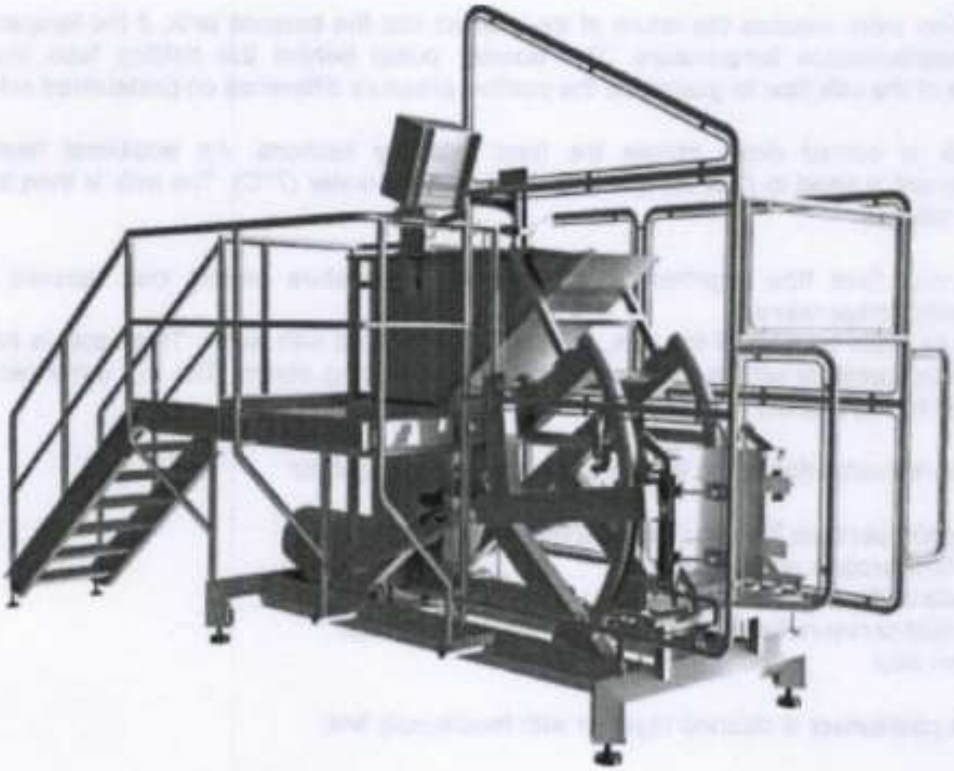
TOMATO PASTE LINE FOR CAN & SACHET MACHINERIES & EQUIPMENT

1.9. Drum Dumping System with buffertank

1.9.1. Drum Dumping System with Buffertank

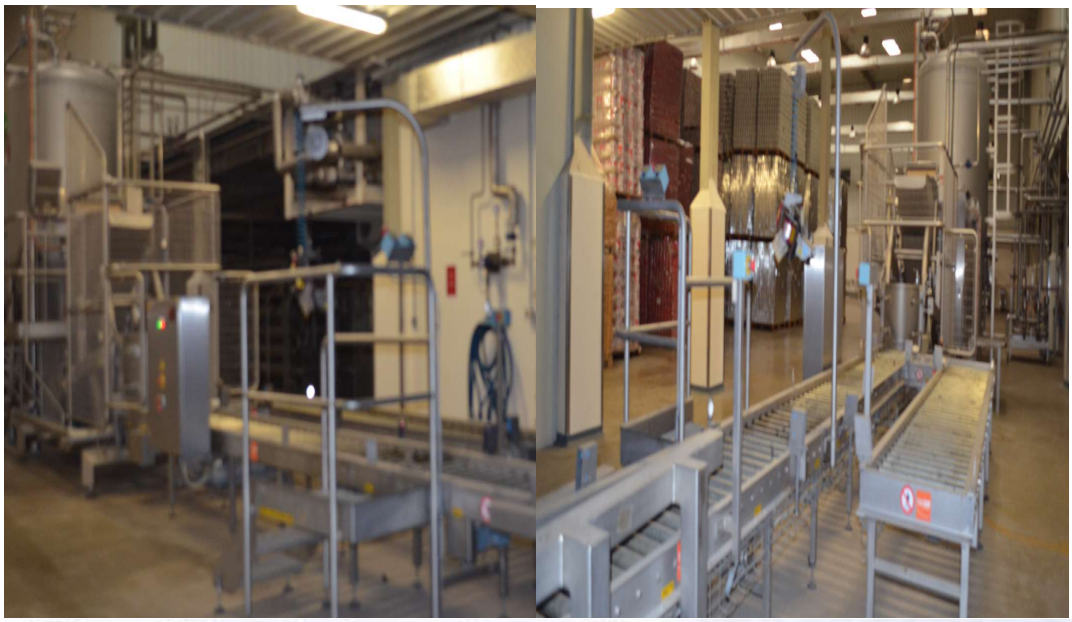
For efficient half-automated emptying of open-top 200 litre steel drums containing high viscous concentrates and purees.
Besides high viscous products like Tomato Paste 28 - 38° brix, this Drum Dumper can also handle fruit concentrates and aseptic fruit juices; 40-67°brix at temperatures between -20° and +20°C.



