

## **1- Beans Soaking Tank:**

### **❖ Specifications:**

1. At the start of the process, the product moisture must be significantly increased. The soaking tank is ideal for this purpose.
2. Full Stainless steel 304L construction with conical outlet.
3. Vessel diameter 2400 mm.
4. Capacity: 10 m<sup>3</sup>
5. Food grade inner stainless-steel finish with no internal welding lines (Hygienic design).

### **❖ Options to be added on request:**

1. Stainless steel 304L basin (flumes) underneath the tanks.
2. Platform.



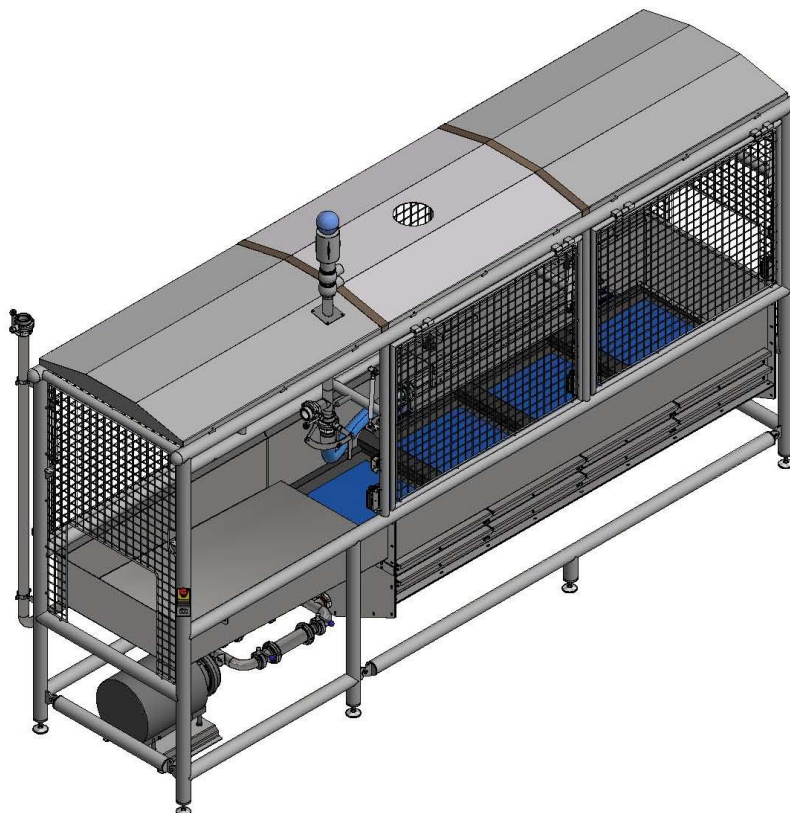
## **2- Shower Filler:**

### **❖ Specifications:**

1. Machine designed to handle bean cans and fill them with a certain volume of liquid that contains Brine with particles/powder.
2. Equipped with pump that picks the liquid from the warmed-up tank to a tray positioned over the containers; this tray brushes against the edge of the container. The liquid overflows but the solid product doesn't.
3. Brine Filling temperature: 85° - 90 °C.
4. Available for different sizes of cans.
5. Capacity: Up to 600 cpm.
6. Brine tank capacity: 400L with recycling pump.
7. Material: Stainless-steel 316L.

