


Fluidor Equipment

World leader in systems

for Fluid, Drum & Container
handling for the Beverage, Honey
and Tomato Paste Industry.



Fluidor Equipment B.V.



Top advice, made-to-measure solutions, improved efficiency

Fluidor Equipment employs top knowledge and technology to serve customer needs.

Our technicians use powerful 2D and 3D CAD systems and can consult a data file full of cases of experience. Expertise is the most important factor that ensures that we can offer a made-to-measure solution within a specific budget: maximum performance from every square metre of available production space.

Solving a handling problem requires only one action: simply explain your problem to us. Conferring with you as a valued client, we then take up the challenge. Moreover, you can count on top advice, custom work and not at least our internationally praised machine quality. An effective investment with a quick return.



Fluidor Equipment B.V.

World leader in systems for Fluid, Drum & Container handling for the Beverage, Honey and Tomato Paste Industry

A deep-seated experience, extending over five decades, has brought Fluidor Equipment to the top in the field of Fluid, Drum and Container handling.

With our equipment to fill and empty 200 litre drums and 1.200 litre tote-bins, we can ensure efficiency improvements for the benefit of the processing industry, especially the food branch. All machines are designed for automatic CIP and according actual CE-Regulations. Being represented in several countries puts us in close contact with producers, anywhere in the world. Everywhere people value the quality of our machines, the customer-directed innovative approach and our high standards of manufacture and design.

Our broad range of stand alone machines eliminates production bottlenecks. Flexibly connected to each other by means of roller conveyor system and pipes, this stainless steel equipment ensures the production process can run uninterrupted.

The raw materials are quickly and hygienically removed from their packaging and prepared for processing. The computer controlled systems for handling 200 litre drums or 1000 litre pallet-containers, incorporate tomorrow's technology for today's challenges.



Specialist in preparing raw materials for processing

Fluidor Equipment takes care of a high efficient, safe and absolutely hygienic handling cycle, realised by advanced equipment working as stand-alones or supplementing each other in a fully automated roller conveyor system.

Fluidor Equipment receives and recovers raw materials from 200 litre drums and pallet-containers. For every condition our company has a reliable solution at hand.

The systems are automatic; they require minimum labour and protect the product integrity, even when it is chopped and completely melted. This can concern products that are dry, or with high or low viscosity, deep frozen or aseptic.

Some of the products that we have broad experience with include fruit juice, fruit concentrate, fruit pulp, tomato paste, cacao butter, honey and hop extract.

Drum and Tote-Bin Dumpers for liquid products like purees and fruit juice concentrates.

Fluidor Equipment supplies a complete range of dumpers for effortless emptying of open-top 200 litre drums and 1000 litre pallet containers with liquid products. These compact stainless steel installations are manufactured in compliance with CE standards and satisfy the most stringent sanitary standards.



Tote-Bin Dumper



Residue-free emptying of 1000 litre totes (pallet containers) and pumping over the product

For handling totes with fluids or purees we offer our model TBD-fluids which is able to tilt and tipping the product out of the totes into a 1200 litre collecting tank. The TBD-fluids features an integrated positive displacement pump. Assisted by the electrical powered wringer above the collecting tank the inner product bag is fully emptied (< 0,1% residue). The processing capacity is ± 20 totes per hour.



Residue-free emptying of 200 litre drums and pumping over of the product for up to 60 drums per hour.



For handling 200 litre drums we offer our model DAPS, offering the primary functions of lifting, tipping and collecting. Lifting is carried out from the driven roller conveyor system after the drums has been positioned by forklift or manipulator onto the roller conveyor. Pneumatic tipping is carried out using a patented technique in a smooth, drip-free movement. With a capacity of 550 litres, the collecting tank is tailored for an output till up to 60 drums per hour, depending on operator, drum infeed and discharge.

The DAPS features an integrated positive displacement pump. A low level control in the tank prevents the pump from running dry. Assisted by the electric driven Squeezer above the collecting tank, the inner product bag is fully emptied ($< 0,1\%$).

