

# MACHINE SPECIFICATION

## BMPS-Paste



Machine name	BMPS-Paste	Manufacturer	Fluidor Equipment B.V.
Publication date	20-02-2024	Address	Ramgatseweg 25, 4941VN Raamsdonksveer, The Netherlands
Version	0.1	Telephone	+31(0)162 581 450

## DESCRIPTION

The BMPS-Paste is designed to rework cartons with plastic screw caps and plastic bottles (HDPE, PP and PET, depending on thickness and shape) containing liquid products up to 20.000 cP, like sauces and ketchups. Packaging's are squeezed to separate product without damaging the packaging to assure product can be re-used. Loading of full cartons or bottles (0,2 up to 1,5 L.) manually or by means of a loading conveyor for controlled infeed. Empty cartons or bottles are collected into a container.

The recovered product will be filtered and is discharge by the build in pump to the next process step. Product recovery rates between 97% and 98% can be achieved, depending on type of packaging and product.

The BMPS-Paste has a complete set of cleaning nozzles and can be integrated into the customer's CIP process.

## DESIGN SPECIFICATION

- According actual CE-regulations
- Developed and build according quality system ISO 9001
- Clean design according actual EN1672-2 and HACCP-regulations
- Food contact materials according EC 1935/2004 and FDA
- Good Manufacturing Practice Regulation (EC) 2023/2006
- Components according Fluidor standard components list
- Machine prepared for integration into existing C.I.P.-system (CIP covers included)  
Alternatively machine can be set-up for stand-alone CIP.
- Machine control by HMI
- Control cabinet IP66 / IPX9 / NEMA 13 / NEMA 4X (HD 1316.600, 810x1050/1221x300, AISI 304)
- Module for remote internet access
- Construction AISI304
- Product contact materials (hopper + piping parts) AISI 316
- Built-in filters for product and CIP.
- Frequency controlled squeezer, hygienic design, natural rubber
- Pressure transmitter behind the pump
- The CIP supply is not equipped with a mix-proof valve solution
- Machine is designed to be used 12 hours a day 5 days a week and 52weeks a year with proper maintenance and an expected service life of 20 years



## REQUIREMENTS

- Layout (dimensional, utility & requirements drawing) available upon request
- Earthquake area extra fixation needed (Anchors option)
- Machine is designed for indoor use in a medium hygiene wet area

## TECHNICAL DATA

	EU	USA
· Total weight empty	: 1050 kg	2315 lbs
· Product / CIP temp	: -20, +90 °C max 60 minutes	-4, 194 °F max 60 minutes
· Ambient temperature	: 5 - 25 °C	41 - 77 °F
· Relative humidity	: 30 - 70%	
· Noise level	: < 85 dB(A)	
· IP value (control cabinets + drives)	: IP66 - IP55	
· Product hopper volume	: 20 L	5,2 gal
· Adjustable machine support legs	: 80 -160 mm	3.15 - 6.3 inch
· Dimensions h*w*d:	: 2300*1700*1750 mm	90*67*69 inch
· Installed power	: 7,5 kW	10 HP

## CAPACITY

- Depending on infeed & product: up to 4.000 cartons per hour.
- Pump capacity 2 - 7 m<sup>3</sup> product per hour (8,8 - 30 gpm)
- Pump pressure max. 12 bar (174 psi)

## PRODUCT INFORMATION

- Product type : Fruit juices, concentrates, milk, yoghurt, sauces & paste
- Product viscosity max : Dynamic viscosity 20.000 cP

## CLEANING

- Cleaning depends on the product and company guidelines, the values below are guide values
- CIP cleaning after each production batch or before each production run after 12 hours of downtime
- Manual cleaning +/- 10 min

CIP Time (sec)

CIP Step	Caustic	Caustic + Acid	Temperature (°C)	Concentration (%)
Pre Rinse	600	600	45	fresh water
Caustic (Organic soils)	1200	1200	75	0,5 - 2 % (Caustic soda)
Intermediate Rinse		600	20	fresh water
Acid (Inorganic soils)		600	65	0,5 - 1% (Acid)
Final Rinse	600	600	20	fresh water
<b>Total CIP time (min)</b>	<b>40</b>	<b>60</b>		

