

SCANDIVAC

Thermoforming machines

APM 2500, APM5000, APM8000





SCANDIVAC

are packaging machines,

used to pack wide range of products with thermoforming technology. Thermoforming technology is intended for forming the film into packages, loading the product and sealing the packages in one technological process. Thermoforming machines make the packing of the product faster and easier.

SCANDIVAC machines are used to pack wide range of products:

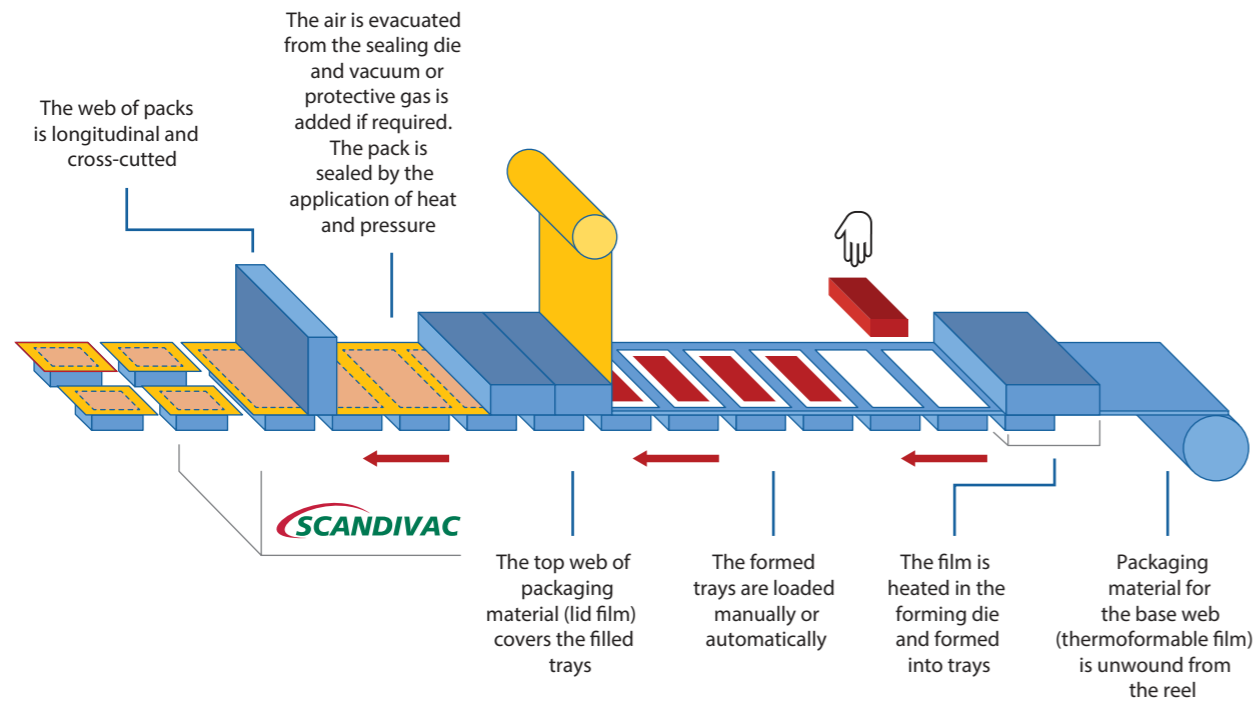
- **Food** – packing of meat, fish, salads, cheese, vegetables and other products
- **Medicine** – packing of medical products
- **Pharmacy** – packing of pharmaceutical products, tools and goods
- Packing of **industrial and consumer goods**

SCANDIVAC is one of the largest manufacturers of thermoforming machines in Eastern Europe with 20 years of experience in producing different kind of food processing equipment. Packaging machines and its appliances are manufactured, using the newest technologies in engineering and using electronic and pneumatic spare parts of European well known manufacturers.

THE MAIN ADVANTAGES OF SCANDIVAC

MOST OF THE SPARE PARTS ARE FREELY AVAILABLE ON THE MARKET, INCLUDING: electrical parts, electric motors, servo drives, spare parts for pneumatic and vacuum system, bearings, seals, etc.

- Servo drive system for gripper chain in standard execution.
- Freely variable distance between moulds, giving a possibility to use dies with different cut-off lengths.