The ultimate capacity increase up to 60 drums per hour is achieved by linking the DAPS to a fully automated roller conveyor system, complete with Drum Opening Station. The infeed and discharge of the drums takes place in a high efficient manner.



Handling deep frozen fruit juices

The emptying of an open top 200 litre drum need not present a problem, not even when the content consist of deep frozen or aseptically packed fruit juices. However, care must be taken to meet specific requirements with regard to hygiene, product handling and efficiency. Years of intensive contact with the food industry have ensured that Fluidor Equipment is well placed to develop and build equipment which will meet these special requirements.



Ice-Chopper

Drum dumper Ice-Chopper

Fluidor Equipment developed the drum dumper ice chopper especially for processing massive blocks of ice. A 200 litre block is chopped into flakes in less then 45 seconds and pumped on. As well as this, the machine is capable of processing the entire range of products without a hitch, ranging from thin fluids to products of high viscosity. The drum and the product bag are rapidly emptied, leaving close to nothing behind.



Crushed-Ice-Melter

The unique Fluidor Crushed-Ice-Melter, resembling a tubular heat exchanger, provides a finely regulated, automatic heat treatment. The system ensures an optimal melting process with minimal thermal stress on the product. The product then passes on into the processing tank at a temperature which falls precisely within the pre-set margins and which can be very close to freezing point.



Pre-thawing tunnel

Hot-Air Pre-thawing tunnel

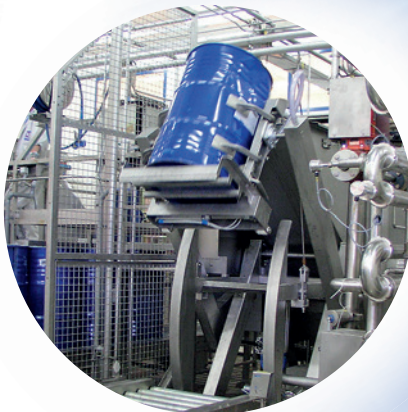
The Pre-Thawing Tunnel guides hot air around the drums coming direct from the cold store, and serves for several purposes. First to keep the product quality as good as possible by keeping the core of the product deep frozen. Second by pre-thawing the outer circumference of the ice block for allowing the ice block to slide out of the drum. Third for better logistics during the production process. Cycle time for deep frozen drums depends on the product characteristics and varies between 45 and 60 minutes.

Output

Standard setting 60 drums per hour can be adjusted to the desired production capacity. Following treatment in the tunnel, the drum can be tilted and the frozen block chopped into flakes. The product can be pumped on at this point, but without follow-up treatment (Fluidor Crushed-Ice-Melter), it will soon freeze solid again.

Roller conveyor system

The emptying of the drum and preparation of the product for pumping are the basic elements of the handling process. Optimal exploitation of capacity and maximum efficiency are realised in the preceding stages. Fluidor roller conveyor systems ensure that the delivery of incoming full drums and removal of emptied drums is fast and well regulated.



Handling of drums and tote-bins with viscous products like Tomato Paste.

Fluidor Equipment produces and supplies several drum and tote-bin emptying systems for handling aseptically packed, viscous products. These systems satisfy the strictest sanitary standards and are capable of completely emptying 200 litre drums at rates up to 50 drums per hour and 1.200 litre tote-bins up to 20 per hour.

Fluidor Equipment: a maximum of paste with a minimum of waste

Handling products of high viscosity in open-top drums and pallet containers is no longer a problem. The dumpers from Fluidor Equipment strip pasty products such as tomato puree and peanut butter from their aseptic packaging with a minimum of manpower and with the least possible loss of product. The paste then flows easily into the cleverly constructed receiving hopper and into the pump which pumps it on for processing.

The available models DAPS-Paste and DL-Paste for drums, TBD-Paste Ltd and TBD-Paste for tote bins and drums vary in capacity and in degree of automation. All systems have AISI 316L for product related parts, remaining parts will be manufactured in AISI 304L, according actual CE-Regulations.





