



KOPPENS®

**KOPPENS FORMING AND PORTIONING MACHINES
THE MOST VERSATILE IN THE WORLD**



VM 600

FORMING AND PORTIONING MACHINES VM 400 HD - VM 600

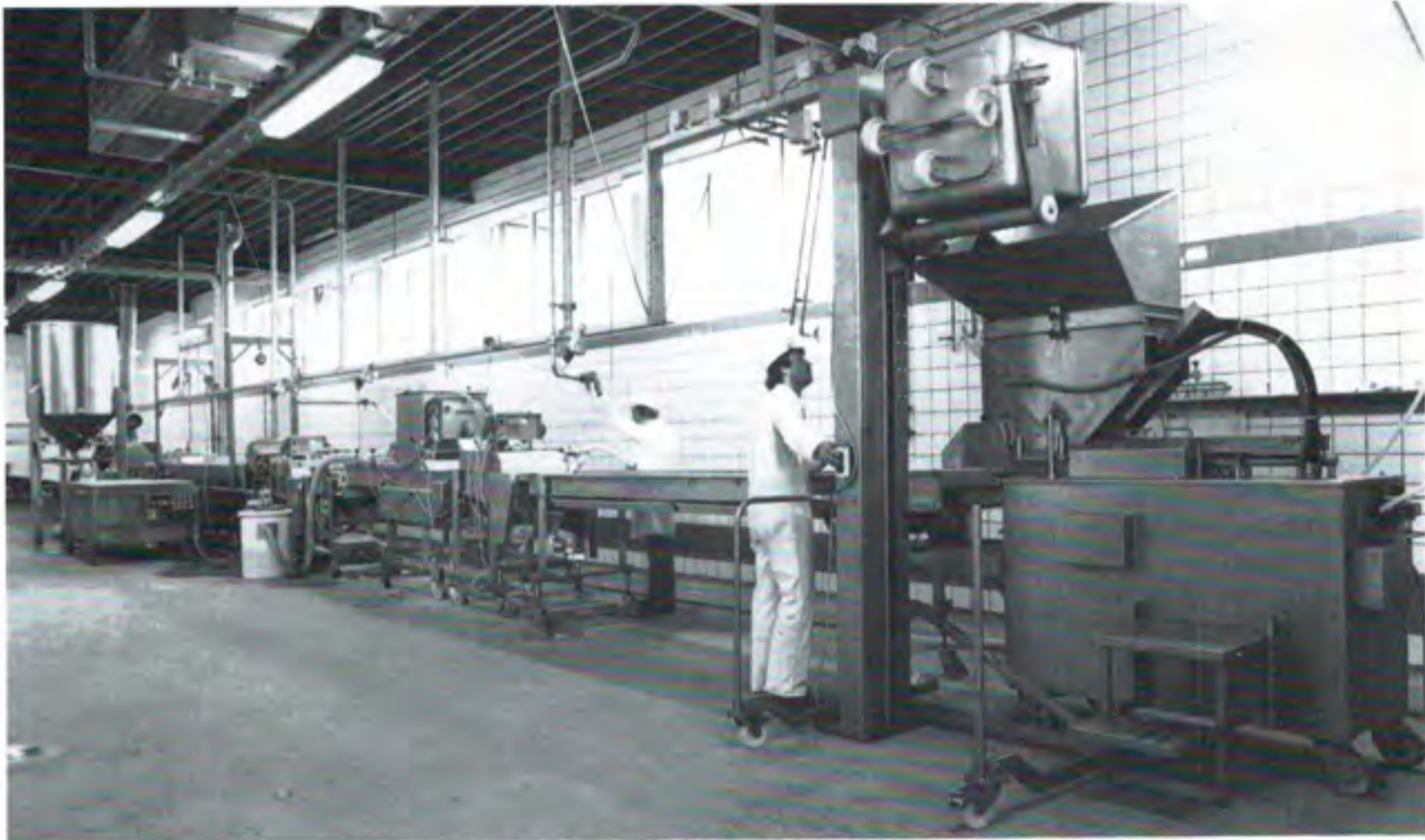
The Koppens patented forming and portioning system is designed to be able to form products without destroying the natural texture. The formers have a self-contained hydraulic drive unit, which is air-controlled. The total system, such as forming pressure and forming plate speed, can be adjusted to the needs of the formed product.

Besides forming a high-quality hamburger, Koppens' forming machines can form almost any shape... regular, two-dimensional as well as three-dimensional shapes. The raw material used can be ground or whole muscle meat — beef, pork, poultry, turkey, veal, fish, shrimp, vegetables, and in some cases, pasta and dough.

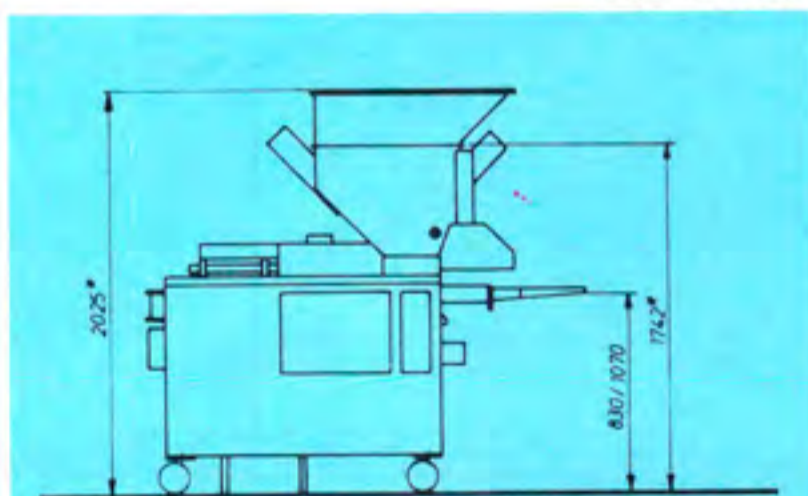
The forming plates can be custom-made for patties, nuggets, tenders, strips, cylinders, rings and many others. Changing forming plates takes just a matter of minutes by automatically lifting the hopper. Cleaning can be done very efficiently and quickly thanks to the simple design to disassemble the necessary parts.