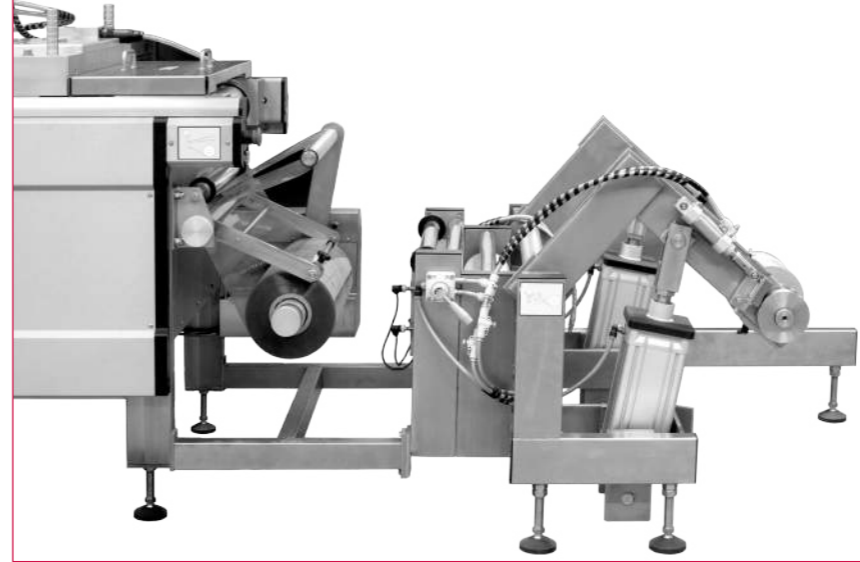
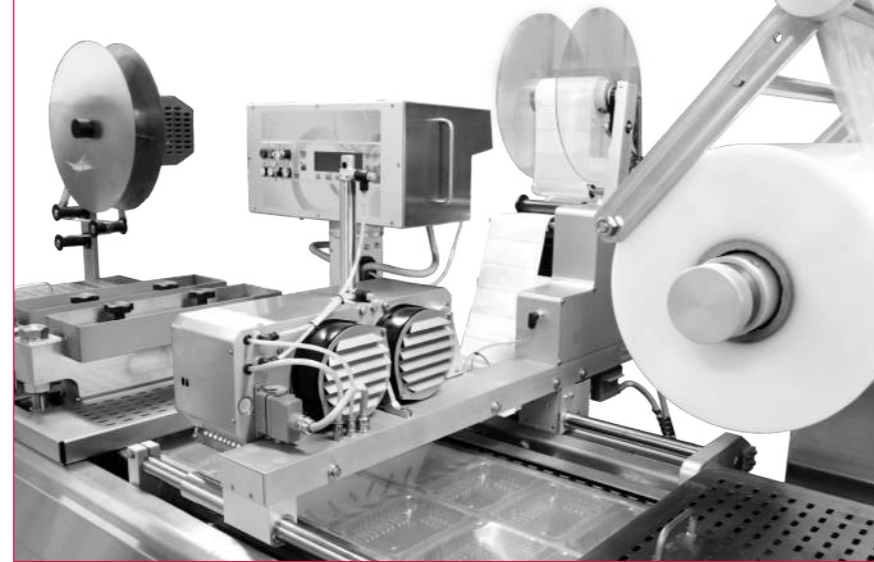
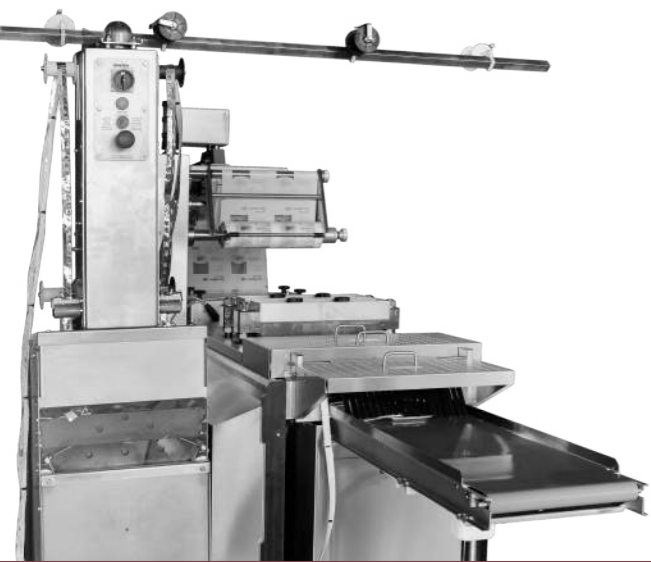


Thermoforming PROCESS

Thermoforming is a manufacturing process, where the package is made at the same time the product is packaged. The film, as a packaging material, is heated up to the forming temperature and formed with the help of air and vacuum in a special mould, gaining the form needed for the package of the product.

In the process of thermoforming, the package is made with the same machine, where at the same time the product is loaded. It is possible to synchronize thermoforming machines with other devices, for example, with labeller, which straight after the sealing of packages sticks a label on them.

The technology of thermoforming can be used for packing small parties of food, as well as the part of a big process of product packaging. Packaging machines and its appliances are manufactured, using the newest technologies in engineering and using electronic and pneumatic spare parts of European well known manufacturers.