Basic execution:
Technical specifications in accordance with enclosed machine specification
Capacity : 10 till 60 drums per hour, depending upon drum infeed and product, pump capacity till 12 m3 per hour.
Materials : Stainless steel AISI 304, product hopper and pump AISI 316.
E-Voltage : 400 V; 50 Hz, 3 fase (standard)

Follwing items are included:

- Adjustable pump speed
- Connection & valve for water inlet at pump
- CIP-preparation (cover)
- Dumping grid
- Pressure switch (pump protection)
- Pneumatic drum hook for conical drums
- Modem for PLC



1.9.2. Fluidor Roller Conveyor System "FA":

This Roller Conveyor System can be installed in front of the DAPS-Paste or the DL-Paste.
Roller Conveyor System will be built in stainless steel AISI 304 with steel galvanized rollers.
Transport height is approx. 700mm and conveyor is equipped with adjustable feet to overcome floor slope.
Conveyor is fully driven by SEW drives which are mounted underneath the conveyors and protected by a stainless steel cover.

Proposed system can be described as follows (see enclosed lay-out ref. 13021/A1):

- mm driven conveyor with drumstop and forklift protection for loading drums.
- 875 mm rotating position for opening drums with pneumatic bolt cutter and operator platform.
- 2.800 mm driven conveyor with drum stop.
- 1.500 mm bi-directional driven conveyor to transport drums in-and out of tipping mechanism.
- Electrical driven pusher to discharge the emptied drums.
- 500 mm non-driven conveyor.
- 4.750 mm driven conveyor for empty drums.

1.9.3. Fluidor AISI 316 Buffertank for 8 m³ Tomato Paste

Engineering and manufacturing of one Buffer-tank with capacity of 8 m³ Tomato Paste:
Buffer-tank material AISI 316, diameter 2.000 mm, with 4"-connection for the product, 1"-connection for CIP incl. spray ball "Typhoon" and an analog level sensor.
4"- AISI 316 piping is to be installed between the Mono pump of the Drum Dumper and the tanks.
This piping includes necessary pneumatic valves and filter unit, as shown on lay-out ref. 13021/A1
At the bottom of this tank there is an integrated frequency-controlled mono pump with a capacity of up to12 m³/h including pneumatic valve and pressure sensor installed (identical to the pump installed in the Drum Dumper).
Complete with electric/pneumatic controls, cabling and automation, visualization on touch screen of Drum Dumper.

MIXING PLANT – PASTEURIZER & CIP PLANT FOR TOMATO PASTE PLANT FOR BOTH LINES ARE WITHOUT PLC's AND SOFTWARE YOU WILL NEED TO PURCHASE FROM GEA.

Tomato mixing plant

The tomato paste is received in drums of approx. 200 l with 38° Brix. The drums are emptied into the customer supplied drum emptying tanks.
From here the tomato paste is pumped by the customer to one of the two tomato paste mixing tanks, where the tomato paste is mixed with water to the requested brix. The water is measured by means of a flow meter. Further salt (approx. 1%) is added and citric acid, if necessary.

From the mixing tanks, the product is pumped to one of two tubular pasteurizers, where product is heated to the filling temp of approximately 90°C, using positive pumps.

The sterilized product is led to the customer supplied filling machine, and the requested filling pressure is regulated by means of a constant pressure valve. In case of stop on the filling machine the product is led back to the mixing tank.

The outlet temperature of the product can be adjusted to minimum 40ºC.

CIP plant for Tomato plant

The CIP plants are designed for cleaning of pipelines, tanks and other equipment. The CIP plants are also designed to pre-sterilize the processing line using hot water.

Tomato paste section:
The CIP plant's main equipment consists of tree tanks with capacity of 5,000 l each, which are for the lye solution, fresh water and recovery water.
The plant has one (1) forward line 20,000 l/h with tubular heat exchanger, flow meter and frequency controlled centrifugal pump.
The valve clusters at forward line and for the return into the tanks consists of leakage butterfly valves with pneumatic actuator.
The CIP plant is designed for: pre-rinse with recovery water, circulation of lye, flushing with water and for hot water sterilizing.