\* Depends on product & film specifications, bag dimensions and optional parts.

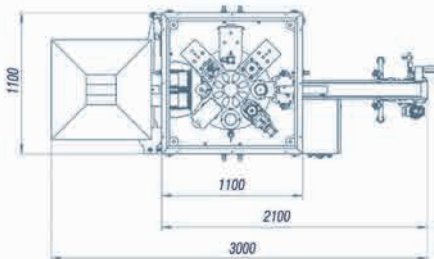
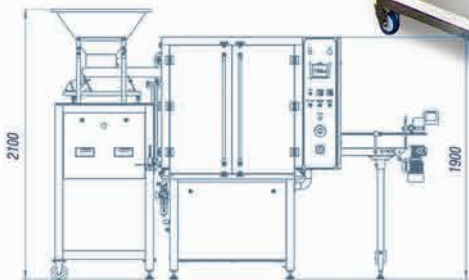
## Optional equipment:

- Printer as per client's requirements;
- Product hopper with heating jacket;
- Automatic product infeed system;
- Connection for CIP.



# Automatic Cup / Tub filling machine CFM-2C-WD with weigh filler

This machine is designed for filling of dry granular products such as ground coffee, snacks, cereals, granola, etc. in plastic cups or tubs (buckets) with pre-cut aluminum lid or sealing membrane cut from laminated film roll. Machine can be optionally equipped with snap-on plastic cover unit for hygienic opening / closure.



## Features:

- Electronic weigh filling system provides high accuracy;
- Main frame and protective panels are made of stainless steel;
- Equipped with Programmable Logic Controller (PLC) with colour touch screen (HMI);
- Rotary type of machine with mechanical turret drive;
- Safety function "No cup – No filling – No sealing"
- Sealing of membrane cut from film roll.

## Optional equipment:

- Product compression inside container;
- Rotary collection table;
- Printer for expiry date coding;
- UV-lamp for container treatment;
- Servo driven turret.

## Technical data (standard configuration):

Product type .....	Dry granular products
Speed*, max. ....	1500 pcs./hour
Filling volume .....	100 – 500 ml/g
Packaging type.....	Premade plastic containers
Electricals** .....	380 V, 50 Hz
Installed power**.....	1,3 kW
Compressed air consumption**.....	450 litres/min. at 6 bar

\* Depends on dimensions and type of container, product features and optional parts.

\*\* Depends on the final configuration of the machine.



# Automatic machine for filling in Cups / Tubs CFM-2C with two fillers

This automatic machine is designed for filling of liquids, viscous, dry products such as yogurt, jam, cheese spread, chocolate paste, nuts, breakfast cereals, spoons, powders and similar products in plastic cups & tubs (buckets) with aluminum lids. Machine can be optionally equipped with snap-on plastic cover unit.



## Features:

- Two fillers installed for products with different characteristics;
- Main frame and protective panels are made of stainless steel;
- Programmable logic controller (PLC) and Touch screen (HMI);
- Rotary type of machine with mechanical turret drive;
- Safety function "No cup – No filling – No sealing"
- Fast and user-friendly changeover process for different container size within 20 minutes.

## Optional equipment:

- Rotary collection table;
- Printer for expiry date coding;
- UV-lamp for container treatment;
- Servo driven turret;
- Servo driven piston filler.
- Connection for CIP.



## Technical data (standard configuration):

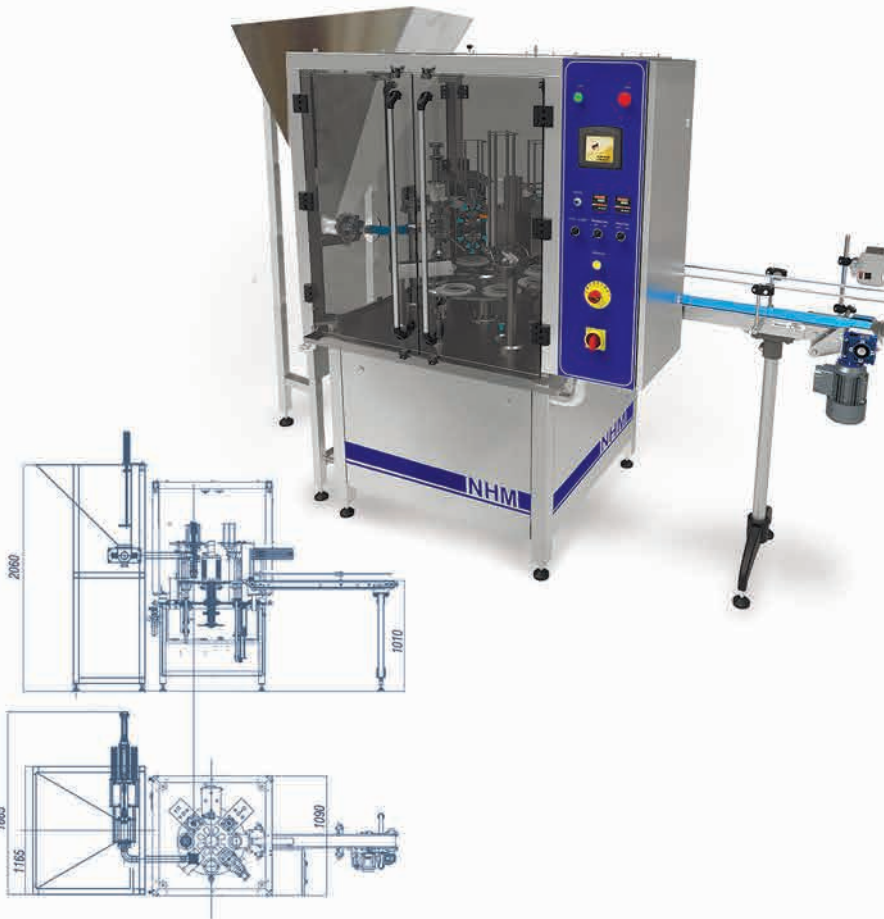
Product type .....	Liquid, viscous and dry products
Speed*, max. ....	1500 pcs. /hour
Filling range .....	10 - 80; 20 - 200; 100 – 500 ml/g
Package type.....	Premade plastic containers
Electricals**.....	380 V, 50 Hz
Installed power**.....	1,5 kW
Compressed air consumption**.....	500 litres/min.at 6 bar

\* Depends on dimensions and type of container, product features and optional parts.  
\*\* Depends on the final configuration of the machine.



# Automatic machine for filling of salads in Cups / Tubs CFM-2C-SL

Single lane special purpose filling machine for filling of salads such as sauerkraut, grated beetroot, pet food, coleslaw, etc. in plastic cups with aluminum lid or film from a roll. Machine can be optionally equipped with snap-on plastic cover unit for hygienic opening/closure of cup.



## Features:

- Main frame and protective panels are made of stainless steel;
- Special filler for non-standard products;
- Product compression inside cup;
- Programmable logic controller (PLC) and colour touch screen (HMI);
- Rotary type of machine with mechanical turret drive;
- Safety function "No cup – No filling – No sealing"
- Connections for central CIP.

