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**AXTEL**

**AXTEL INDUSTRIES LTD**

**Chocolate Solutions**





# ADDRESSING YOUR PROCESSING NEED WITH PRECISION



**A**xtel brings in more than 25 years of experience in offering customized solutions for the Food Processing Industry. Our design, engineering and manufacturing capabilities are focused towards delivering solutions that maximize your profitability, ensure sustainability and improve reliability. Axtel is a specialist in engineering process systems for the food industry. We are recognized for our expertise in Turnkey Systems, Product Development and Exemplary Customer Service. Our advanced manufacturing facility is suitably equipped to build robust and aesthetically designed machines.





## AXTEL® FACTS AT A GLANCE

**YEAR OF  
COMMENCEMENT:**  
1993

**STRENGTH:**  
735+

**REGISTERED  
MEMBER:**  
EHEDG

● Axtel  
● Clients

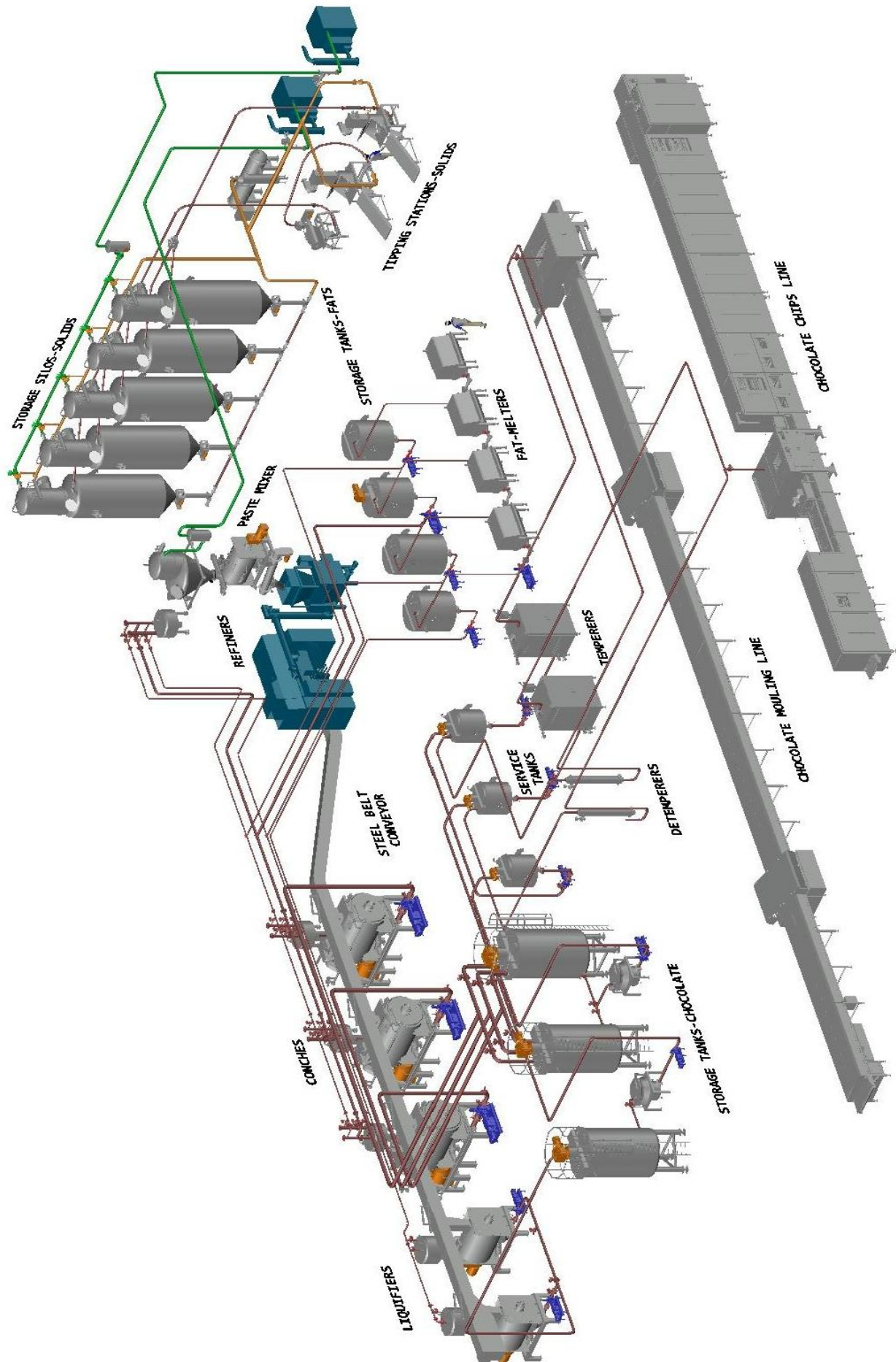


**Global  
Presence**

# Chocolate Solutions:

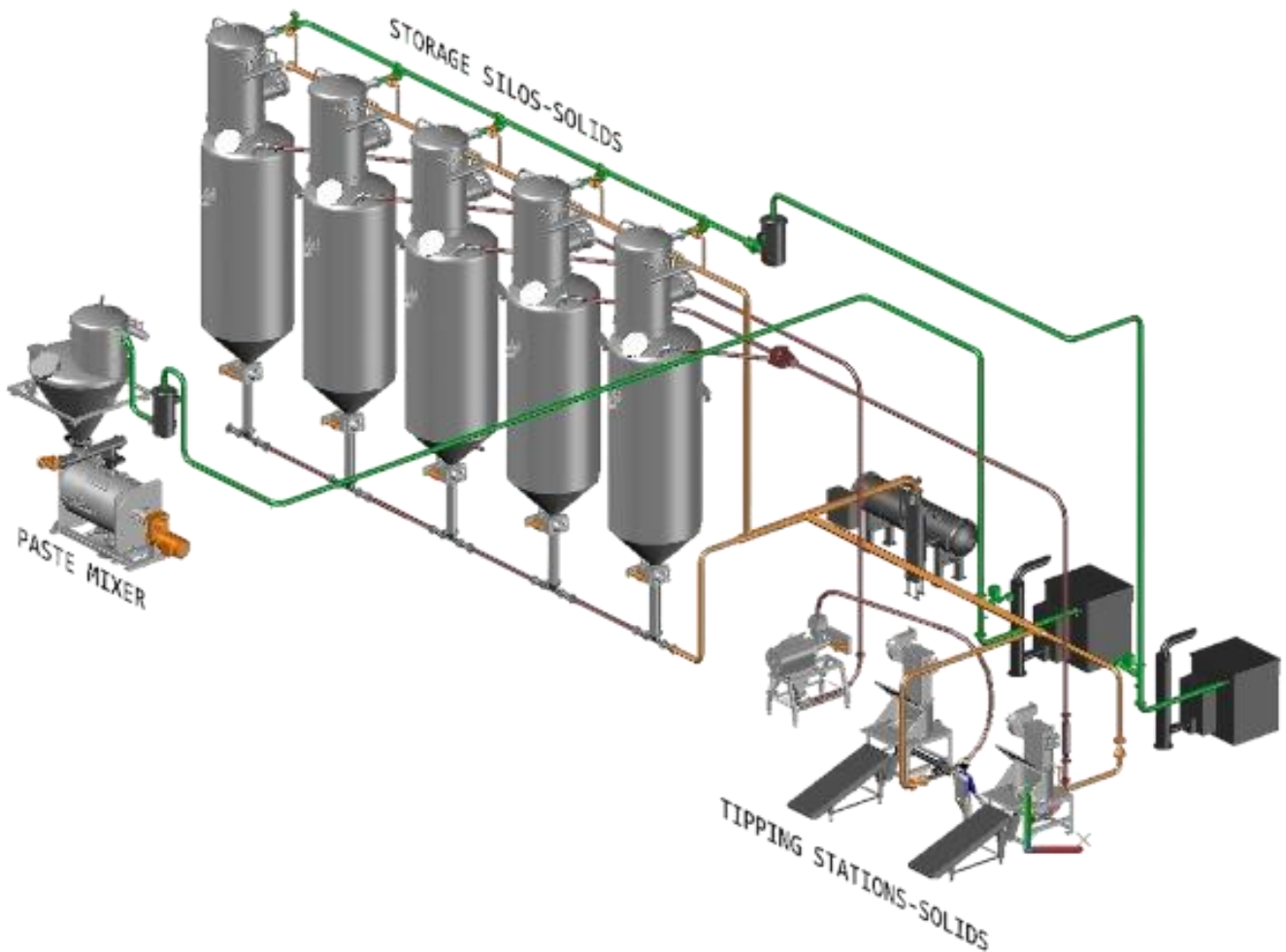
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Axtel Chocolate Solution



## Solid Raw Material Handling And Ingredient Management Systems

- Fully automatic and integrated turn-key solutions to handle solid raw material/ingredients such as natural cocoa powder, alkalized cocoa powder, sugar, skimmed milk powder, lactose, whole milk powder, whey powder, whey protein etc.