### **❖ Options to be added on request:**

1. Agitator inside the warmed-up tank to agitate brine continuously.



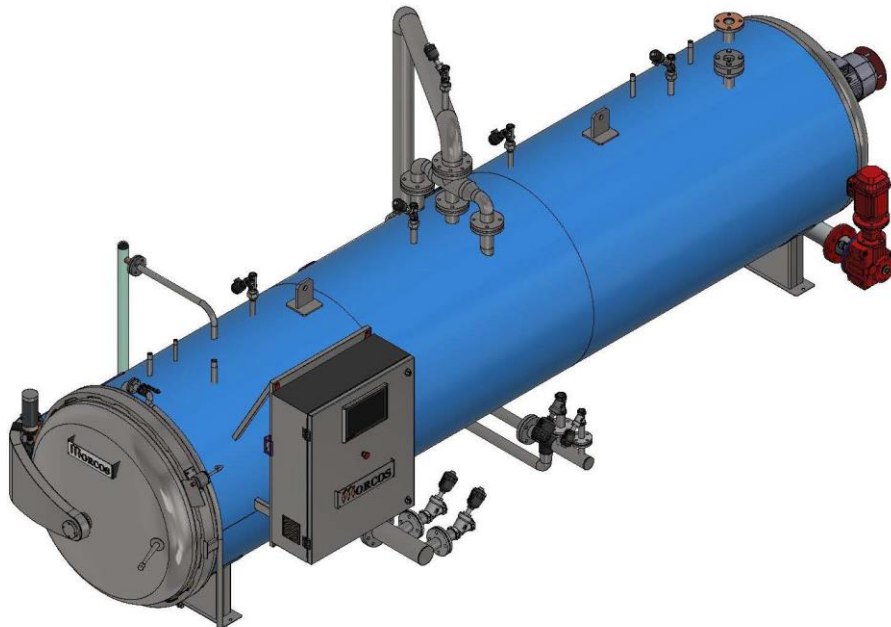
### **3- Autoclave “Retort”:**

#### **❖ Specifications:**

1. Pressure chamber used to carry out industrial processes requiring elevated temperature and pressure different from ambient air pressure.
2. Used to cook and sterilize the beans cans by subjecting them to high pressure saturated steam at 120-121° C for around 50-60 minutes depending on the size of the load and contents.
3. 5 m long and able to carry 5 trolleys filled with cans.
4. Types:
  - I. Regular Retort.
  - II. Rotary Retort.

#### **❖ Options to be added on request:**

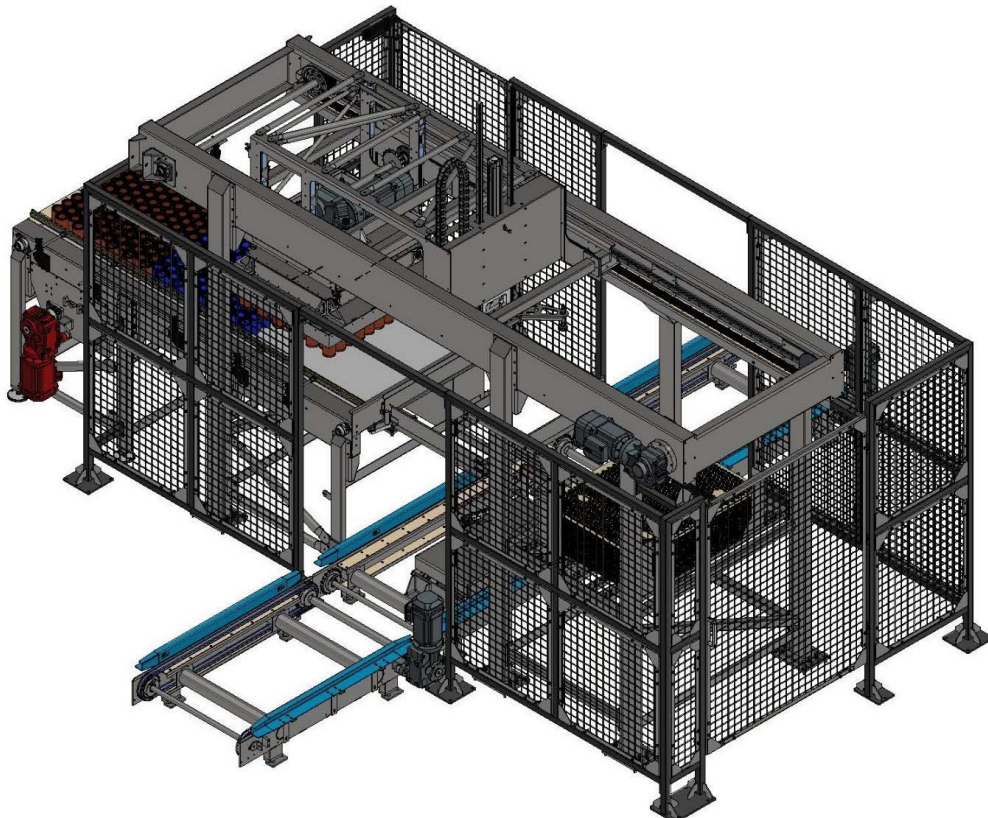
1. Baskets motorized pulling system to empty the autoclaves automatically.
2. Stainless steel 304L Trolley.
3. Stainless steel 304L Basket.
4. Stainless steel 304L basket base.
5. Polypropylene divider for bean cans.