## Optional equipment:

- Rotary collection table
- Printer for expiry date coding
- UV-lamp for container treatment
- Servo driven turret drive
- Servo driven piston filler
- Standalone CIP station

## Technical data (standard configuration):

Product type .....	Salads
Speed*, max. ....	1500 pcs. /hour
Filling range .....	100 – 500 ml/g
Package type .....	Premade plastic containers
Electricals** .....	380 V, 50 Hz
Installed power** .....	2 kW
Compressed air consumption** .....	900 litres/min.at 6 bar

\* Depends on dimensions and type of container, product features and optional parts.  
\*\* Depends on the final configuration of the machine.



## Automatic Cup / Tub filling machine CFM-2L *Ultraclean*

Automatic double-lane machine in "ultraclean" execution is designed for filling of liquid and viscous products such as yoghurt, desserts, cold coffee, processed cheese, chocolate paste and other similar products in plastic cups with pre-cut aluminum lid. Machine can be optionally equipped with sealing of membrane cut from laminated film roll and snap-on plastic cover unit for hygienic opening / closure.



### Features:

- Air cleaning in product filling area with Class G4 filter and Class H14 HEPA filter;
- Universal volumetric piston fillers for viscous and liquid products with advanced hygienic features during filling and CIP;
- Main frame and protective panels are made of stainless steel;
- Feeding of cups & lids without opening of doors;
- Equipped with Programmable logic controller (PLC) and colour touch screen (HMI);
- Rotary type of machine with mechanical turret drive;
- Safety function "No cup – No filling – No sealing";
- Connection for CIP.

### Technical data (standard configuration):

Product type.....	Liquid and viscous products
Speed*, max. ....	3000 pcs./hour
Filling volume .....	100 – 500 ml/g
Package type.....	Premade plastic containers
Electricals**.....	380 V, 50 Hz
Installed power** .....	2 kW
Compressed air consumption**.....	900 litres/min. at 6 bar

\* Depends on dimensions and type of container, product features and optional parts.

\*\* Depends on the final configuration of the machine.

### Optional equipment:

- Rotary collection table;
- Printer for expiry date coding;
- Changeover parts for different cup size;
- UV-lamp for container treatment;
- Servo driven turret;
- Servo driven piston filler;
- Product hopper with heating jacket and agitator;
- Standalone CIP station.



# Automatic Cup filling machine CFM-3L

This machine is designed for filling of liquid, viscous or dry products, such as sour cream, yoghurt, processed cheese, sauces, snacks or similar products in plastic cups with aluminum or plastic lid. Machine can be optionally equipped with snap-on plastic cover unit for hygienic opening/closure of cup.



## Features:

- 3-lane rotary packaging machine;
- Three fillers with single product tank;
- Rotary type machine with mechanical turret drive;
- Main frame and protective panels are made of stainless steel with acrylic safety doors;
- Machine is equipped with Programmable logic controller (PLC) and colour HMI;
- Safety function "No cup – No filling – No sealing"
- Possibility of fast changeover for different cup size within 20 minutes.

## Optional equipment:

- Rotary collection table;
- Printer for expiry date coding;
- Changeover parts for different cup size;
- UV-lamp for container, lid or film treatment;
- Inert gas flushing system
- Servo driven turret;
- Servo driven piston filler;
- Product hopper with heating jacket and agitator;
- Standalone CIP station.

## Technical data (standard configuration):

Product type .....	Liquid, viscous or dry products
Speed*, max. ....	4500 pcs./hour
Filling volume .....	100 – 500 ml/g
Package type .....	Premade plastic containers
Electricals** .....	380 V, 50 Hz
Installed power** .....	3 kW
Compressed air consumption** .....	1300 litres/min. at 6 bar

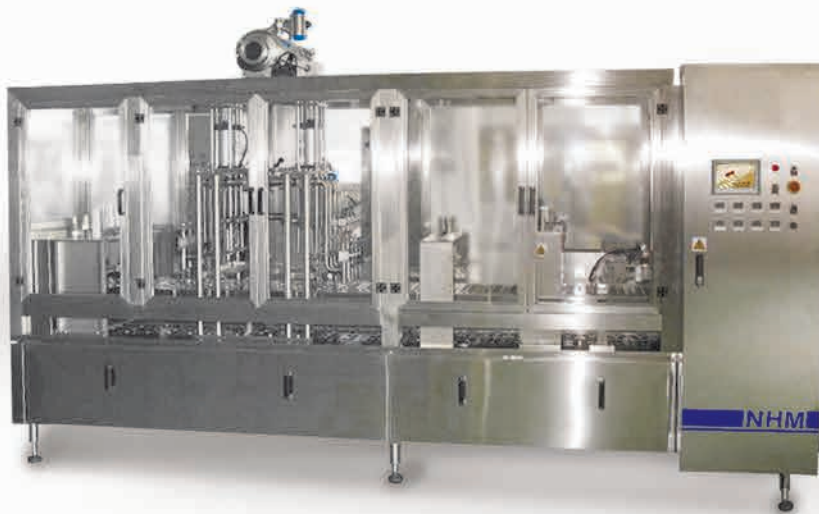
\* Depends on dimensions and type of container, product features and optional parts.

\*\* Depends on the final configuration of the machine.



# Linear type packaging machine for filling in Cups / Buckets CFM-LN

The machine is designed for filling in plastic containers various types of liquid, viscous and dry products (yogurt, deserts, cream, nuts, breakfast cereals, powders, salads, etc.) with particles and sealing with pre-cut lids or membrane cut from a film roll. The machine can be optionally equipped with snap-on plastic cover unit.



## Features:

- Linear machine can be a 4-lane or a 6-lane design configuration;
- Filler types:
  - Piston;
  - Weigh;
  - Cup;
  - Auger.
- Machine frame and protective panels made of Stainless steel with acrylic doors;
- Programmable logic controller (PLC) and Touch screen (HMI);
- Safety function: "No container – No filling – No foil sealing".

## Optional equipment:

- HEPA filter for filling area for "Ultraclean" series;
- Air or nitrogen blowing system (MAP) system;
- Sealing of membrane from a film roll instead of pre-cut lids;
- Capping with snap-on cap;
- Weight checker that provides feedback to the fillers;
- Rotary collection table;
- Printer for date coding;
- Changeover parts for different format of container;
- Extra fillers depending on the product and customer requirements.

## Technical data (standard configuration):

Product .....	Liquid, viscous and dry products
Speed*, max. ....	6000 – 9000 containers/hour
Filling range*** .....	10 – 80; 100 – 500 ml/g
Package type.....	Pre-formed containers
Electrical** .....	220/380 V, 50 Hz
Installed power** .....	5.5 kW
Air consumption** .....	1,2 m <sup>3</sup> /min. at 6 bar

\* Depends upon the container size, product characteristics and optional equipment.

\*\* Depends on the final configuration of the equipment.