The DAPS-Paste

A number of factors contribute to the capacity of the DAPS-paste, that can handle up to 60 drums per hour. First a driven, automated roller conveyor system assures constant infeed of full drums and direct discharge of emptied drums. The flow of the viscous product is encouraged by the shape of the specially designed product hopper. The DAPS-Paste is a semi-automatic system where opening of the aseptic bag and feed of the emptied bag through the Squeezer are the manual tasks of the operator

The TBD-Paste Ltd

This automatic system is designed to empty tote-bins and drums with Tomato Paste in lower ranges of viscosity, like "Cold Break" Tomato Paste. This system has no washing section for external washing of the aseptic bags. Bags are cut open by driven knives and product is pumped with an integrated positive displacement pump. Finally the bags are automatically emptied by a Squeezer, ensuring less than 0,1% of product will remain in the bags. Capacity of this system is up to 10 tote-bins or 25 drums per hour.



The DL-Paste and TBD-Paste

With capacities of respectively up to 50 drums or 20 tote-bins per hour are these systems the most powerful and automated systems, designed for high viscosities comparable to "Super-Hot Break".

Once the bag is cut open, the product flows through the grate in the receiving hopper with its product pump. The wringer ensures that less than 0,1% of the product remains left in the packaging. The DL-paste and TBD-paste have been especially designed for the professional user. The operator of this PLC controlled unit has only to monitor its activity.

The TBD-paste is equipped with an operator platform on both sides of the machine. The operator monitors the process from one of these platforms and operates the control panel for the entire installation. The ultimate capacity increase up to 20 tote-bins per hour is achieved by linking the TBD-paste model to a fully automated roller conveyor system. The infeed and discharge of accumulated totes in this configuration takes place in a high efficient manner.

Fluidor Equipment's solutions for Product Recovery

All our customers are looking for solutions to reduce their **Product Waste**, to improve their **Product Recovery** and to improve their **Sustainability Program**.

Fluidor Equipment offers you following solutions:

- Line Clearing System "Fluivac", 3rd. generation.

This is our alternative for traditional pigging systems. Besides Product Recovery this systems will drastically reduce your consumption of fresh water and will improve your overall process efficiency by reducing your CIP-and change-over times.

This stand-alone unit can be connected to your product line to

- empty the product line and reduce product loss
- rinse the product line with a minimum amount of water
- reduce change-over time



Fluivac: optimal product recovery, maximum flexibility

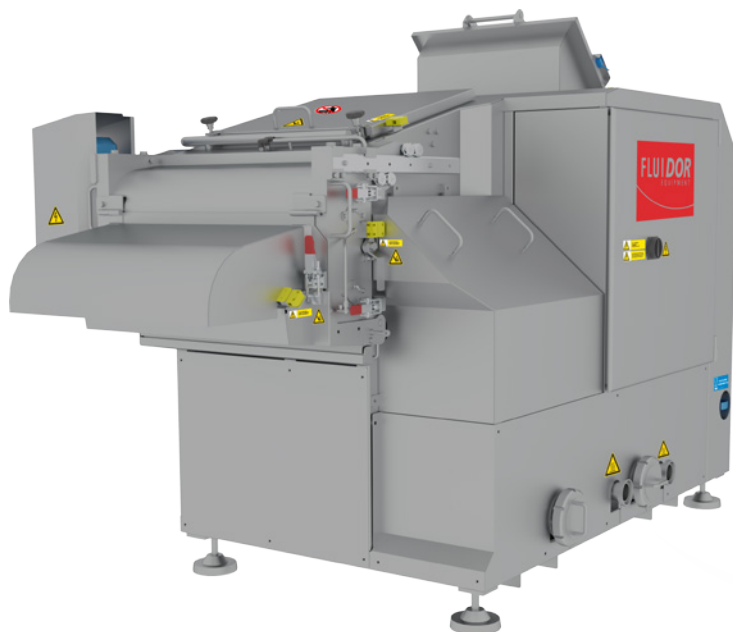
Compared to existing alternative methods like pigging and flushing with water, the Fluivac system has many advantages:

- No high demands on product lines, like large radius bends, full bore valves, etc.
- Can be connected to existing pipe lines
- One unit can be used for several pipe lines, so no dedicated unit required
- No mix-zone so cleared product is not lost
- Low energy consumption
- No foreign body in product line



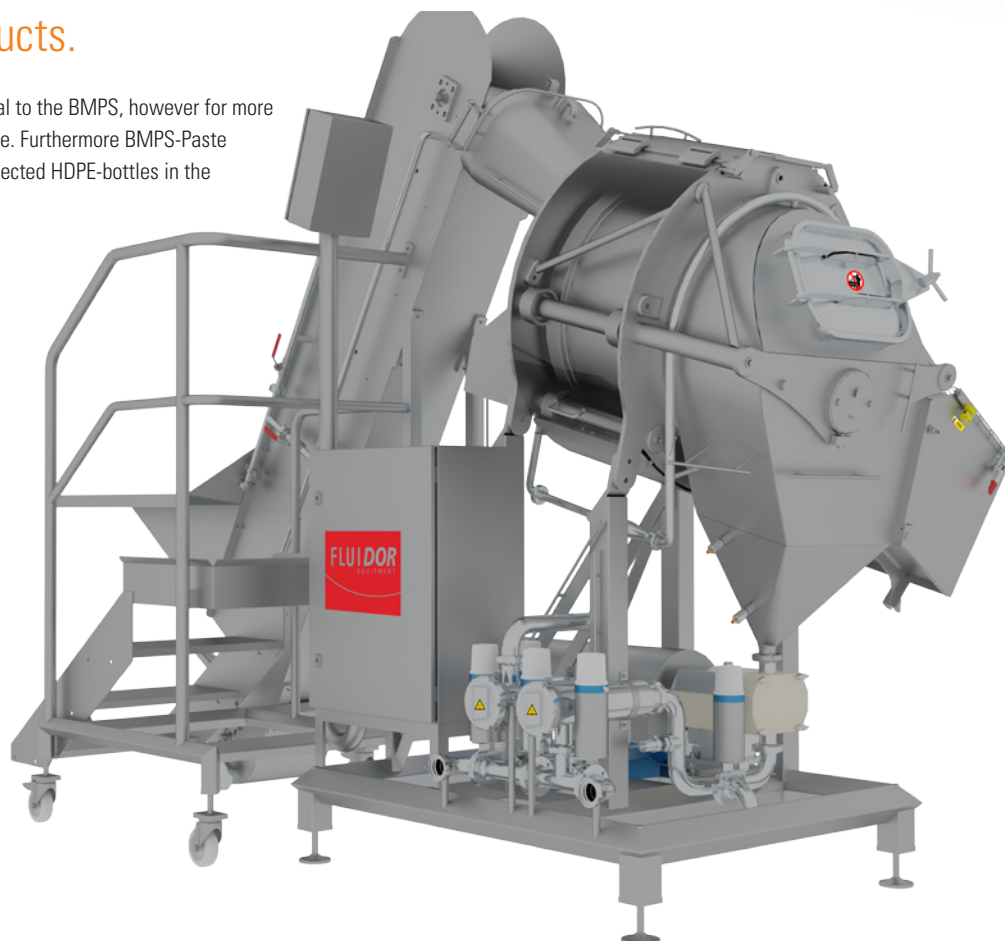
Carton Squeezer BMPS, for liquid products.

Most of our customers are faced with rejected cartons from their filling lines. Most of the times these cartons are re-worked manually in order to re-use the product. BMPS takes care of automatic separation of rejected cartons and their products. BMPS can be used for liquid products in Beverage and Dairy Industry.



Carton Squeezer BMPS-Paste, for viscous products.

Purpose of this machine is identical to the BMPS, however for more viscous products like Tomato Sauce. Furthermore BMPS-Paste can also be used for re-work of rejected HDPE-bottles in the Dairy Industry.





*P.O. Box 152
4940 AD Raamsdonksveer
Ramgatseweg 25
4941 VN Raamsdonksveer
The Netherlands*

*Tel: +31-162-581450
Fax: +31-162-518788
E-mail: info@fluidor.com
Internet: www.fluidor.com*



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