#### **4- Automatic Cans basket Unloading machine:**

❖ **Specifications:**

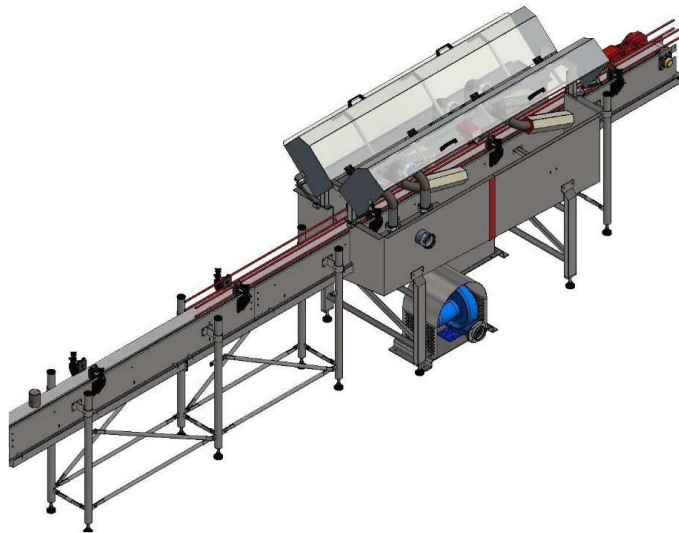
1. Heavy machine used to unload canned products of beans or legumes from baskets.
2. Developed for lines of wide range of production capacities (up to 600 cans per minute).
3. Automatic magnetic pick and place head to unload cans layers with maximum precision.
4. Positioning hydraulic elevator to raise cans layers in stepwise fashion.
5. State of the art vacuum generator to remove plastic separators.
6. Full Stainless-Steel execution.
7. Fully automated through PLC and encoders for guaranteed accuracy.
8. Maximum flexibility to include different product sizes.
9. Safety guard equipped with safety switches to ensure safe operation.



## 5- Drying Unit:

### ❖ Specifications:

1. Conveyor used for drying cans by the use of blowers.
2. Chain conveyor, length designed to the production capacity.
3. Stainless steel cover around all the drying system.



## 6- Twister:

### ❖ Specifications:

- 1- Equipment used to turn over the cans to be dried from both sides.
- 2- Material: Stainless-steel.
- 3- Its length is calculated according to production capacity and the drying system design.