\*\*\* Other filling ranges available on request.





## Working principle:

- Container and pre-cut lids are loaded into the magazine;
- The containers are taken and transferred automatically to the cells on the conveyor;
- Conveyor transfer the containers to functional stations for undertaking following:
  - Check presence of container;
  - Filling;
  - Pick and place pre-cut lid or Membrane cut from a film roll;
  - Sealing of lid;
  - Discharge on the outfeed conveyor.



### Check for presence of container

This station is equipped with high sensitive photo sensor that ensures proper functioning of the safety feature "No container – No filling – No lidding".

The next station is for blowing air or nitrogen flushing of the container.

### Filling station

Filling nozzles with interchangeable filling heads depending upon product characteristics provide filling without splashing, foaming and have a suck-in function to avoid dripping. Thereby the product does not fall on the sides of the container and a clean seal is ensured.



### Transfer of pre-cut lid

The "pick-and-place" system for the pre-cut lids provides exact placement of the lid at the required place on the container. In case of absence of lids in the magazine, an alarm is sounded and the machine stops.

This ensures that no cup will be received without the lid.



### Lid sealing

The lid sealing station is equipped with safety guards in order to ensure the safety of personnel. Special design of the sealing jaws ensures high quality sealing of the lids on the container.

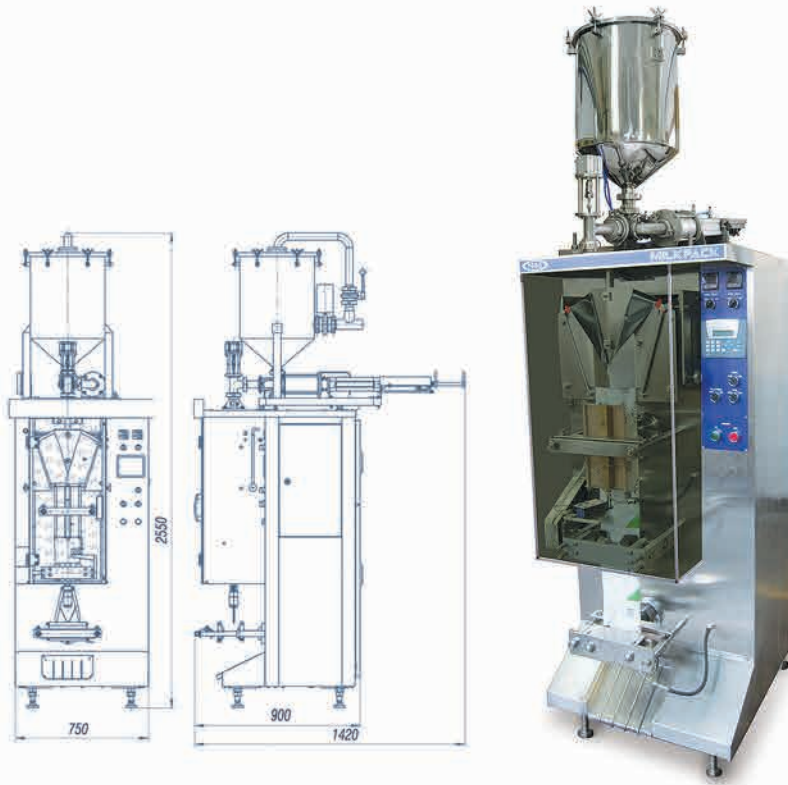


### Outfeed of filling containers

The filled containers are unloaded on to a conveyor after the filling, lid sealing and cap placement (optional). The cups can then be collected on a rotary collection table (optional) for manually or automatic packaging in cartons for further transportation

# Automatic Pouch filling machine Milkpack 1500

Milkpack series packaging machines are used for packing of liquid and viscous food and non-food in polyethylene "pillow" pouch. This machine is designed as budget model with mechanical drive within Milkpack series. Machine is dedicated for small & medium size processing companies as well as for farms with milk processing facilities.



## Features:

- Programmable logic controller (PLC) with integrated screen;
- Self-diagnostics system with alarm indication on screen;
- Single switch for automatic start/stop of the machine;
- Constant heating of sealing elements with accurate temperature control;
- UV-lamp for packaging material treatment;
- Thermal transfer ribbon printer is included in standard scope of supply;
- All parts which are in contact with product are made of food-grade stainless steel AISI 304;
- External panels are made of stainless steel AISI 202;
- Pouch forming area and product filling area are made of stainless steel AISI 304;
- Easy to operate and maintain;
- Minimum requirements for spare parts and consumables.

## Technical data (standard configuration):

Product.....	Liquid and viscous products (milk, fermented milk, sour cream, kefir, laban, mayonnaise, etc)
Speed.....	1500 pouches/hour
Filling range.....	200 – 1000 g/ml
Filling accuracy*.....	± 0,5 – 1%
Electricals, max.....	3 kW, 380 V, 50 Hz
Compressed air pressure.....	6 bar
Air consumption.....	18 m <sup>3</sup> /hour
Packaging materials.....	Multi-layered polyethylene films (LDPE) with thickness of 70-90 microns. Roll width – 320 mm.

\* In case of regular cleaning of filling system, constant product density, constant product level in product hopper.

## Optional equipment:

- Outfeed conveyor;
- Standalone CIP system;
- Automatic counting and crating system for ready pouches.



# Automatic Pouch filling machine Milkpack 3000 / 6000

Milkpack series packaging machines are used for packing of liquid and viscous food and non-food in polyethylene "pillow" pouch. Milkpack 3000 and Milkpack 6000 are high-speed machines which were designed in accordance to modern hygienic equipment requirements.



## Features:

- Main frame and protective panels are made of stainless steel;
- Machine is equipped with photoeye mark sensor and thermal transfer printer in standard scope of supply;
- Single switch for automatic start/stop of the machine;
- Film length pulling is controlled by Mitsubishi servo drive, which provides accurate and smooth pulling without jerks and loss of time;
- Programmable logic controller (PLC) and colour touch screen HMI;
- Universal double-chambered filler with improved hygienic features;
- Possibility to simultaneously pack two different products with different filling quantities & pouch length;
- Constant/Impulse sealing type of heating elements;
- Menu of PLC stores up to 12 groups of parameter settings in memory for each combination of "film-product" on each head, which are quickly accessible from touch panel and provide immediate changeovers;
- Connections for central CIP station;
- Tips for eliminating emergency situations are displayed on the screen;
- Self-diagnostics system and access through Internet;
- Minimum requirements for spare parts and consumables.

## Technical data (standard configuration):

	Milkpack 3000	Milkpack 6000
Speed**.....	3000 pouches/hour.....	6000 pouches/hour
Filling range .....	200 – 1000 g/ml.....	200 – 1000 g/ml
Filling accuracy*.....	± 0.5 – 1 %.....	± 0.5 – 1 %
Electricals, max.....	1.5 kW, 380±4% V, 50 Hz.....	3.0 kW, 380±4% V, 50 Hz
Compressed air pressure....	6 bar.....	6 bar
Air consumption.....	~ 30 m <sup>3</sup> /hour.....	~ 60 m <sup>3</sup> /hour
Packaging material.....	Multi-layered polyethylene films (LDPE) with thickness of 70-90 microns. Roll width – 320 mm.	