There are three systems available to knock out products to ensure a proper knock-out:

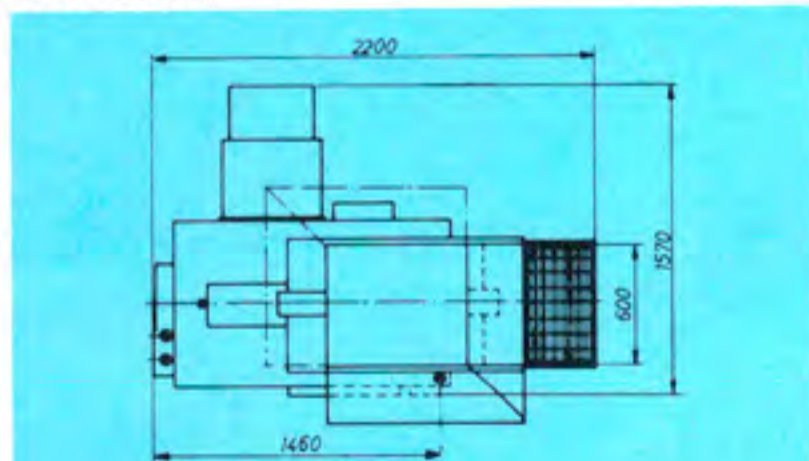
1. Water spray system, which is standard.
2. Heating system with thermostat together with aluminium and teflonized cups.
3. The latest new design is air knock-out cups.



TECHNICAL DETAILS VM 600



- Formplate width: 600mm (24").
- Usable forming area: 570 x 130mm (22½" x 5¼").
- Minimum forming plate thickness: 6mm (¼").
- Maximum forming plate thickness: 40mm (1½").
- Maximum volume per stroke: approx. 1½ litre (0.4 gallons).
- Maximum number of strokes per minute: 50.
- Hopper contents: approx. 250 litres (66 gallons).
- Air volume at maximum capacity: 0.4 m³/min. - 13 cfm.
- Air pressure at connecting point: 6 ato.
- Total electrical power: 11 kW.
- Outfeed belt width, adjustable height: 600mm (24").
- Net weight without accessories: approx. 970 kg (2140 lbs).
- The machine needs water, air and electric connections.
- It is advisable to use an air dryer in the air system.



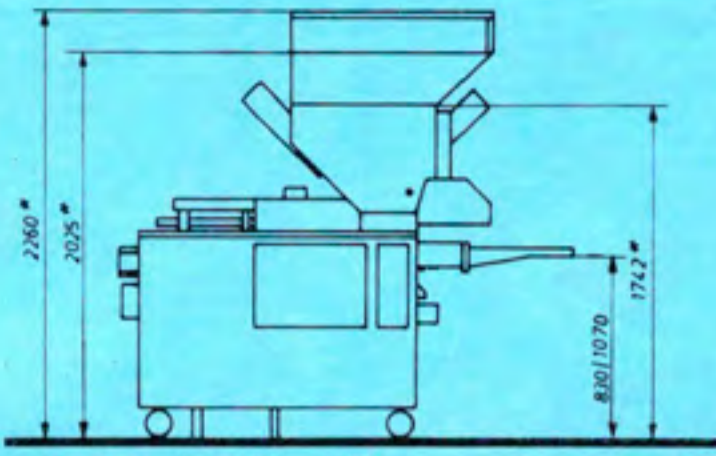
Standard equipment is as follows:

- Pre-connection for the croquette system (skinless links).
- Automatic lift of the hopper for cleaning and changing forming plates.
- Stainless steel castors.

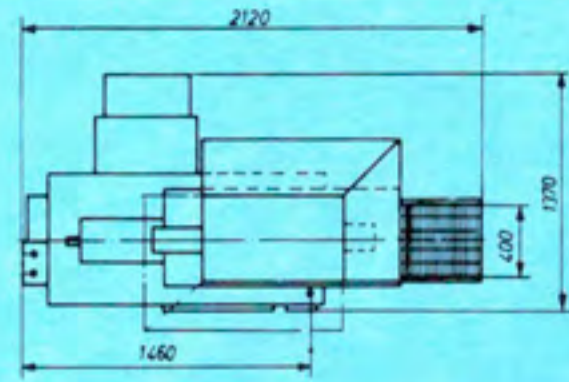
Non standard equipment available is:

- Pre-connection for paper interleaver.
- Pre-connection for stick inserter.
- Special bridge breaker system for very cold or sticky products.

TECHNICAL DETAILS VM 400 HD



- Formplate width: 400mm (16").
- Usable forming area: 370 x 130mm (14 1/4" x 5 1/4").
- Minimum forming plate thickness: 6mm (1/4").
- Maximum forming plate thickness: 40mm (1 1/2").
- Thinner or thicker on request.
- Maximum volume per stroke: approx. 1 litre (0.26 gallons).
- Maximum number of strokes per minute: 50.
- Hopper contents: approx. 250 litres (66 gallons).
- Air volume at maximum capacity: 0.4m³/min. - 13 cfm.
- Air pressure at connecting point: 6 ato.
- Total electric power: 7.7 kW.
- Outfeed belt width, adjustable height: 400mm (16").