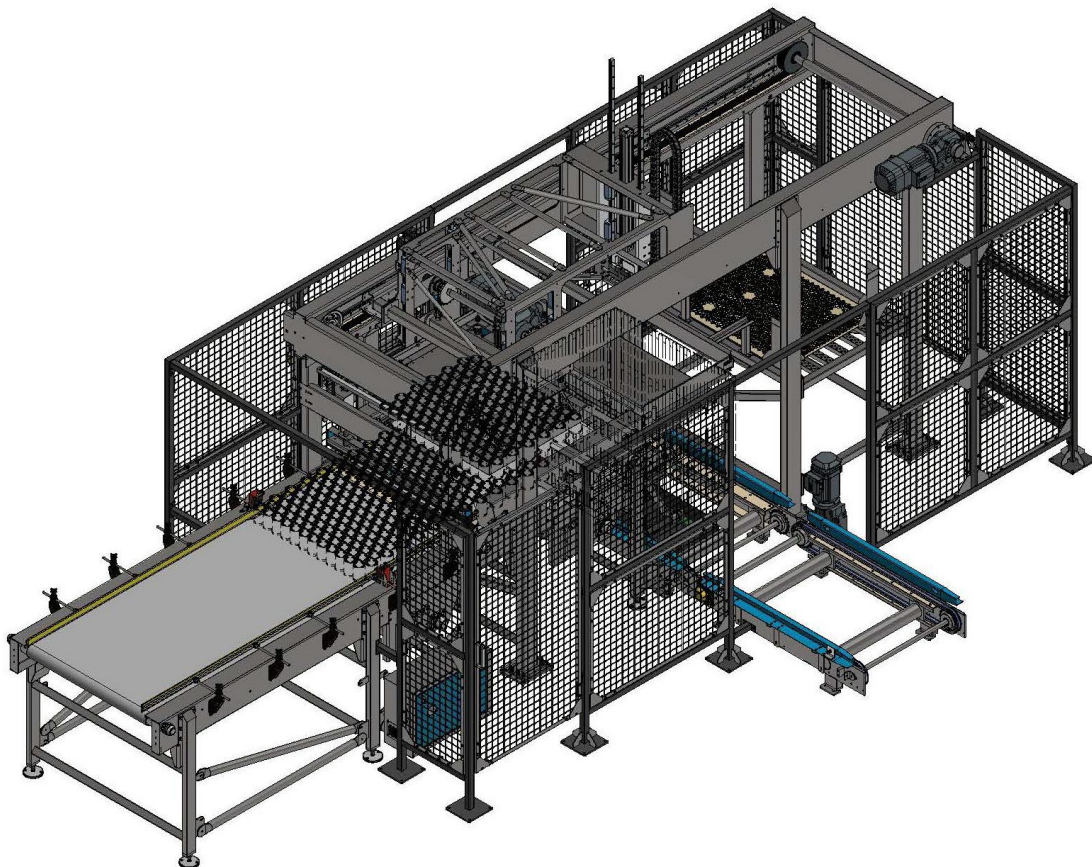




## **7- Automatic Cans basket Loading machine:**

### **❖ Specifications:**

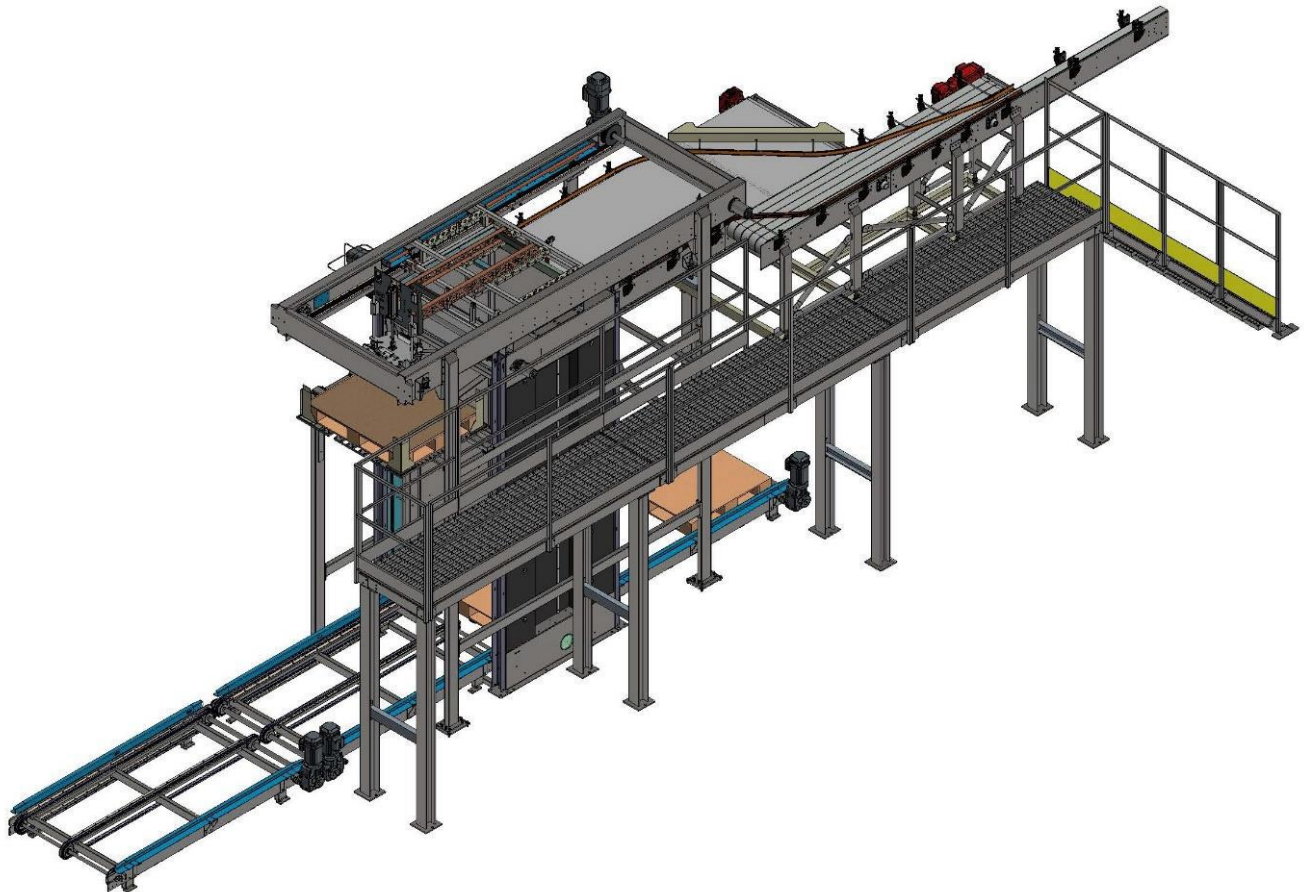
1. Heavy machine used to load canned products of beans or legumes in baskets.
2. Developed for lines of wide range of production capacities (up to 600 cans per minute).
3. Automatic magnetic pick and place head to load cans layers with maximum precision.
4. Positioning hydraulic elevator to lower cans layers in stepwise fashion.
5. State of the art vacuum generator to add plastic separators.
6. Designed to ensure full well aligned layers.
7. Full Stainless-Steel execution.
8. Fully automated through PLC and encoders for guaranteed accuracy.
9. Maximum flexibility to include different product sizes.
10. Safety guard equipped with safety switches to ensure safe operation.