\* In case of regular cleaning of filling system, constant product density, constant product level in product hopper.

\*\* Depends on dimensions of pouch, product features.

## Optional equipment:

- Outfeed conveyor;
- Standalone CIP system;
- Colour touch screen Mitsubishi 10,4";
- Thermal transfer printer Markem-Imaje 8018 (USA);
- Automatic counting and crating system for ready pouches.



# Automatic Pouch filling machine Milkpack ESL

MILKPACK ESL is intended for filling of liquid products with extended shelf life in "pillow" pouch. This machine is designed for filling of UHT milk, ESL milk, flavored milk and fruit drinks (juices).



## ESL Packaging

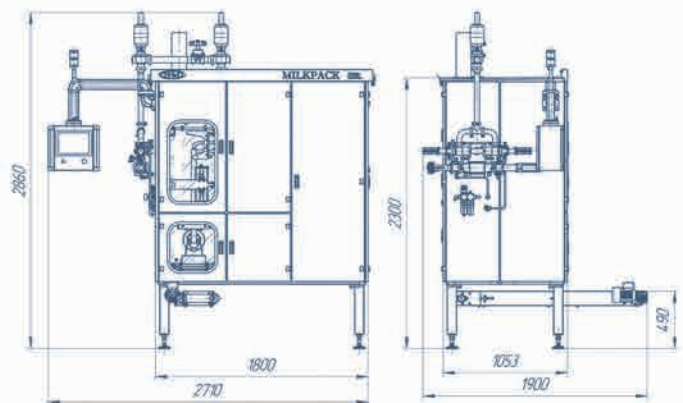
**Packing of product in clean & sterile environment that allows filling of ultra-pasteurized and UHT milk:**

- Film disinfection system by hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>);
- System of UV lamps for drying film and additional anti-bacterial treatment;
- HEPA filter for creation of clean sterile air around the product;
- "Tube-in-tube" filling system;
- CIP system;
- Aseptic valves for separating filling and cleaning areas;
- Contact of product with ambient air is eliminated.

Overall, ESL system **prevents** product from contamination by packaging material or ambient air.

## What is ESL packaging?

The main concept of ESL is increasing shelf life of product up to 30 - 40 days while stored at room temperature that allows considerable reduction in energy cost towards storage and transportation. ESL packed products, for example milk, is processed at high temperature 125–137° C for a short period of time, then quickly cooled to room temperature and filled. As per food technologists this process destroys all harmful bacteria and allows to save the nutritional and energy value of the product. Guaranteed film sterilization and packaging is performed in a clean environment, which prevents contamination of the product.



## Optional equipment:

- Outfeed conveyor
- Standalone CIP station
- Thermal transfer printer *Markem-Imaje* 8018 (USA)
- Automatic counting and crating system for ready pouches.

## Milkpack ESL features

- Main frame, covers and all parts in contact with product are made of stainless steel AISI 304;
- Film length pulling is controlled by Mitsubishi servo drive;
- PLC based control system:
  - All production process data (sealing temperature, speed, package length, etc.) are displayed on the touch screen of the operator panel and these parameters are easily accessible for adjustment;
  - PLC has self-diagnostics mode which displays up to 20 alarms on screen;
  - Menu of PLC stores up to 12 group of parameter settings per lane in memory for each combination of "film-product".
- Sterilization and disinfection:
  - film pulling unit is completely isolated from the external environment, and thus protected from any contamination;
  - film is continuously sterilized in a hydrogen peroxide ( $H_2O_2$ ) bath from both sides.  $H_2O_2$  temperature is adjustable;
  - residues of hydrogen peroxide is effectively removed from the surface of the film before entering the filling chamber;
  - preparation of sterile air and UV lamps.
- Special filling system. Design of filler is fully adopted for CIP connection. It is possible to rinse all surfaces and cavities without disassembling the filler;
- Constant heating type of seam sealing system;
- Integration flexibility with any type of UHT sterilizer or aseptic tank;
- Fast changeover process from touch screen for filling of different volumes (200 ml., 500 ml. & 1000 ml).

## Technical data (standard configuration):

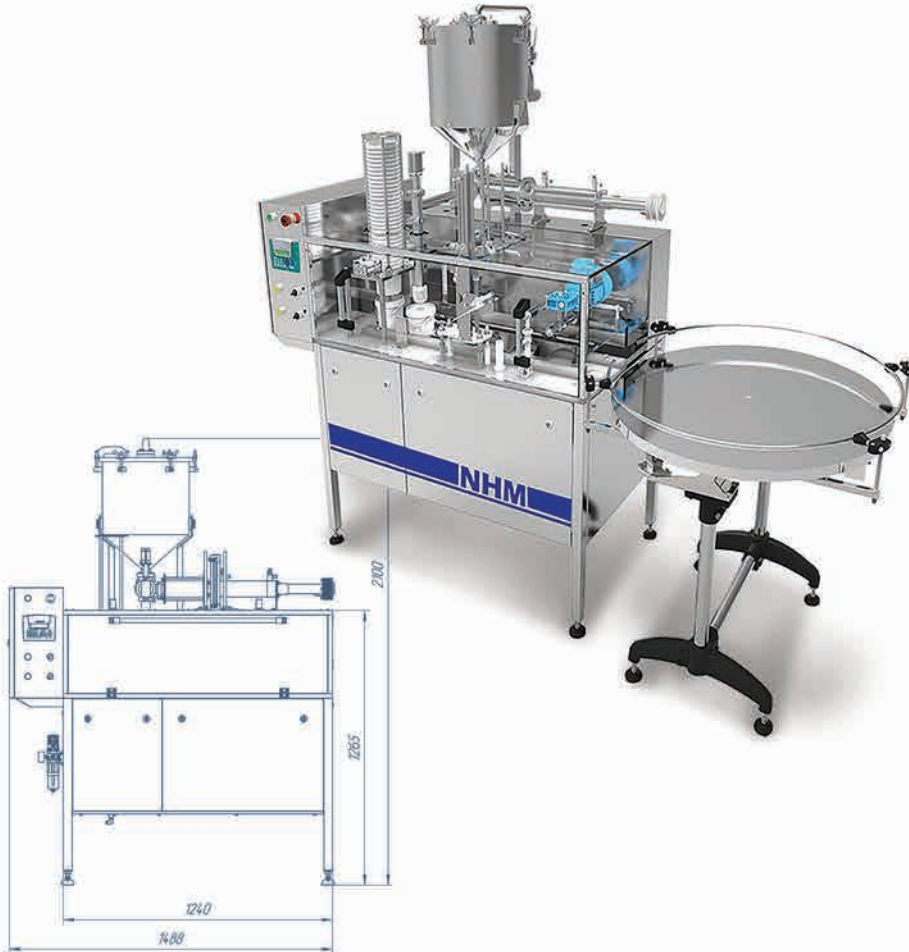
Speed*, max.....	2000 (based on 1 lt.) pouches/hour
Filling range .....	200 – 1000 ml
Filling temperature .....	18 – 22° C
Filling accuracy .....	± 0.5 – 1.5%
Package type.....	3-side seal "pillow" pouch
Product shelf life .....	30 – 40 days at room temperature Up to 90 days at 2 – 7° C
Compressed air consumption.....	30 m <sup>3</sup> /hour
HEPA filter class.....	G4 and H14
Electricals .....	380 V, 50 Hz
Installed power, max. ....	1.5 kW
Weight .....	3600 kg

\* Depends on quality of packaging material and product characteristics, operator skills.