Thermofforming machines

DESCRIPTION

Type of packaging

- Only sealing of the package
- Vacuum and sealing
- Vacuum, gas and sealing
- "Skin" packaging

Types of cutting

- Longitudinal and cross-cutting
- Shape cutting
- Longitudinal perforation
- Cross-cutting perforation

Types of forming

- Only with compressed air
- With compressed air and vacuum
- With pre-heating of film
- With pre-heating of film and plugs
- Posiforming

Details of packages

- Hanging hole – oval or round
- Hanging hole – "euroslot"

Specification of films

- Film width: from 320 up to 600 mm
- Upper film: flexible film, paper, folio
- Thickness up to 100 microns
- Lower film: rigid film, flexible film, folio
- Thickness up to 1000 microns
- Printed upper film

Longitudinal cutting

- Rotary knife assembly
- Squeezing knife assembly
- Roller shear cutting assembly – line cutting
- Roller shear cutting assembly – strip cutting

Cross cutting

- Cross cutting unit for flexible film – straight cut
- Cross cutting unit for flexible film – zig-zag cut
- Cross cutting unit for rigid film with round corners

Cut-off length

- Without preheating: up to 800 mm
- With preheating: up to 600 mm

Control system

- Colourful LCD touch screen
- Control elements from SMC Pneumatics, Schneider Electric, Allen Bradley, Busch and others

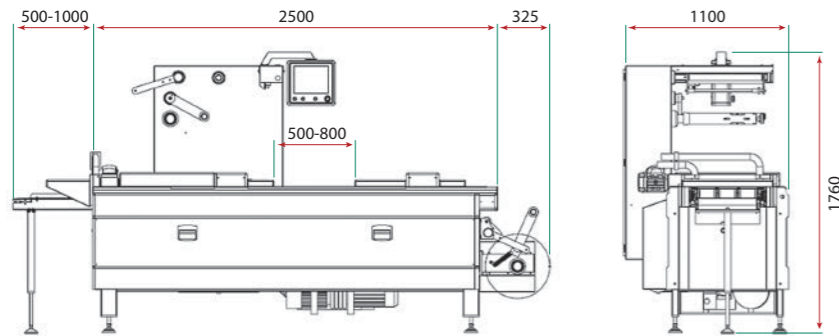
Potential options for SCANDIVAC machines