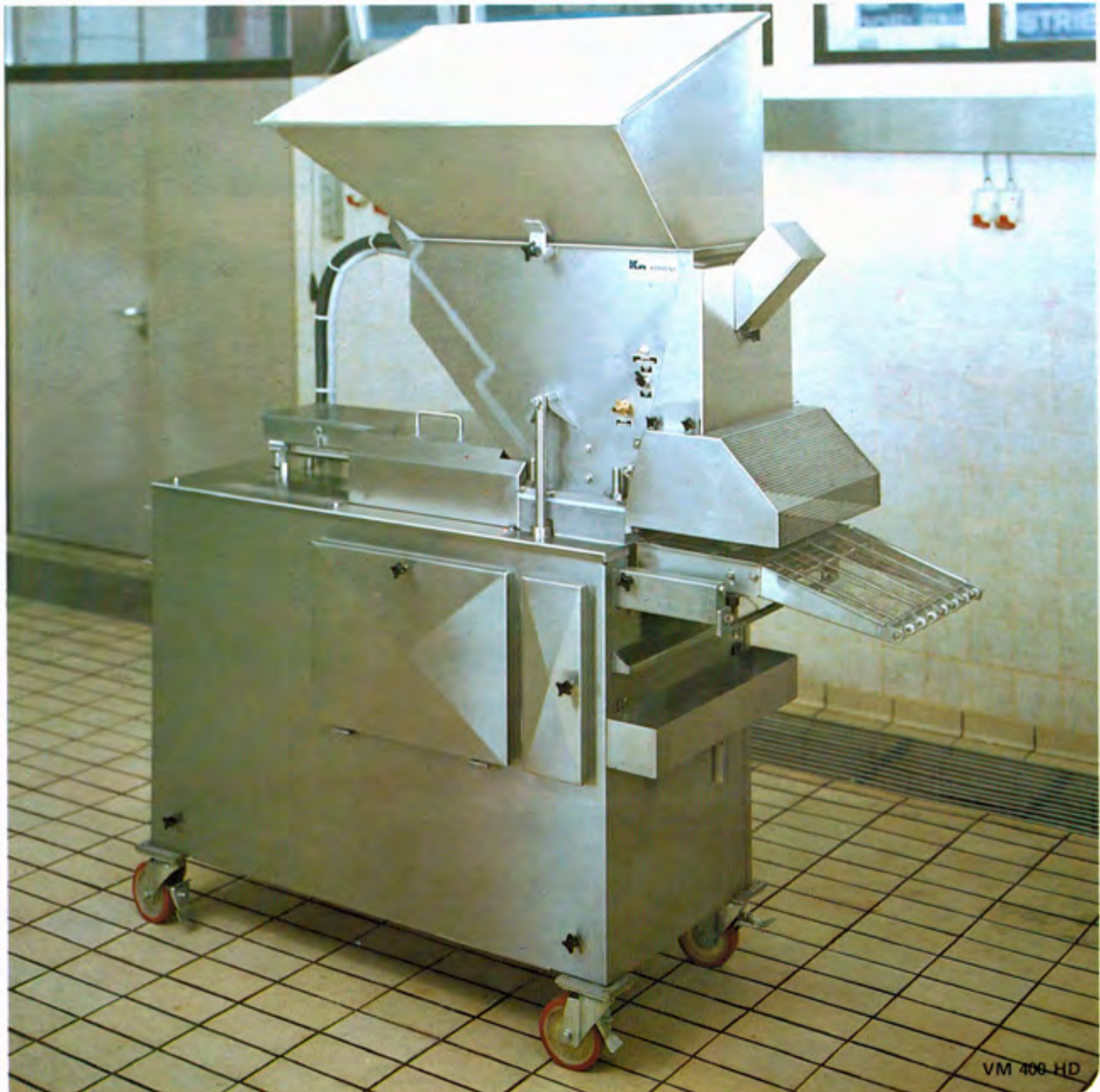
- Net weight without accessories: approx. 810 kg (1790 lbs).
- The machine needs water, air and electric connections.
- It is advisable to use an air dryer in the air system.

Standard equipment is as follows:

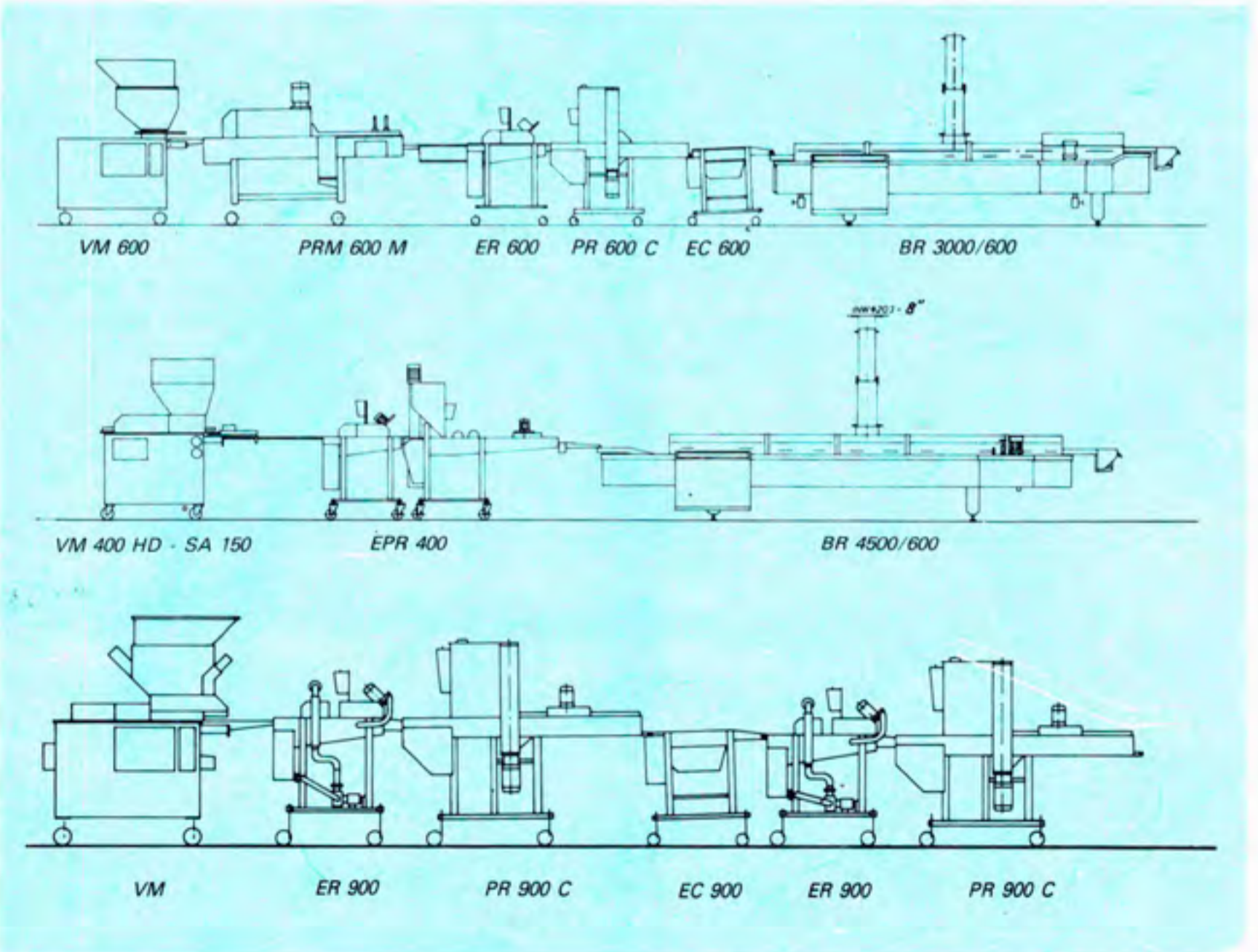
- Pre-connection for the croquette system (skinless links) and for the transverse conveyor.
- Automatic lift of the hopper for cleaning and changing forming plates.
- Stainless steel castors.

