

## 03 TIPPING

## 04 TIPPING AND CAP SEALING FOR CONTAINMENT

### Advantages



Compatible with drums containing an inner liner



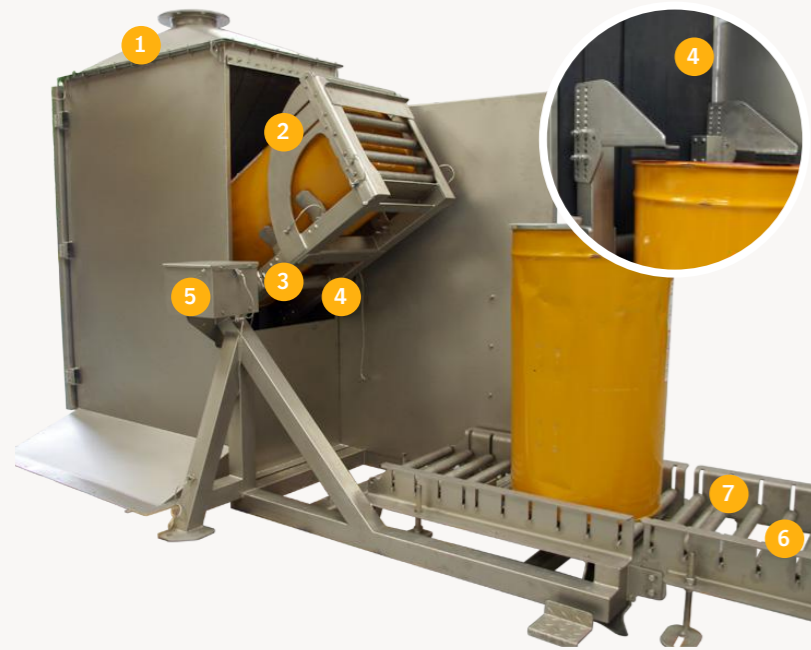
Containment of toxic and hazardous materials



Adjustable to all drum-types



Total containment enclosure with glove box access for a safe work environment



### [+] Safety features

#### Protective screen

Positioned near the tilting mechanism to provide operator security

#### Lock system

The operations cycle cannot be started if the access door is in the open position

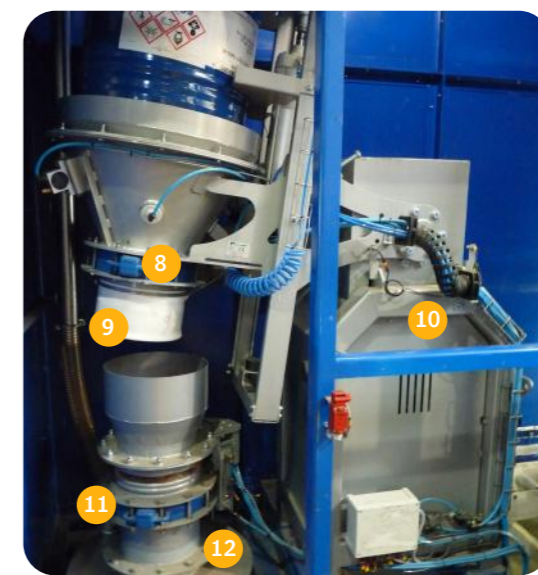
#### Control system

Options are available for simple push button controls or PLC. In the case of push button controls, the operator must hold the button down to continue with the tipping cycle. The operation cycle can be interrupted if the operator releases the control buttons.

#### Security area

Located between the conveyor and the tipping mechanics, it prevents any risk of collision and provides reliability of the installation.

1. Dust cover with dust collection connection flange - 2. Tipping cradle with adjustable dimensions - 3. Tipping drive shaft directly connected to the engine - 4. Clamps to maintain upper drum position during tipping (adjustable height by control system) - 5. Pivoting system with angle sensor - 6. Motorized roller conveyor - 7. Adjustable frame to allow maintenance



1. Containment enclosure - 2. Flow aid vibrator - 3. Containment cylinder - 4. Gloves for drum opening - 5. Tipping cradle - 6. Drum vibrator - 7. Motorized roller conveyor - 8. Butterfly Valve - 9. Inflatable Seal Connection - 10. Motorized group - 11. Butterfly valve for isolation of collection hopper - 12. Hopper - 13. Control panel - 14. Roller