# Automatic Tub / Jar filling machine ATM-2

This linear type packaging machine is intended for filling of liquid, viscous and dry products such as sour cream, chocolate paste, jam, mayonnaise, ketchup, washing powder, grains, cosmetics, construction products and other similar products in plastic tubs or jars with membrane sealing from film/foil roll (option) and capping with plastic lid or "twist-off".



## Features:

- Machine is equipped with Programmable logic controller and colour HMI;
- Tub magazine\*\* accommodates up to 30 pcs.;
- Possibility to use tubs with or without handles;
- Clamshell mechanism for transfer of tubs / jars;
- Easy changeover process within 15 minutes;
- Possibility to equip machine with different types of filling system depending of product to be filled;
- "No container – No filling – No capping" system;
- Outfeed conveyor.

## Optional equipment:

- Rotary collection table;
- Printer for expiry date coding;
- Unit for cutting and sealing of tub/ jar with membrane from film / foil roll before capping;
- UV-lamp for container treatment;
- Piston filler with servo drive;
- Fillers: electronic weigh filler, auger filler, volumetric cup filler, piston filler.

## Technical data (standard configuration):

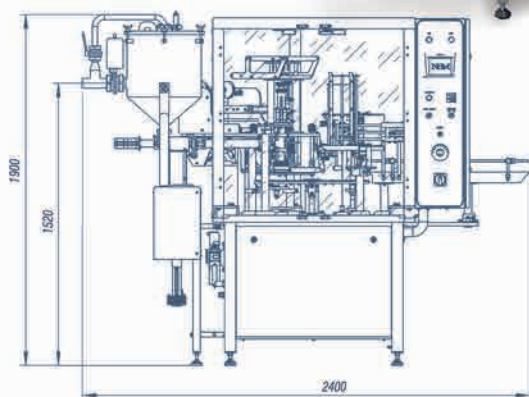
Product type.....	Liquid, viscous & dry products
Speed*, max. ....	900 pcs./hour
Filling volume.....	200 – 1000 or 500 – 4000 ml/g
Packaging type .....	Premade plastic containers
Electricals**.....	380 V, 50 Hz
Installed power**.....	0.6 kW
Air consumption**.....	0.2 m <sup>3</sup> /min. at 6 bar

\* Depends on dimensions and type of tubs, film specifications and optional parts.  
\*\* Depends on the final configuration of the machine.



# Automatic Tub filling machine CFM-2T

This machine of rotary type is intended for filling of liquid, viscous and dry products such as sour cream, chocolate paste, mayonnaise, ketchup, washing powder, grains, cosmetics, construction products and other similar products in plastic tubs or jars with film/foil sealing (option) and capping.



## Technical data (standard configuration):

Product type.....	Liquid and viscous products
Speed*, max. ....	1200 pcs./hour
Filling volume .....	200 – 4000 ml
Packaging type.....	Premade plastic containers
Electricals**.....	380 V, 50 Hz
Installed power**.....	2.0 kW
Air consumption** .....	0.5 m <sup>3</sup> /min. at 6 bar

\* Depends on dimensions and type of tubs, film specifications and optional parts.

\*\* Depends on the final configuration of the machine.

## Features:

- Main frame and protective panels are made of stainless steel;
- Programmable logic controller (PLC);
- Tub magazine\*\* up to 30 pcs.;
- Possibility to use tubs with or without handles;
- Rotary type of machine with mechanical turret drive;
- Two fillers for main and additional product;
- "No container – No filling – No capping" system".

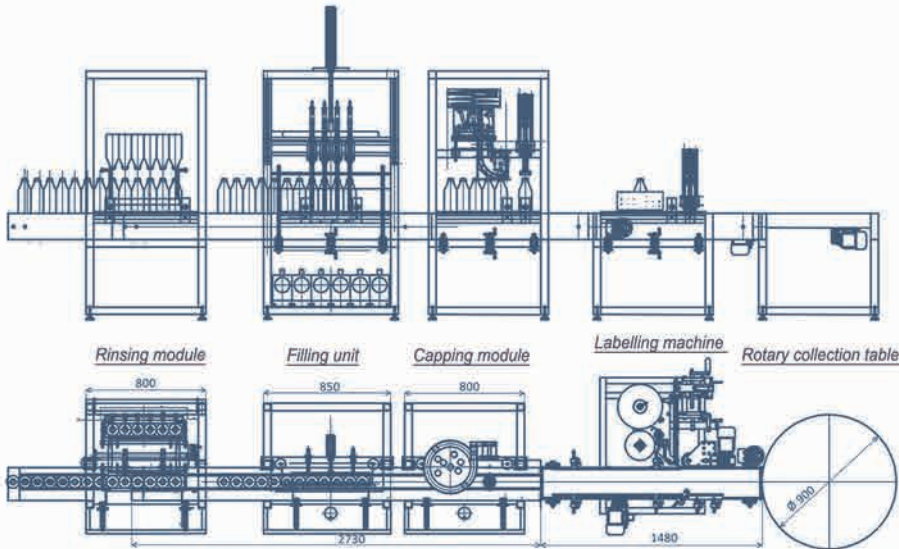
## Optional equipment:

- Rotary collection table;
- Printer for expiry date coding;
- Unit for sealing of tub with film or foil from roll before capping;
- UV-lamp for container treatment;
- Servo driven rotary turret drive;
- Piston filler with servo drive;



# Linear type filling line for Bottles LFC

Automatic filling line for PET, HDPE and glass bottles is designed for rinsing, filling of liquid and viscous products (milk, kefir, drinking yogurt, juices, sauces, chocolate paste, honey, etc.) followed by capping the bottles with different types of caps: screw, twist-off or sleeve labelling. The bottles are then printed and labelled using self-adhesive / sleeve / polypropylene film from a roll.



## Standard configuration:

- Bottle rinsing unit;
- Dosing unit;
- Cap orientator and infeed unit;
- Capping unit;
- Labelling machine;
- Date printer;
- Conveyor system.

## Features:

- All units are closed and hygienic;
- Machine frames and protective panels are made from stainless steel and covered by acrylic doors;
- Programmable logic controlled (PLC) and Touch screen (HMI);
- Filling module has 2 – 6 fillers depending on the required speed;
- Safety function "No bottle – No filling – No capping";
- UV lamp for sterilization of bottles;
- Fast and user-friendly changeover process for different bottles within 20 minutes;
- Easy to operate and maintain.