Non standard equipment available is:

- Pre-connection for paper interleaver.
- Pre-connection for stick inserter.
- Special bridge breaker system for very cold or sticky products.



VM 400 HD





PAPER INTERLEAVER SYSTEM

To stack and interleave hamburgers. This attachment can be mounted on the former in just a few minutes. The complete system is air operated, and there are two types available for each former. With the paper interleaver system, it is required that one uses heated knock-out cups or air knock-out cups to ensure proper release.

For VM 400 HD:

PT4115: 115 x 115mm (4½" x 4½") sized paper. Suitable for hamburgers with a maximum diameter of 105mm (4¼").

PT4140: 140 x 140mm (5½" x 5½") sized paper. For hamburgers with a maximum diameter of 130mm (5¼").

Maximum stacking height: 100mm (4") for both units.

For VM 600:

PT6115: 115 x 115mm (4½" x 4½") sized paper. Suitable for hamburgers with a maximum diameter of 105mm (4¼").

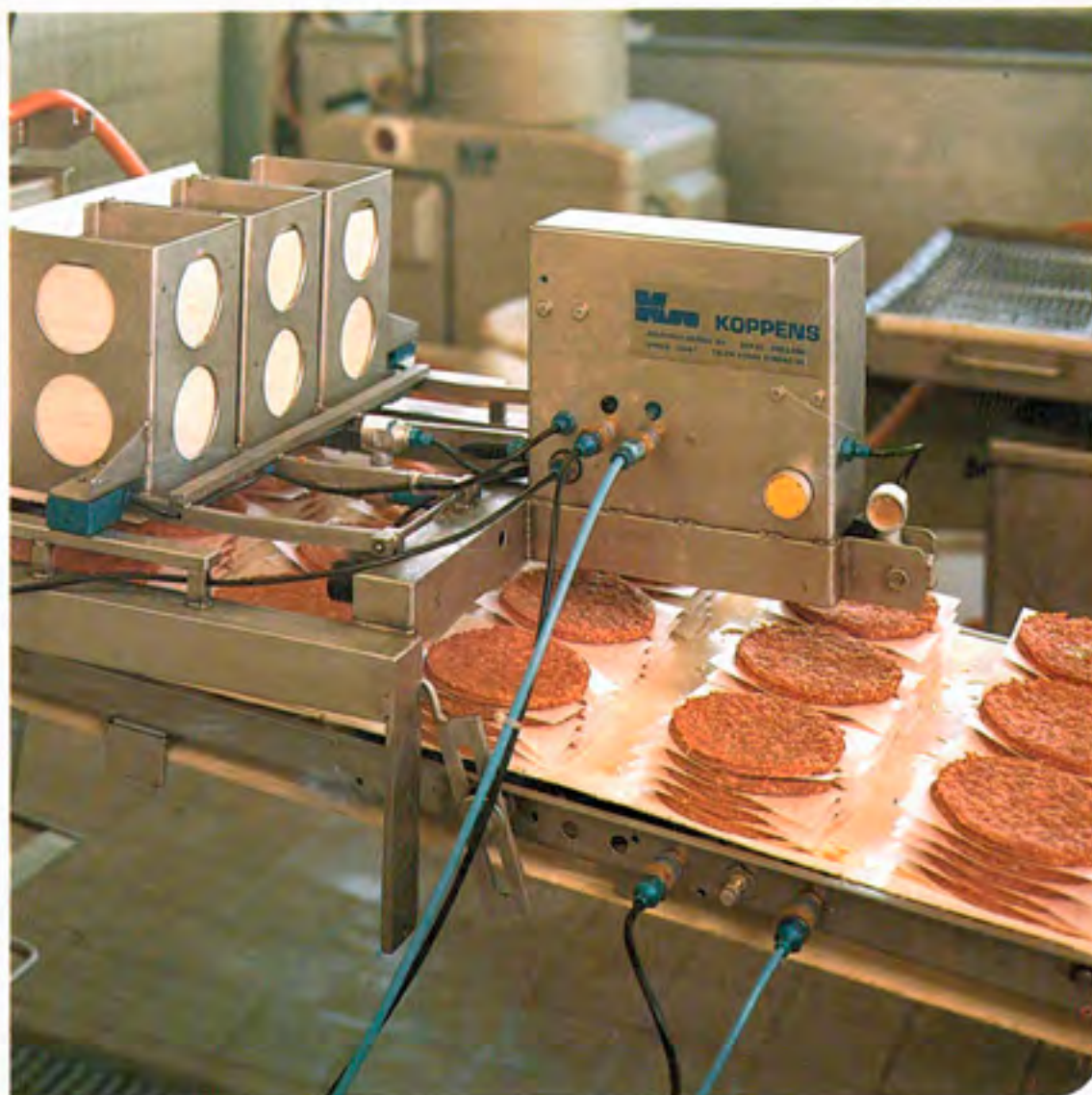
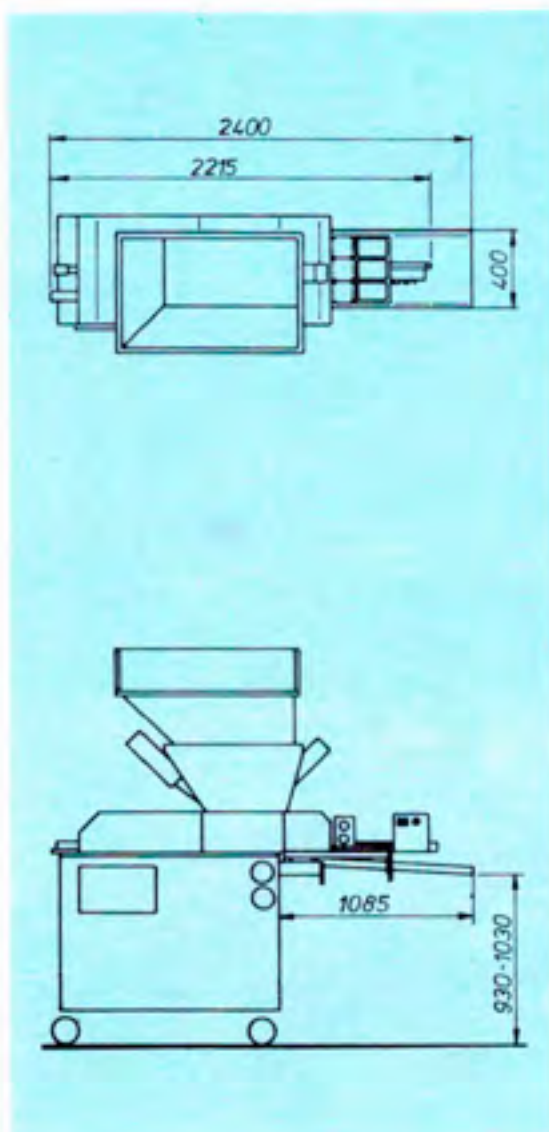
PT6140: 140 x 140mm (5½" x 5½") sized paper. For hamburgers with a maximum diameter of 130mm (5¼").