## **8- Fully automatic magnetic De-Palletizer for EMPTY loose cans:**

### **❖ Specifications:**

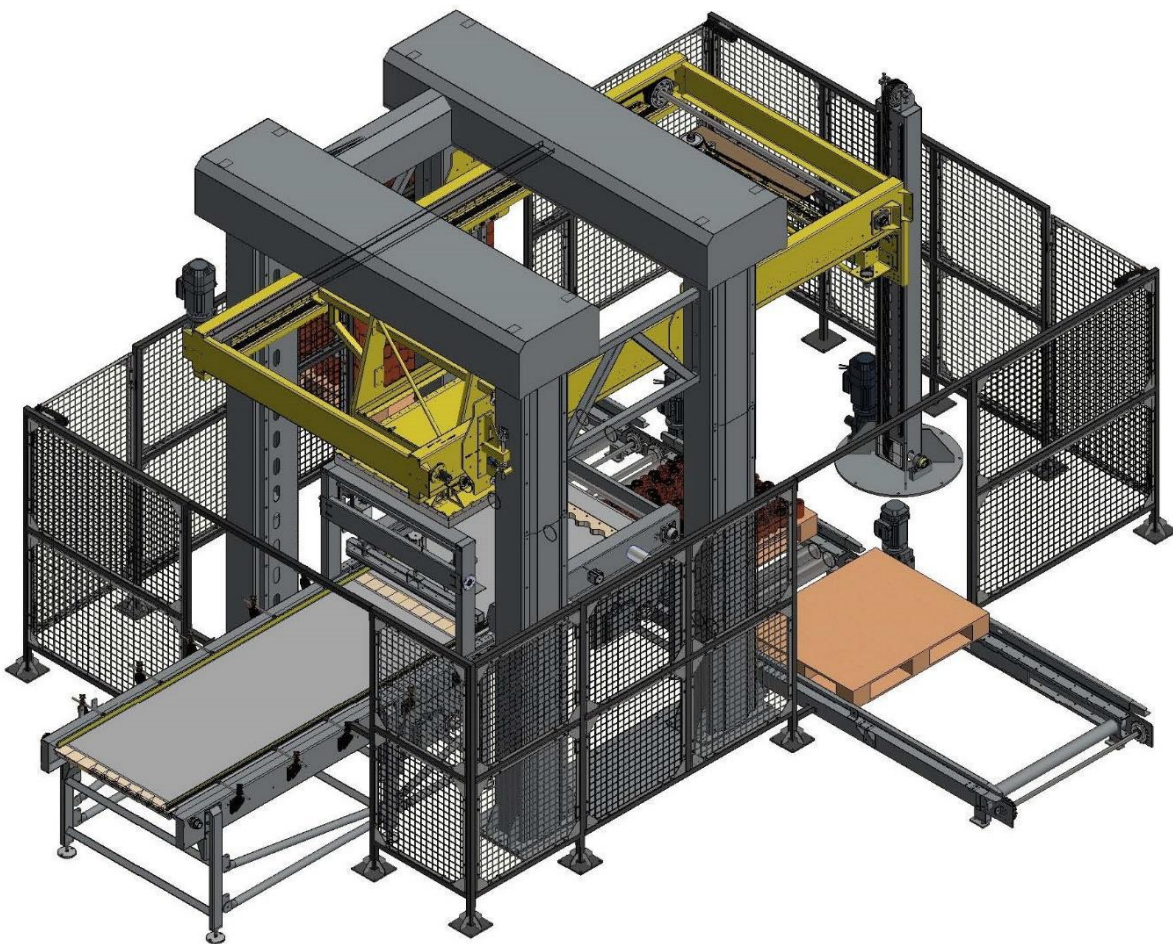
- 1- An automated system, that discharge pallets from empty cans.
- 2- Used to automate the de-palletizing process at the start of the line.
- 3- It pushes empty cans from the pallets onto the conveyor then the cans pass through modular conveyors for sterilization and filling stage.
- 4- Grippers system to ensure separators position while pushing cans layers.
- 5- Vacuum generator to remove separators.
- 6- Developed for lines of wide range of production capacities (up to 600 cans per minute).
- 7- Fully automated through PLC and encoder for guaranteed accuracy.



## **11. Fully automatic Palletizer for FULL loose cans:**

### **❖ Specifications:**

- 1- A fully automated system for loading cans onto pallets.
- 2- Developed for lines of wide range of production capacities (up to 600 cans per minute).
- 3- Automatic magnetic pick and place head to load cans layers with maximum precision.
- 4- Counter weighed carriage for minimum power consumption.
- 5- Separate head with state-of-the-art vacuum generator to add separators between cans layers.
- 6- Designed to ensure full well aligned layers.
- 7- Fully automated through PLC and encoders for guaranteed accuracy.
- 8- Maximum flexibility to include different product sizes.
- 9- Safety guard with safety switches to ensure safe operation.

