

PlateFormer

High performance by high pressure

TOWNSEND
FURTHER PROCESSING

marel



- Minimum product smearing
- Hygienic product processing
- Wide choice of forming possibilities

High performance by high pressure



The further processing market is growing. We are seeing a great variation on all fronts with respect to meat mass, product forms, coatings and presentation possibilities for further processing products. This is a tendency which has a considerable influence on the equipping of your production systems. This diversity demands a flexible process in which your forming machine also must be prepared for many different product variants.

Townsend Further Processing supplies a number of fully-automatic high pressure forming machines for the accurate and efficient forming of all sorts of products. They form the basis for the production of snacks, meal components and ready-made meals. These versatile machines will prove themselves in practice on a daily basis where capacity and product precision play a leading role.

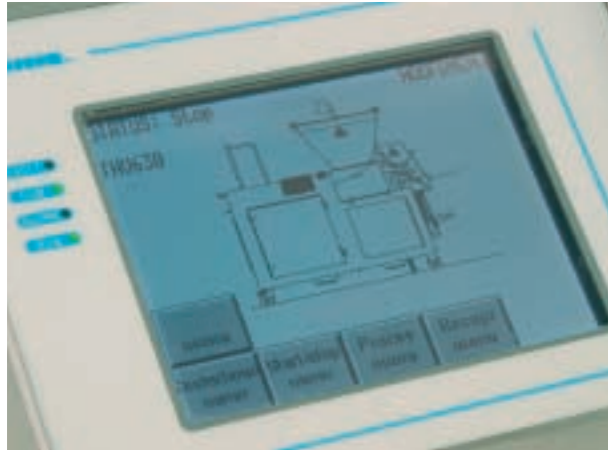
Wide range of products

The PlateFormer was developed for the processing of all sorts of product masses such as poultry meat, red meat, fish, potatoes and vegetables. These can be formed and portioned into a wide range of products such as nuggets, schnitzels, croquettes and hamburgers. The PlateFormer is also suitable for the processing of whole muscle meat.

The technological approach...

Much attention is paid during the forming process to filling the form correctly. Factors such as filling pressure, filling time and the temperature of the dough have quite an influence on the filling process. The optimum dough temperature for the forming process depends on the preparatory process, the type and composition of the meat and also the percentage of fat, water and salt in the meat. The temperature is therefore an unmistakable factor which you have to take into account when forming the dough mass. If the mass is too cold then it is more difficult to transport the dough through the machine. If the temperature is too high then the product will not form properly because it is too limp or soft.

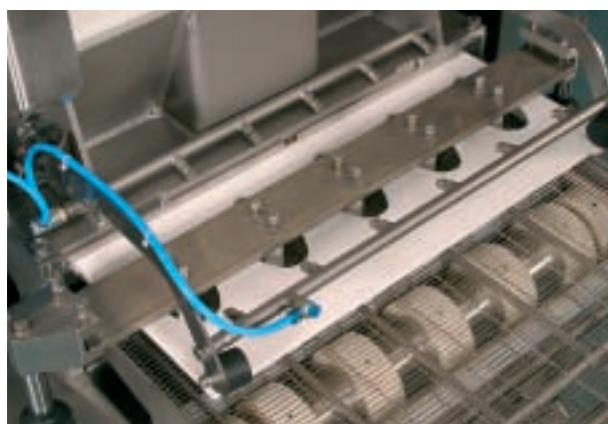




By means of the touch screen you can easily compose, open and adjust recipes.

User-friendly process control

Townsend Further Processing forming machines are equipped as standard with a user-friendly process control touch screen. 20 different recipes can be stored in the control memory. Using the touch screen you can easily compose, retrieve and modify recipes entirely in accordance with your wishes. You also use the touch screen to determine and control the filling process where you can influence the weight and texture and avoid critical points such as lips, membranes or smearing of the product.