Maximum stacking height: 100mm (4") for both units.

Other sizes on request.



515





STICK INSERTER SYSTEM

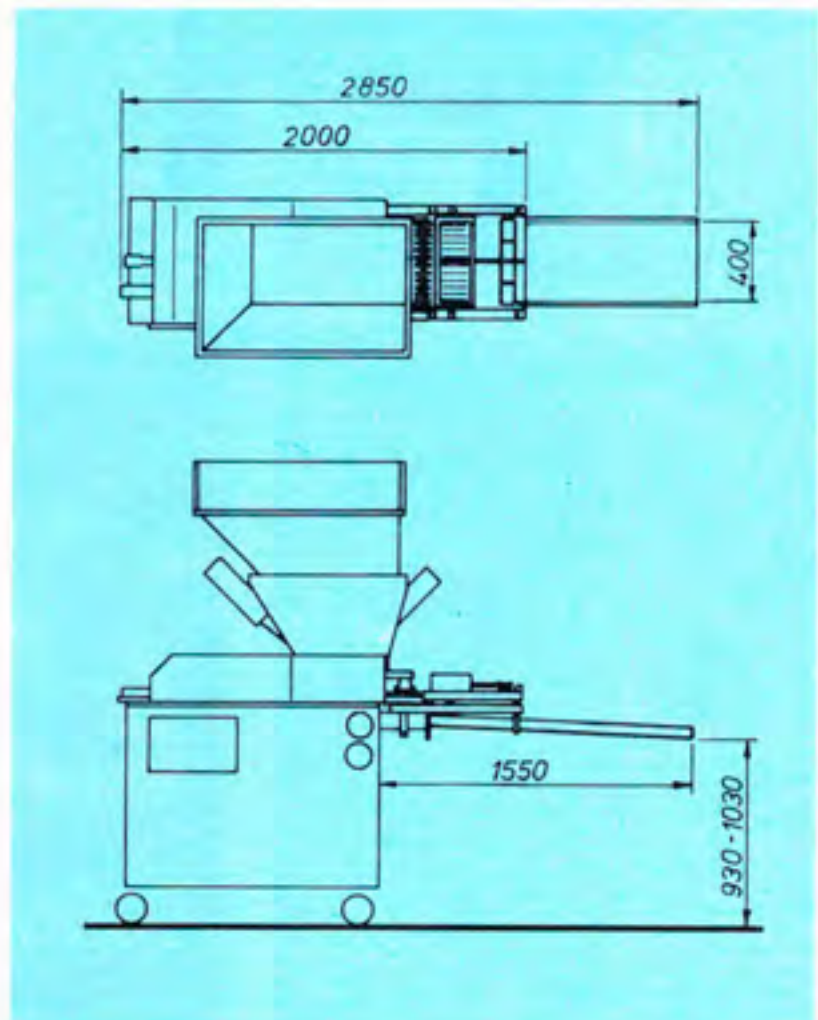
For the VM 400 HD and VM 600. This attachment automatically inserts sticks into the formed product during the forming process. The production rate is dependent on the quality of the stick and product dimensions.