## Optional equipment:

- Rotary collection table;
- Labelling machine option types:
  - Self-adhesive;
  - Sleeve;
  - Polypropylene.
- "Press-on" capping unit;
- Printer for date coding;
- UV lamp for cap sterilization.

## Technical data (standard configuration):

Product .....	Liquid and viscous
Speed*, max.....	2000 bottles/hour
Filling range.....	100 – 2000 ml
Package type.....	PET, HDPE, Glass bottles and containers
Electricals**.....	220/380 V, 50 Hz
Installed power**.....	4 kW
Compressed air consumption .....	1.3 m <sup>3</sup> /min. at 6 bar

\* Speed depends on dimensions and type of bottle, product specifications and optional parts.  
\*\* It also depends on the final configuration of the machine.



## Working principle:

The operator manually feeds the empty bottles on the infeed conveyor or with the help of a rotary turntable. After this, the bottles are automatically transferred to the rinsing nozzles where they are first rinsed to remove dust particles. After that they pass through a conveyor fitted with UV lamps and get sterilized. The bottles then are transferred to the filling nozzles where the filling nozzles lower into the bottle and filling takes place gradually as the nozzles are lifted. The drive for the nozzles "up-down" action can be pneumatic or servo. After filling the bottles are subsequently conveyed to the capping and labelling units. The filled and labelled bottles are finally transferred to a rotary collection table (option) for stacking towards transportation to the end customer..

### Rinsing module

- Provides rinsing of bottles before filling;
- 6 stations;
- Bottles are turned 180 degrees for rinsing and then turned back and returned to the conveyor after rinsing;
- Provision of ozonised water or clean water is in the scope of the Buyer.

### Rotary collection table (option)

- Intended for accumulating filled bottles;
- Consists of a movable table with rigid frame and a perimeter frame;
- Driven by a geared motor with frequency inverter to control the rotation speed as per requirements.

### Capping module

- The cap head is designed for one cap format and easily changed for different cap formats;
- The cap orientator is equipped with UV lamp.

### Filling unit

- Provides good filling speed and high filling accuracy;
- Availability of 2 – 6 filling stations (depending upon the required speed);
- Product tank equipped with level sensor and cleaning spray ball;
- Adjustable filling volume;
- Universal filler for filling liquid and viscous products;
- "Filling without touching" – The nozzles dive into the bottle and do not touch the neck during filling. This ensures high level of hygiene;
- Clamp connections for easy dismantling and assembly;
- All parts in contact with product are made from Stainless steel.

### Labelling machine for different types of labels

- Machine is intended to label the bottles as per customer's requirements. The different types of labels possible are:
  - Self-adhesive;
  - Sleeve;
  - Polypropylene.



# Rotary type filling line for Bottles MFC

Automatic filling line for PET, HDPE and Glass bottles. Filling line is intended for rinsing of bottles, filling of viscous and liquid products (milk, kefir, yoghurt, juice, sunflower oil, jams, sauces, etc.) with further capping (screw cap, twist-off cap, snap-on cap) and bottle labelling: self-adhesive, sleeve, roll feed.

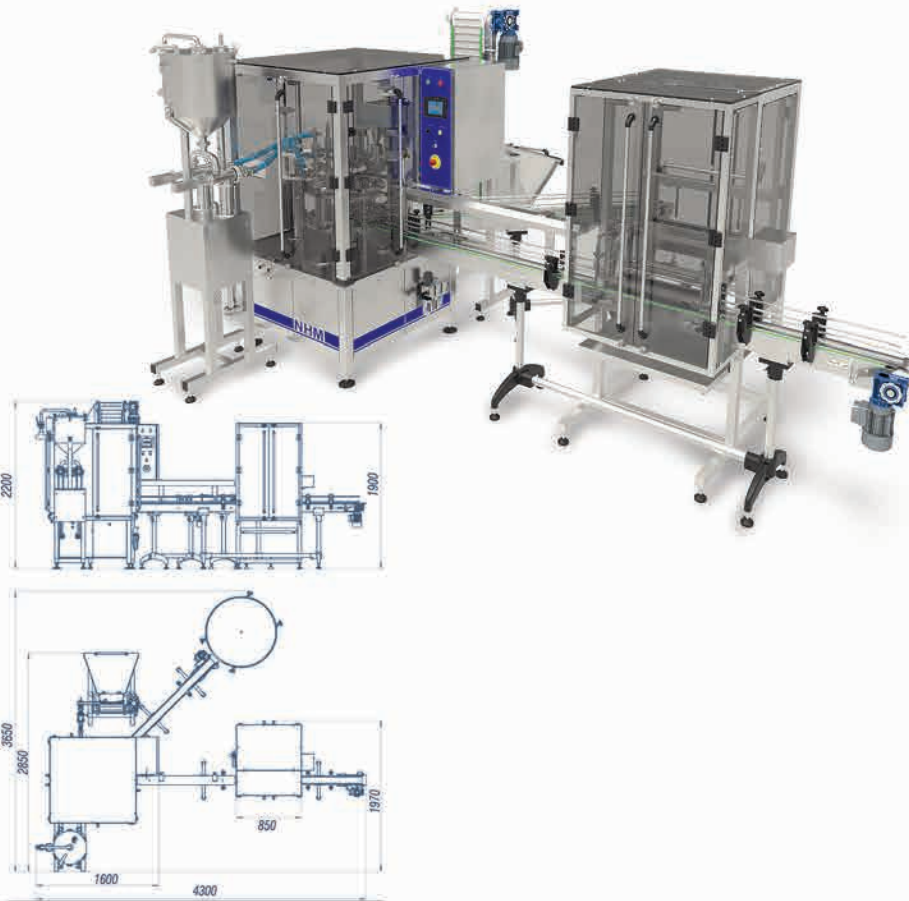


## Standard scope of supply:

- Bottle rinsing unit;
- Filling & capping Monoblock;
- Cap orientator;
- Conveyor system;
- Labelling machine;
- Printer for expiry date coding.

## Features:

- All units are closed type;
- Main frame and protective panels are made of stainless steel with acrylic safety doors;
- Machine is equipped with Programmable logic controller and colour HMI;
- Rotary type of monoblock with mechanical turret drive;
- 1- 4 stage filling;
- Safety function "No bottle – No filling – No capping"
- UV-lamp for bottle and cap treatment;
- Fast and easy changeover process for different bottle size.