## **MACHINE EXECUTIONS**

- One standard execution

## **POWER SUPPLY / CONTROLES**

- 3 Phase 400V 50Hz 25 A+ neutral + earth, Siemens controls
- 3 Phase 480V 60Hz 25 A + earth, Allen-Bradley controls, UL prepared

## **COMMUNICATION**

- PROFINET connections pre- installed at Siemens controls
- Ethernet/IP connections pre- installed at Allen Bradley controls

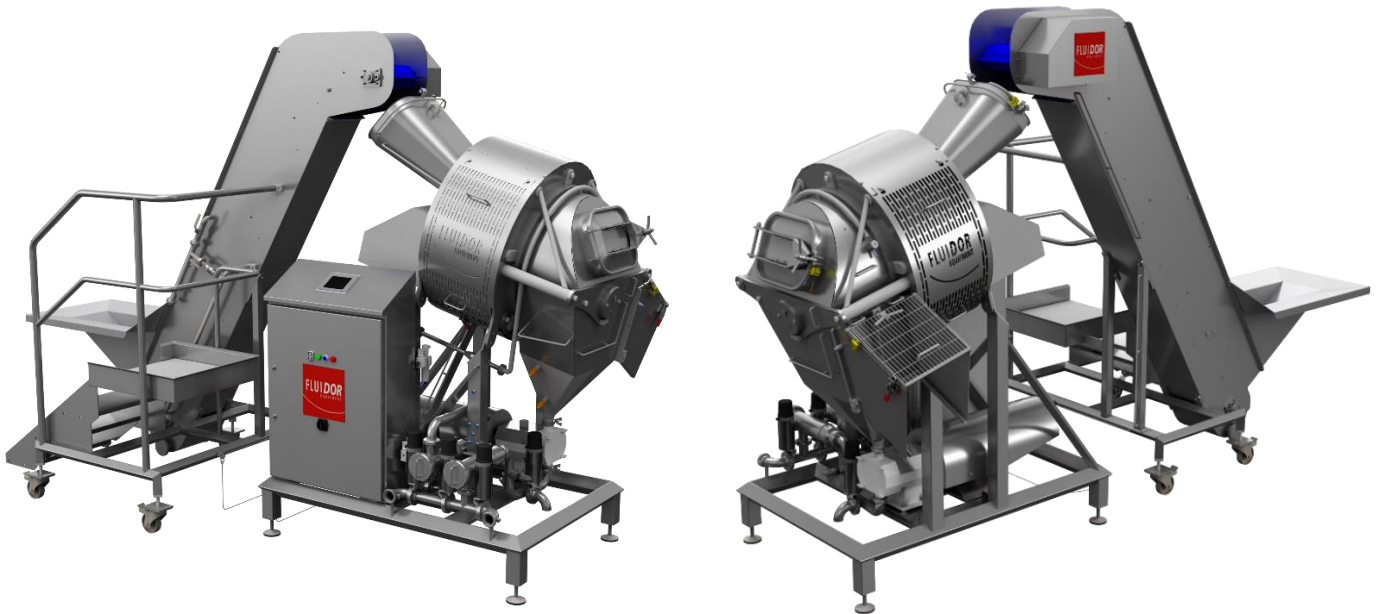
## **OPTIONS**

- Various product filter sizes obtainable from 5 – 1500 microns.
- Loading conveyor like shown on picture, for dosed loading of cartons/bottles.

## PROCESS OPTIONS

The BMPS-Paste can be integrated with a loading conveyor and a discharge conveyor to facilitate the dosing and discharge of cartons or bottles.

## PROJECT LAYOUT EXAMPLE



## ANNEXED DOCUMENTS

- Machine Lay-out
- Machine P&ID
- Fluidor standard components

## GENERAL INFORMATION

Website	: <a href="http://www.fluidor.com">www.fluidor.com</a>
Telephone	: +31 162 581450
Sales	: Mr. Jan Vermeulen
Telephone:	: +31 162 581457
Mobile	: +31 6 25009609
Email	: <a href="mailto:j.vermeulen@Fluidor.com">j.vermeulen@Fluidor.com</a>
Spares	: Mr. Wing Ho Kwok
Telephone	: +31 162 581468
Email	: <a href="mailto:wh.kwok@fluidor.com">wh.kwok@fluidor.com</a>
Service	: Service department
Telephone	: +31 162 581466
Email	: <a href="mailto:service@fluidor.com">service@fluidor.com</a>