Types available for VM 400 HD:

- SA 4120: Stick size 100 x 2.5mm (4'' x 0,1'') or stick size 120 x 2.5mm (4,7'' x 0,1'').
- SA 4150: Stick size 150 x 2.5mm (5,9'' x 0,1'').
- SA 4200: Stick size 180 x 3mm (7,09'' x 0,12'') or stick size 200 x 3mm (7,9'' x 0,12'').

Types available for VM 600:

- SA 6150: Stick size 150 x 2.5mm (5,9'' x 0,1'').
- SA 6200: Stick size 180 x 3mm (7,09'' x 0,12'') or stick size 200 x 3mm (7,9'' x 0,12'').





CROQUETTE-KEBAB SYSTEM

This can be adapted onto the VM 400 HD and the VM 600 by placing this attachment onto the former instead of the forming plate to form cylinder shapes such as breakfast link sausage and croquettes. Depending on size, weight and product characteristics, the diameter can vary from 17mm to 45mm ($\frac{5}{8}$ " - $1\frac{3}{4}$ "); and the length from 23mm to 117mm ($\frac{7}{8}$ " - $4\frac{1}{2}$ "). Other lengths and diameters on request.



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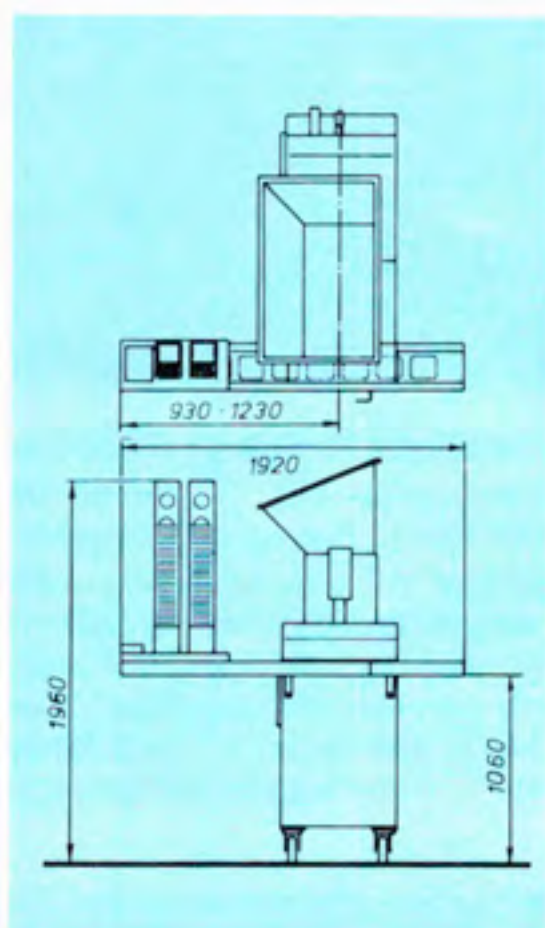
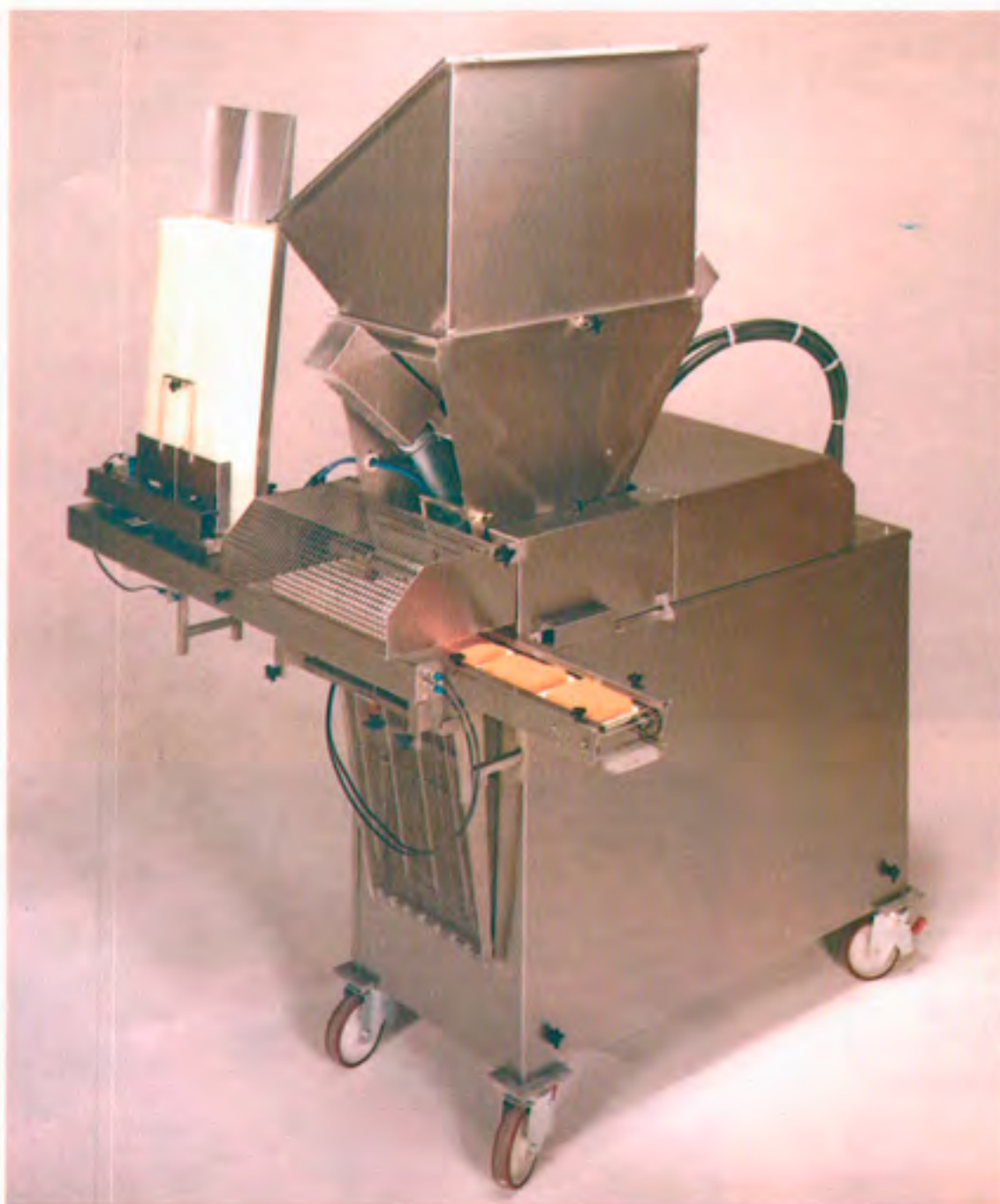