Minimum rotation of meat mass

The PlateFormer offers you the opportunity to vary pressing times, filling times and turning times. The advantage of this is that you can create ideal processing conditions for any type of dough used. Less time is required to fill the form with a liquid dough, for example. This also applies to the turning time of the screw and to the delay on the roll block which moves up and down. Thanks to the spiral feeder screw and the stationary stator the product mass does not turn along with the feeder screw this avoiding arching. In addition, the structure of the mass is retained due to the optimum interaction between the screw and the roll block in which use is made of a valve which prevents the dough mass being carried back in the direction of the funnel during the filling of the mould (PlateFormer 630 and 400).

High efficiency

The design of the PlateFormer is robust so that these machines are extremely suitable for long production runs. You can produce end products with great precision and with a minimum variation in weight. This ensures high line efficiency. The capacity of the PlateFormer 630 can, depending on the product mass and the form of the end product, rise to 2500 kilos per hour. The total structure has been lowered by 50 mm which means that the discharge belt has a less sharp angle. This ensures a smooth transition to the next process step.



Short set-up times and simple cleaning

A wide variety of end products means regular changing of forming plate sets. The forming plates are constructed such that they can be changed quickly so that you have low set-up times. In addition, all the actions which are necessary for this can be carried out with a single tool.

Thanks to the well-thought-out construction, cleaning the high pressure forming machine is very simple. By folding away the funnel and removing a number of parts you have perfect access to the machine so that you can start cleaning the PlateFormer.

Optimum expulsion of products

The latest generation of the PlateFormer 630 has the ejectors in line with the bearings. This makes a positive contribution to the stability of the machine. The ejectors are sprayed with water to ensure that the products can be discharged more easily.

If you produce mostly relatively light products or products which may not become wet then you may decide on ejectors which are fitted with a compressed air system. This compressed air system can provide an air pulse at the moment of ejection so that the products are discharged more easily. Depending on your end product, ejectors can be made in various different materials such as Teflon and metal. If it is not desirable to make use of water during ejection because, for example, you make use of a paper separator then pre-heated ejectors can be used.

Safety

Safety plays an important role in the designing of machines. Naturally, the machine complies with the applicable CE norms. All the materials used are permitted in the food processing industry. The PlateFormer has a fully hydraulic drive; all cylinders and motors are in the frame of the high-pressure machine. This means that all the hydraulic components are separated from the product zone and that there is an optimum construction for hygienic cleaning.



The PlateFormer in cleaning position.



Well-thought-out lifting and tipping device

Townsend Further Processing has developed the lifting and tipping device for the supplying of dough masses. This bowl tipper which was specially designed for the economic loading of forming and portioning machines is suitable for mounting directly on the ground and also for positioning on a mobile undercarriage.

The bowl tipper offers many conveniences and advantages. Smearing of your dough mass does not take place so hygienic treatment is guaranteed. The bowl tipper also contributes to better working conditions as heavy, tiring operations are a thing of the past. Its mobility and its height adjustment also contribute to the user-friendliness of this bowl tipper which can easily be positioned in the line.

- Options:
- Croquette forming unit
 - Paper separator
 - Forming plates storage rack.



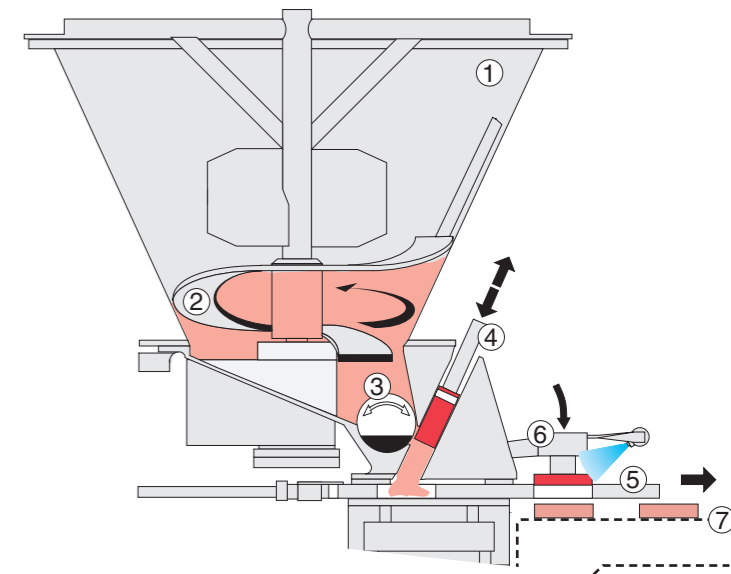
The lifting/tilting unit has been specially designed for the supply and economical loading of the product mass.