## Technical data (standard configuration):

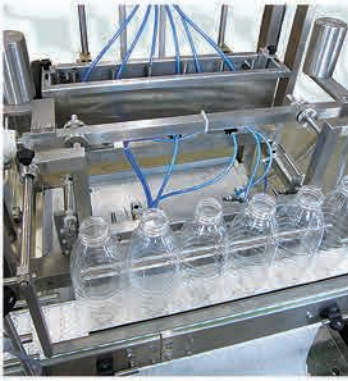
Product .....	Liquid and viscous
Speed*, max.....	1500 bottles/hour
Filling range.....	100 – 2000 ml
Package type.....	Premade PET, HDPE or Glass bottles, jars
Electricals**.....	220/380 V, 50 Hz
Installed power**.....	1.4 kW
Compressed air consumption**.....	450 litres/min. at 6 bar

\* Speed depends on dimensions and type of bottle, product specifications and optional parts.  
\*\* It also depends on the final configuration of the machine.

## Optional equipment:

- Collection table;
- Labelling machine;
- Printer for expiry date coding;
- Servo driven rotary turret drive.





## Bottle rinsing unit

This unit provides rinsing of bottle with purified (ionized) water before filling.

The bottles which enter this unit are held together and turned over, so their bottlenecks are above the water injectors. After rinsing, the water flows from the bottles into the tray, the bottles are turned over again and placed on the conveyor. After that bottles are moved to filling & capping monoblock.

## Monoblock

Bottle filling and capping operations are performed in the Monoblock. Bottles are transferred to the Monoblock by conveyor or turntable. To reduce foaming, the filling of bottles is done "from the bottom" in stages depending upon the bottle volume and product characteristics. Next, the cap is fed to the top of the bottle neck and is screwed. Filled bottles are conveyed from a Monoblock to the collection table (optional) or labeling unit.



## Fillers

The product is filled with the help of volumetric piston fillers (for liquid or viscous products) or weigh fillers (for granular products) fitted with product hopper.

## Cap orientation

For correct orientation of caps and their continuous supply to the monoblock, an automatic cap orientator with a hopper is used. The cap hopper is equipped with a UV lamp for caps treatment.

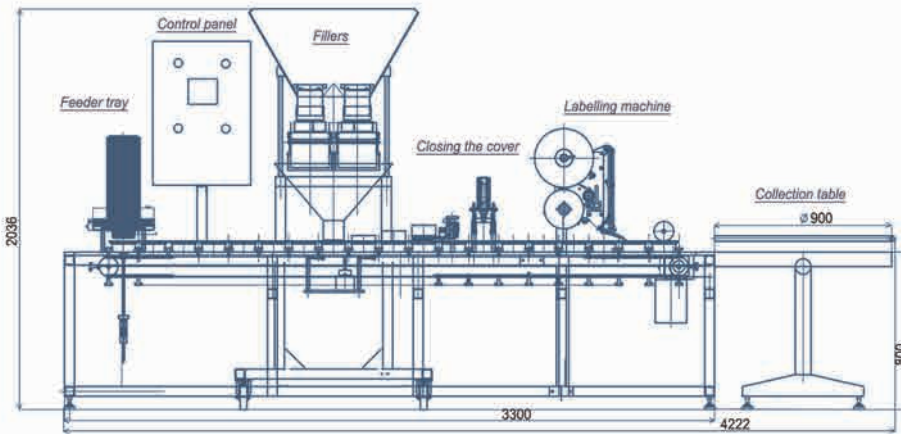


## Conveyor system

Conveyor systems are used to move bottles between modules. Conveyor connecting rinsing module and monoblock is equipped with a UV-lamp.

# Automatic machine for filling in moulded plastic Trays AFT

This automatic machine is designed for filling of dry products such as nuts, dry fruits, chocolates, small biscuits, pasta, etc. in pre-made plastic trays with closable lid. The machine performs filling, lid closing and labelling for pilfer proof protection of the tray.



## Optional equipment:

- Rotary collection table;
- Printer for expiry date coding;
- Changeover parts for a different tray size;
- Fillers:
  - Electronic weigh filler;
  - Auger filler;
  - Volumetric cup filler.



## Technical data (standard configuration):

Product type.....	Dry free flowing products
Speed*, max. ....	1200 pcs./hour
Filling volume.....	100 – 500 ml/g
Package type.....	Pre-made molded plastic trays
Electricals**.....	220/380 V, 50 Hz
Installed power**.....	2,5 kW
Compressed air consumption**.....	550 litres/min. at 6 bar

\* Depends on dimensions and type of bags, film specifications and optional parts.  
\*\* Depends on the final configuration of the machine.

## Features:

- Linear type packaging machine;
- Automatic pick and place system for feeding trays on the conveyor from magazine;
- Main frame is made of stainless steel with acrylic protective guards;
- Equipped with Programmable logic controller (PLC) and colour touch screen (HMI);
- Safety function “No container – No filling – No labelling”;
- Vibrator platform under the tray during filling;
- Changeover to another container format within 20 minutes.

## Operation principle:

- Open plastic trays are loaded in a tray magazine;
- Machine takes trays automatically one by one and places it on to the conveyor in open condition;
- Conveyor transfers opened tray under the filling area;
- Simultaneous filling and vibrating are performed in the filling area;
- Tray is further moved to lid closing station where it is closed;
- A labelling machine sticks label on top of tray with simultaneous folding of label on tray side or front;
- Outfeed of trays on a rotary collection table (optional).



## Carton forming machine FM

These machines are designed to form carton boxes from pre-made flat sheets.

This equipment is necessary for automation at the final packaging stage and can be used independently or in combination with a product stacker and box closing machine.

Our high-performance machines easily solve the issue of "End-of-line" automation.



### Main operations:

Pre-made flat carton sheets are automatically transferred from a magazine. The machine performs opening of the flat carton sheet, bending of side flaps and closing with a scotch tape or glue.

### Technical data (standard configuration):

Model	Speed, boxes/min.	Dimensions (L x B x H), mm
FM-20T	up to 12	2250 x 1220 x 1350
FM-30T	up to 25	2800 x 1560 x 2250
FM-40T	up to 40	4150 x 1530 x 2000

## Carton box sealing machine ZY

This equipment is designed for accurate sealing of cardboard boxes with scotch tape, hot or cold glue. Automatic sealing machine can be supplied as a complete line with pick-and-place machine.

This machine is easy in operation, does not require special skills, and saves space due to its small size.



### Main machine operations:

Filled boxes with products are fed to the machine through a conveyor. The equipment provides automatic closing of the upper flaps of the box and sealing with adhesive tape.



### Technical data (standard configuration):

Model	Speed, pcs./min.	Dimensions, LxWxH, mm
ZY-3A	12-25	1650 x 988 x 1370
ZY-1D	up to 30	970 x 890 x 1280
ZY-501	up to 40	1158 x 890 x 1230

## Semi-automatic Cup filling machine K3

Equipment is intended for filling of liquid, viscous & dry products, such as sour cream, yogurt, mayonnaise, ketchup, sauces, honey, snack foods and other similar products in plastic cups. Machine is controlled by PLC.



### Operation principle of semi-automatic machine:

- **Operator the following operations manually:**
  - placing of cup on turntable;
  - removing of filled & sealed cup;
  - table rotation by one step.
- **Automatic operations, which are performed after manual table rotation:**
  - filling of cup with product;
  - lid placing;
  - lid sealing.