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TRANSVERSE CONVEYOR, TYPE CTB 400

It is possible to adapt this onto the VM 400 HD by taking out the regular outfeed conveyor. In this way, products can be portioned directly into trays. This conveyor is synchronized with the former. Automatic

tray dispensers can be added to load the trays onto the transverse conveyor automatically. However, samples of the trays are required in order to ensure proper function of dispenser.



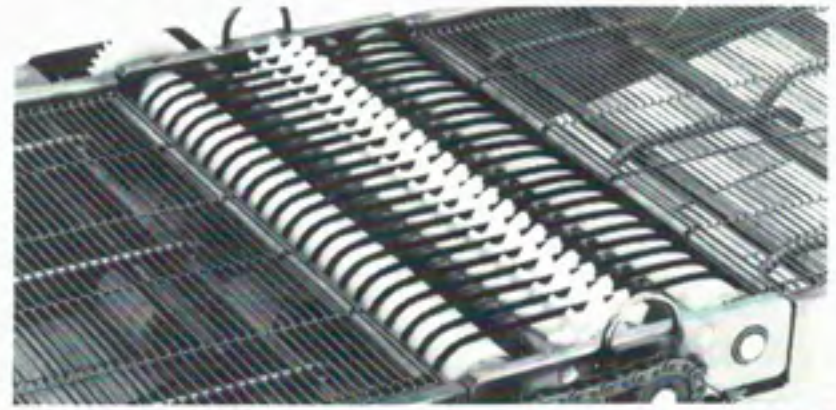
SCORER/CUBER

The system is built in a special outfeed conveyor (which will

replace the standard outfeed conveyor) and is driven by the former. The system can be taken apart easily for cleaning.



Scorer



Cuber



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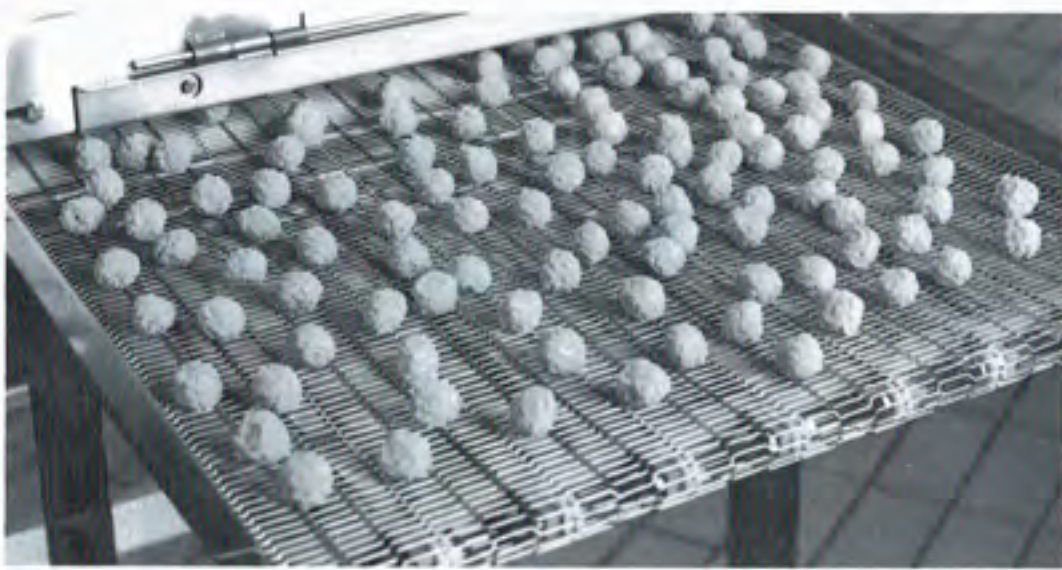
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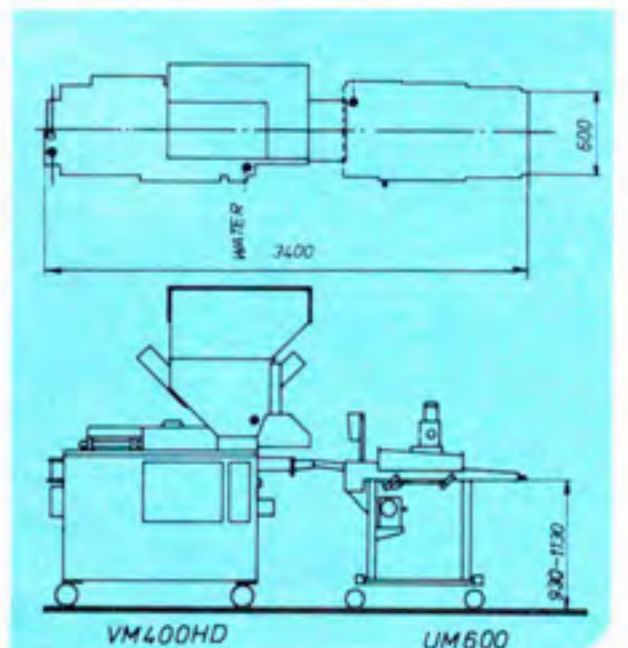


MEATBALL ROLLING EQUIPMENT

Meatballs can be made with the VM 400 HD and VM 600 formers in combination with the meatball rollers UM 600 (for VM 400 HD) or UM 900 (for VM 600). The forming machine will form the cylinder which will then be shaped round in the meatball roller. To obtain different weights involves just changing the forming plate in the former and adjusting the distance between the belts in the meatball roller.