PlateFormer advantages

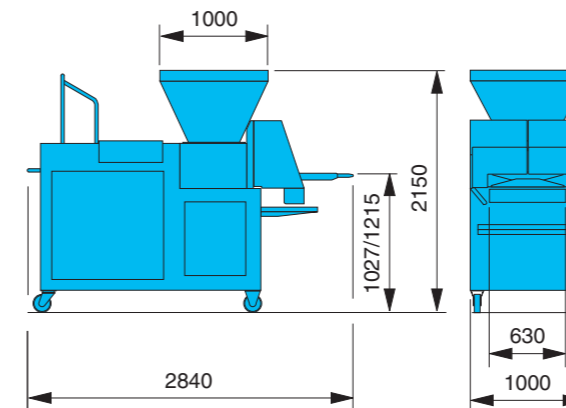
- Minimum product smearing
- Hygienic product processing
- Wide choice of forming possibilities
- High capacity
- Accurate positioning
- Rapid set-up for other product forms
- User-friendly control
- Easily expandable with various options
- Stable and easily moved
- High reliability.

Operation of the PlateFormer 630 and 400

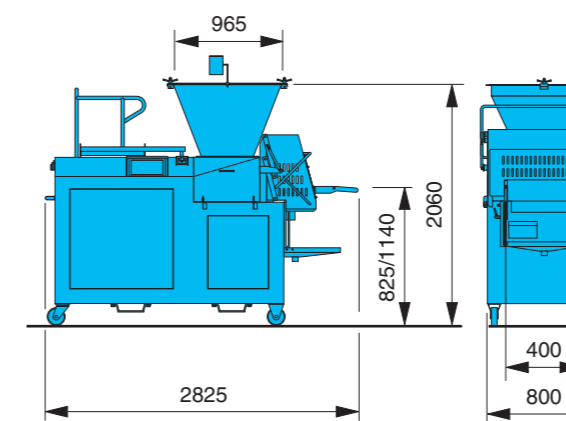
The product mass is deposited in the funnel (1). There is a spiral screw (2) in the funnel which, after the valve (3) is opened, brings the mass to the roll block (4) at a regular rotation speed. The product mass is then pressed through the roll block into the forming plate (5). The valve (3) is then closed to prevent the mass being pressed back into the funnel. After ejection from the forming plate by the ejectors (6) the product is laid on the discharge conveyor (7) and can be passed to the next process step.



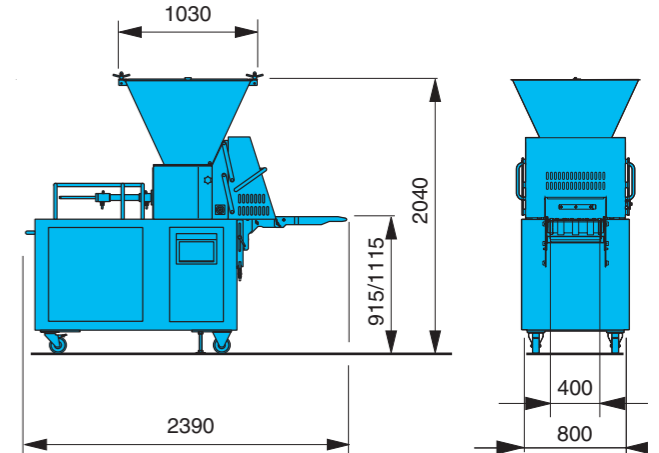
PlateFormer 630



PlateFormer 400



PlateFormer 400 E65



Contact details

Townsend Further Processing

Design, manufacture, worldwide sales and service of further processing systems for portioning, marinating, coating, heat treatment and sausage-making for poultry, red meat, and fish.

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