### Technical data (standard configuration):

Product type.....	Liquid, viscous & dry products
Speed*, max. ....	12 pcs./min.
Filling volume . . . . .	100 – 500 ml/g
Packaging type.....	Premade plastic cups
Electricals . . . . .	220 V, 50 Hz
Installed power.....	0,5 kW
Compressed air consumption.....	90 litres/min. at 6 bar

\* Depends on dimensions and type of cups, product specifications and operator's skills.



## Semi-automatic machine for filling in Tubs (buckets) SATM

Equipment is intended for filling of liquid and viscous products for HoReCa sector, such as sour cream, yogurt, mayonnaise, ketchup, sauces, honey and other similar products in plastic tubs. Machine is controlled by PLC and has a touch screen (HMI).



### Operation principle:

- Operator places tub manually;
- Filling is done by set weight;
- Manual transfer of tub (bucket) to lid placing area;
- Manual or automatic placing of lid on top of tub (bucket);
- Manual transfer of tub (bucket) to lid closing area;
- Leak-proof closing of plastic lid.



### Technical data (standard configuration):

Product** .....	Liquid and viscous products
Speed*, max. ....	8 pcs./min.
Filling volume.....	2000 – 10 000 ml/g
Packaging type.....	Premade plastic containers
Electricals.....	220 V, 50 Hz
Installed power.....	0.2 kW
Compressed air consumption.....	80 litres/min.at 6 bar

\* Depends on dimensions and type of tubs, product specifications and operator's skills.

\*\* Dry products can be filled using other dosing devices



# Semi-automatic machine for filling in Bottles, Jars SAB

Semi-automatic machine for filling of liquid, viscous & dry products of food, chemical, pharmaceutical industries in PET, HDPE or Glass bottles/jars.



## Operation principle:

- Placing of bottle under the filling nozzle;
- Pressing of pedal for automatic product filling;
- Manual transfer of bottle under the capping head and cap placing;
- Pressing of pedal for automatic capping;
- Removing of ready bottle

## Optional equipment:

- System of vertical movement of filling nozzle to avoid foam forming.



## Technical data (standard configuration):

Product type .....	Liquid, viscous & dry products
Speed*, max. ....	12 pcs./min.
Filling volume . ....	100 – 1000 or 500 – 3000 ml/g
Packaging type.....	Premade bottles / jars
Electricals.....	220/380 V, 50 Hz
Installed power.....	0,5 kW
Compressed air consumption.....	15 litres/min. at 6 bar

\* Speed depends on dimensions and type of container, product specifications and operator's skills.

# Semi-automatic Doypack filling machine SAD

Semi-automatic machine, depending on configuration, is used for filling & sealing of pre-made Doypack packets with various products, such as dry fruits, candy, tea, coffee, sauces, etc. Packets can be with or without *spout* & with or without *zip-lock*. Machine is easy adjustable for different packet formats.



## Operation principle:

- Operator manually opens packet on a mandrel installed on machine;
- Operator puts packet under the filler and presses pedal to dose the product;
- Operator moves filled packet into the sealing area where top sealing of Doypack packet is executed.

## Optional equipment:

- Machine can be equipped with piston filler, auger filler, volumetric cup filler or electronic weigh filler;
- Printer for expiry date coding.



## Technical data (standard configuration):

Product .....	Liquid, viscous or dry products
Speed*, max. ....	12 pcs./min.
Filling volume. ....	10 – 3000 ml/g (depending on product type and packet size)
Packaging type .....	Premade Doypack packet, Sachets
Electricals .....	220 V, 50 Hz
Installed power .....	1 kW
Compressed air consumption .....	20 litres/min. at 6 bar

\* Depends on packet dimensions, product characteristics and operator's skills.

## Fillers for automatic and semi-automatic machines

All packaging machine can be equipped with different types of fillers, depending on product to be packed.

### Electronic weigh filler

Dosing of product is executed by weight, which is adjustable from a control panel. *Linear* weigh fillers can be 1 - 4 lanes, depending on required filling speed. Each lane of the filler can be made with standard single feeding line and a narrow line for accurate dosing. The lane can also be made with 2 levels (double cascade) for large pieced products.

*Multihead* weigh fillers are used for high speeds and accuracy level. This filler provides high filling accuracy for various granular and single piece products. They can be from 10 heads and up to 22 heads depending upon the required speed and accuracy. *Multihead* weighers can also be used for dosing multiple products (2 – 3 products) at the same time. In such cases the minimum number of heads is 16.

For automatic feeding of the product into the product hopper, an inclined bucket elevator or a Z-type product infeed conveyor system is used.

**Application:** granular free flowing and piece products (grains, sugar, coffee beans, tea, dried fruits, seeds, biscuits, pasta, frozen foods, dry fruits, washing powder, products in flow-pack packets, etc).

### Volumetric cup filler

The dosage of the product is based on the volume of the measuring cup. The number of *measuring cups* can vary from 2 to 6, depending on the product. Dose adjustment within one volume of a cup is allowed within  $\pm 15\%$ . Larger change in dose volume requires a replacement kit of measuring cups.

For automatic feeding of the product into the product hopper, an inclined bucket elevator or Z-shaped product infeed conveyor is used.

**Application:** granular products (grains, salt, granulated coffee, tea, nuts, dry fertilizers, washing powder, etc.)



rice



pepper



muesli



coffee



sunflower seeds





# Fillers for automatic and semi-automatic machines

All packaging machine can be equipped with different types of fillers, depending on product to be packed.

## Piston filler

Dosing of the product is carried out by filling and dispensing the product by a volumetric cylinder dispenser fitted with a piston. It is possible to work in both viscous and liquid modes.

Centralized factory product supply system or an autonomous product supply pump are used for automatic product supply into the tank.

**Application:** liquid and viscous products: mayonnaise, ketchup, sour cream, condensed milk, yoghurt, mustard paste, liquid household chemicals, liquid fertilizers, cosmetic creams, motor oils, pharmaceutical ointments, gel, shampoo, etc.



## Auger filler

This filler is used for dispensing of powdered products that do not have free-flowing properties (except abrasives). The dose is measured by number of auger rotations. Different sizes of augers are used depending on filling volume. Auger filler is equipped with a product mixing system in the product tank to prevent "hanging" of the product on the walls of the product tank.

For automatic feeding of the product into the product hopper, an infeed screw conveyor is used.

**Application:** spices, milk powder, icing sugar, starch, powdered coffee, cocoa powder, etc.



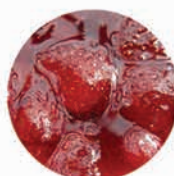
condensed milk



mayonnaise



jam



spice



powdered milk



# Our clients



# Our suppliers





**4, R. Okipnoy street, suites #43, 44  
Kiev, 02002, UKRAINE**

+380 44 517 00 35  
+380 44 517 01 19  
+380 97 255 25 20  
info@nhmpak.com

[www.nhmpak.com](http://www.nhmpak.com)