### TECHNICAL SPECIFICATION

**Rate:** 1 drum/4-5 min.

**Manufacturing:** framework in painted steel/stainless steel

**Load capacity:** 550 lbs

**Angle:** up to 180°

**Drum tipping:** electrical engine of 7,5 kW

**Drum containment:** Pneumatic cylinder with inflatable seal

**Downspout connection:** low-pressure inflatable seal

**Isolating butterfly valve:** DN150

**Product Flow Aids:** fluidizer on the discharge cone and vibrator on the cone or bottom of the drum

### TECHNICAL SPECIFICATIONS

**Rate :** 1 barrel/2 min.

**Manufacturing:** framework in painted steel / stainless steel

**Loading capacity:** 400 lbs kg

**Angle :** up to 180°

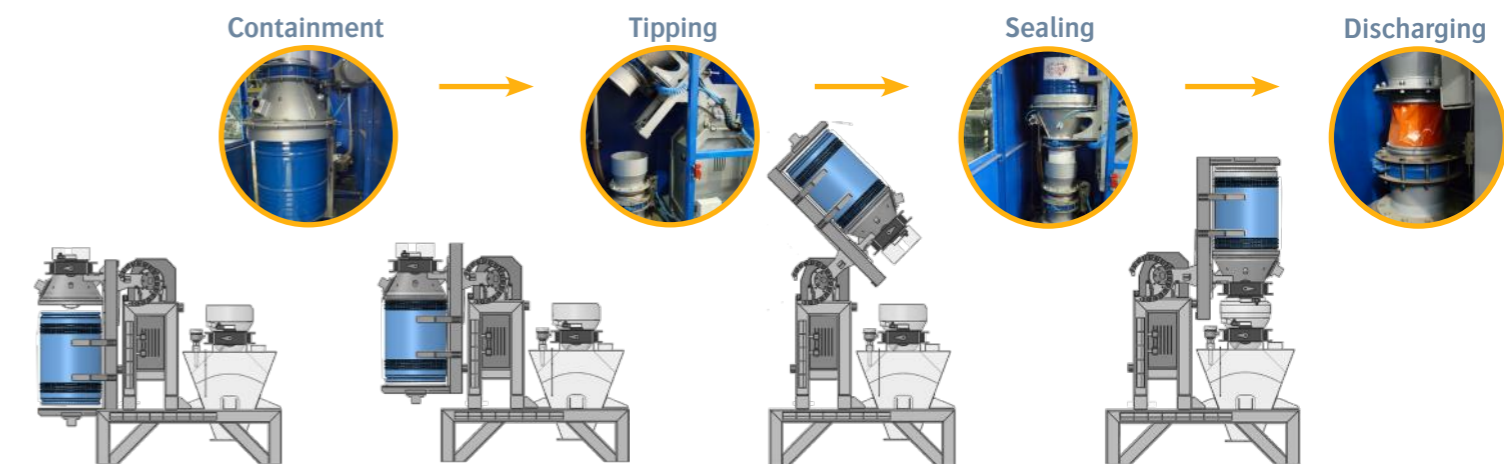
**Drum tipping:** electrical engine of 5,5 kW

### OPERATION SEQUENCE

AVERAGE CYCLE TIME: 2 MINUTES

1. The drum is positioned on the roller conveyor.
2. The drum is conveyed by gravity conveyor or motorized conveyor to the unloading dock.
3. The first drum is stopped on the tilting mechanism; rubber pads provide a soft stop.
4. Once the drum is in position, the operator starts the tipping cycle. The cycle is controlled by means of two push buttons for lifting and two buttons for lowering the drum. The tipping mechanics are driven by gear motor with the moving assembly docking against rubber pads.
5. Once empty the drum returns to the starting position by control of the operator.
6. The operator manually removes the drum.

### OPERATING MODE



1. Drum placement on roller conveyor and tipping cradle

2. Drum containment is ensured by cradle lifting and docking cone. The internal cone contains forks that prevent the reversal of the inner liner.

3. Drum inversion

4. Connection to the collection hopper by inflatable seal and material discharge controlled by isolation butterfly valves