- Labeller
- Data printer
- Dosing system

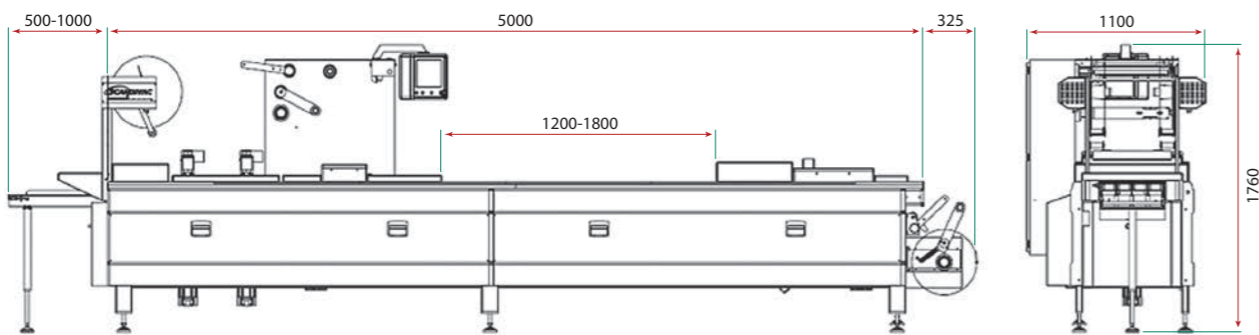
Technical data

SPECIFICATION

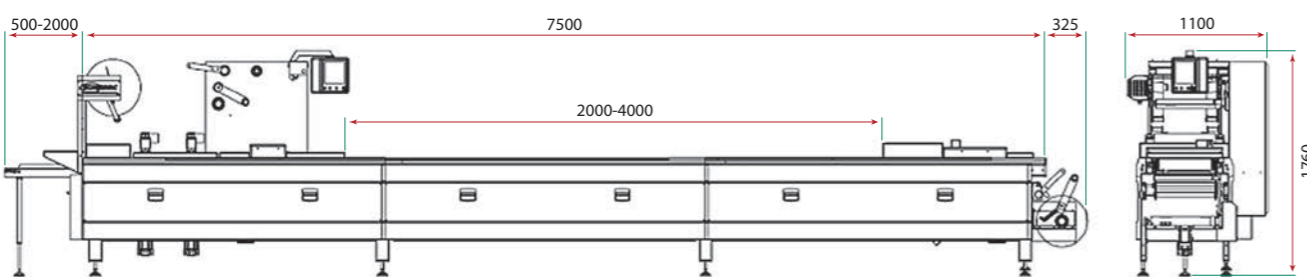
APM 2500



APM 5000



APM 8000



	APM 2500	APM 5000	APM 8000
Film width (mm)	320 and 420	up to 600	up to 600
Upper film	Flexible film, paper, folio		
Lower film	Rigid film, flexible film, folio		
Upper film thickness (microns)	up to 100	up to 100	up to 100
Lower film thickness (microns)	up to 400	up to 1000	up to 1000
Cut-off length without pre-heating (mm)	200, 240, 270, 300	300, 400, 470, 480, 600	up to 800
Cut-off length with pre-heating (mm)	100, 110, 120, 130	300, 400	up to 600
Max. diameter of film reel (mm)	400	400, jumbo 1000	500, jumbo 1000
Max. forming depth (mm)	up to 100	up to 130	up to 200
Loading area max. (mm)	800	2500	3500
Max. capacity (cycles/min)	up to 10	up to 15	up to 15
Drive system for gripper chain	Servomotor 1 - 2 kW		
Vacuum pump (m3/h)	40 - 100	up to 400	up to 400
Needed capacity	4 - 6	4 - 8	6 - 12
Compressed air (bar)	6	6	6
Cooling system (L/h)	70 - 120	100 - 150	150 - 200
Control system	"Allen-Bradley" programming control system + colorful LCD touch screen (TFT, Touch Screen)		
Machine size (mm)	3000 x 1100 x 1780	5500 x 1100 x 1780	8500 x 1100 x 1780
Machine weight (kg)	approx. 600	approx. 1000	approx. 1500

OPTIONS	APM 2500	APM 5000	APM 8000
Autonomous water cooling system	N	●	●
Supply system for protective gas	●	S	S
Photocell to position printed upper web	●	S	S
Posiforming forming system	N	●	●
Figure cutting system	N	●	●
Roller shear cutting	N	●	●
Squeezing knife	●	●	●
Corrosion-resistant gripper chain	●	●	●
Automatic chain lubrication	●	●	●
Central lubrication system	●	●	●
Chain cleaning program	●	●	●
Extended loading area	N	●	●
Data printer	●	●	●
Labelling machine	N	●	●
Product dosing system	●	●	●
Possibility to work with oxygen more than 21%	●	●	●

N - not possible; ● - optional; S - standard

Technology

The main functions of the SCANDIVAC thermoforming machines are being controlled by using Allen Bradley programming control systems, Schneider Electric electrical components and colourful LCD touch screens.

Thermoforming machines are equipped with Busch vacuum pumps and SMC Pneumatics pneumatical elements. There is a possibility to equip the thermoforming machines with ELS labellers, with printers of an Austrian company Bein, with a dosing systems for liquid products, automatical pad placer, and a closed type water cooling system can be made.

Service and Spareparts

Service and maintenance

SCANDIVAC partners provide full maintenance during the time of exploitation of the machine, as well as fast repairs. All service technicians of our partners are with many years of experience, knowledgeable and trained to work with SCANDIVAC machines.



Spare parts

SCANDIVAC manufactures and delivers original spare parts and separate units of the machine

- Die inserts
- Cross-cutting unit for flexible film
- Cross-cutting unit for rigid film
- Longitudinal cutting device
- Film edge trim rewinder
- Conveyor for discharge of packages etc.



SCANDIVAC offers

- Cutting knives
- Blades for perforation
- Heating elements
- Temperature sensor
- Membranes
- Silicone sealing gaskets
- Gripper chain
- Sprocket wheels for gripper chain

Parts of the machine, where suppliers' units are used, can be purchased from specialized agents:

- Pneumatics – SMC Pneumatics
- Vacuum pumps – Busch Vacuum Pumps
- Vacuum valves – SMC Pneumatics
- Bearings, gaskets, sealing – SKF bearings
- Electrical components – Schneider electric
- Programming control system – Allen Bradley

PACKING ALL

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SCANDIVAC is thermoforming machines made by company Uldis Bikernieks Ltd., established in 1991. Company manufactures several models of thermoforming machines, as well as different kind of packing equipment's additional units. In more than 20 years of operation, company has exported packaging machines to Sweden, Finland, Norway, Germany, Russia, the Netherlands, Lithuania, Estonia and other European countries.

Being in a close collaboration with partners and customers, lot of attention is paid to the development and improvement of the thermoforming machines. SCANDIVAC supplies equipment for meat processing companies, companies of fish industry, food manufacturers and for companies specialized in packaging of industrial products.