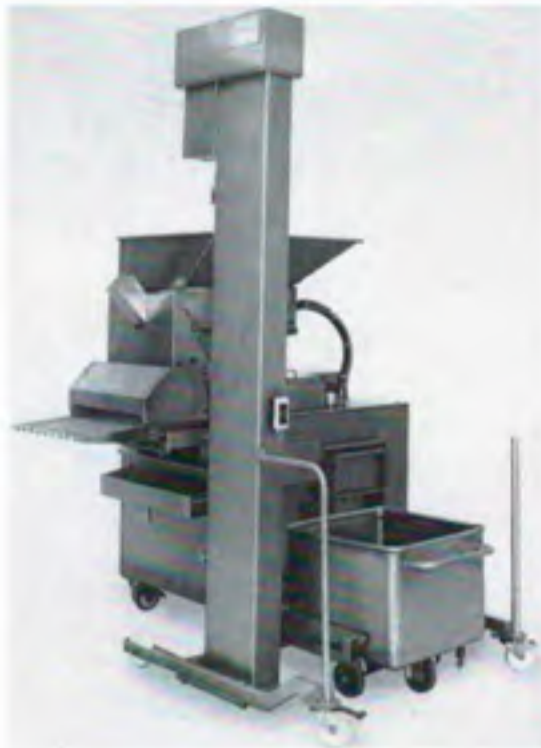
UM 600



VM400HD

UM600

All Koppens' formers can be delivered with a movable lifter to fill the hopper.

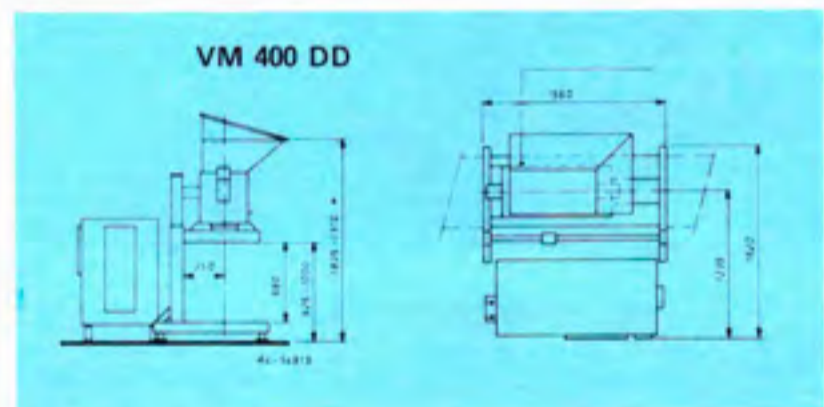


FORMING AND PORTIONING MACHINES VM 400 DD - VM 600 DD

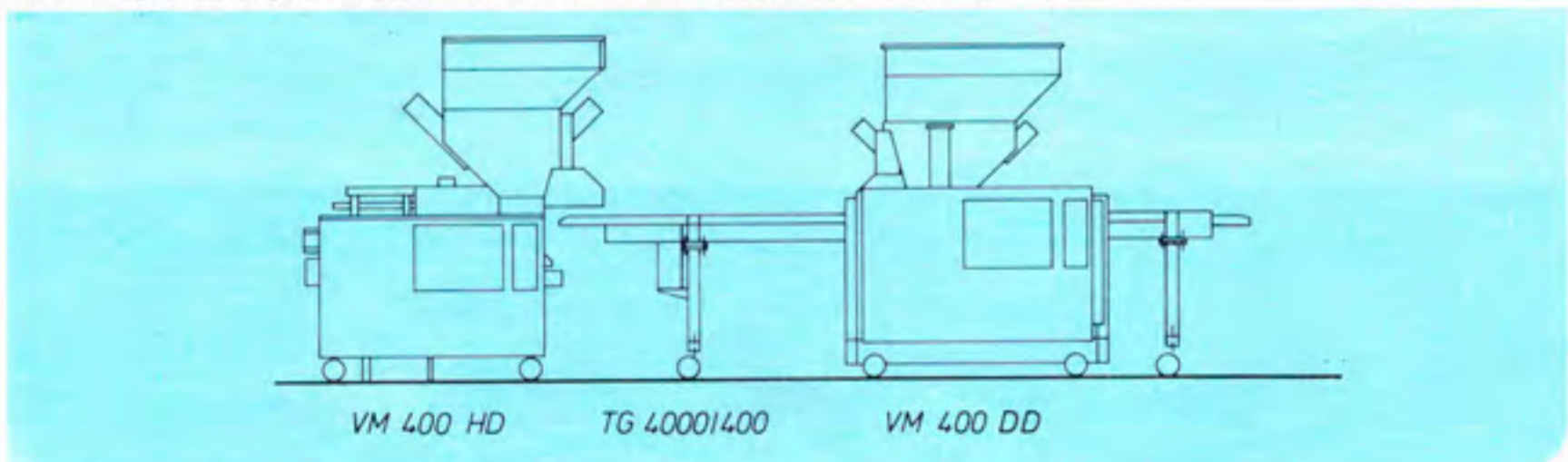


These formers have been designed for special applications. The hopper with frame is built separately from the powerpack unit. In this construction the hopper can be placed above another conveyor, a vacuum or other packaging machine. The mould plate is 400 mm (for VM 400 DD) or 600 mm (for VM 600 DD) wide; other widths of mould plates for the DD range of machines are available on request.

Hamburgers, minced meat or other portions can be dropped directly into the packing without manual interference. When synchronized with a VM 400 HD or VM 600 machine it is possible to drop one product on top of the previous product.



Future designs, drawings and parts may from time to time be altered as the necessity arises.





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Machines are developed and manufactured by Koppens



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