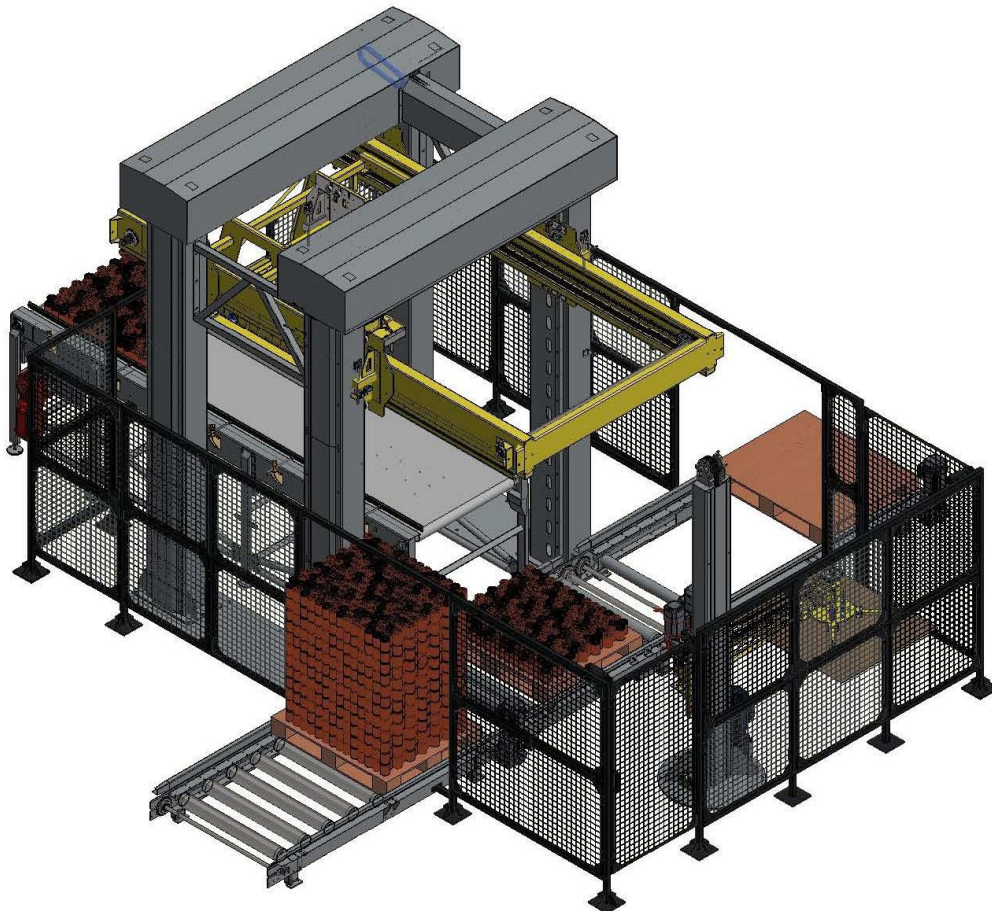




## **12. Fully automatic De-Palletizer for FULL loose cans:**

### **❖ Specifications:**

1. A fully automated system for unloading cans from pallets.
2. Developed for lines of wide range of production capacities (up to 600 cans per minute).
3. Automatic magnetic pick and place head to unload cans layers with maximum precision.
4. Counter weighed carriage for minimum power consumption.
5. Separate head with state-of-the-art vacuum generator to remove separators.
6. Fully automated through PLC and encoders for guaranteed accuracy.
7. Maximum flexibility to include different product sizes.
8. Safety guard with safety switches to ensure safe operation.



### **13. Intermedia Conveyors:**

#### **❖ Specifications:**

1. Modular/Chain conveyors used between machines for handling the cans transferring from stage to another.
2. Its length is calculated according to production capacity and plant layout.
3. Full stainless steel construction with top end plastic modular/chain belts.