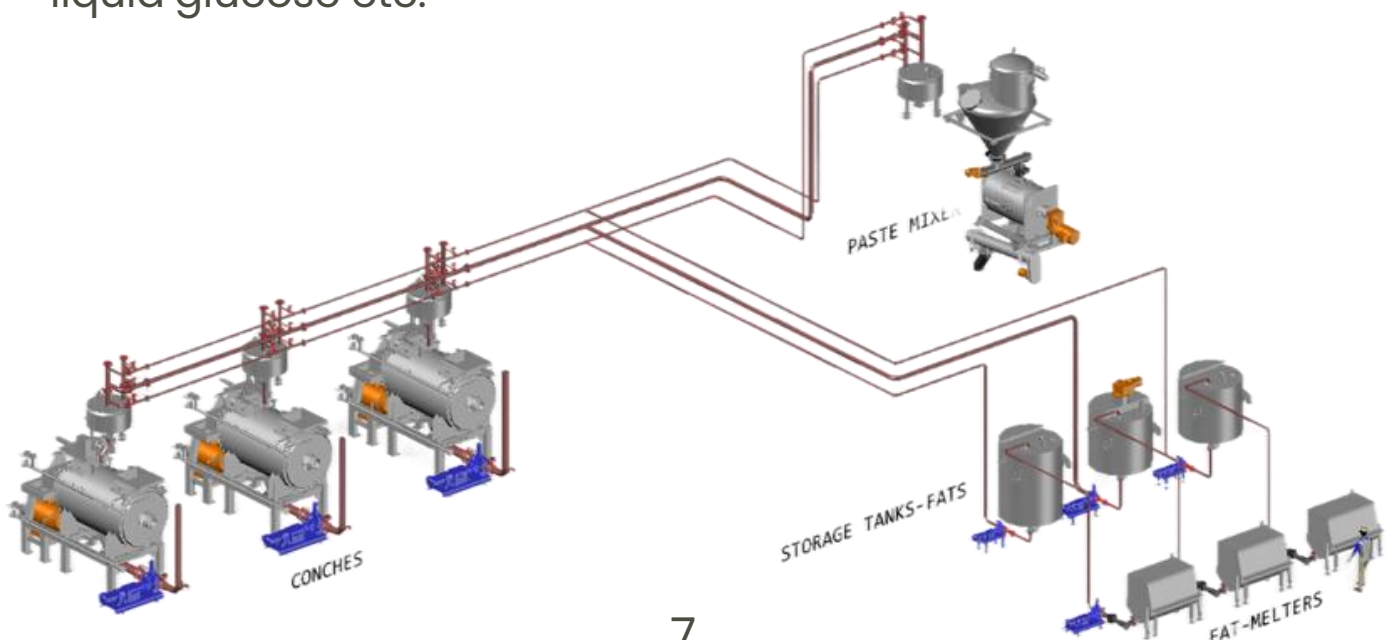
- Raw material intake from various incoming packaging, such as small bags, FIBC's, IBC's, bulk road tankers etc.
- Material handling aids such as bag transfer conveyors, vacuum bag lifting arrangements, big bag discharge stations etc.



- Pneumatic/mechanical conveying and transfer of ingredients to Silos/Storage Hoppers/other storage systems to suit Client's storage requirements and site conditions
- Inline Sieving, Magnets, Metal Detectors etc. to ensure food safety
- Fully automatic weighing and batching of ingredients according to the recipe with coarse and fine dosing to ensure high accuracy
- System capacities to suit chocolate manufacturing of **500 kgs/hr to 10,000 kgs/hr**; higher capacities can be offered on request

## Fully Automated Liquid Raw Material Handling And Ingredient Management Systems For Chocolate Manufacturing

- Fully automatic and integrated turn-key solutions to handle liquid raw material/ingredients such as cocoa butter, cocoa liquor, vegetable fats, CBR's, CBS's, CBE's, lecithin, PGPR, yolkin, liquid glucose etc.



- Raw material intake from various incoming packaging, such as small blocks (10 – 50 kgs), big blocks (200 – 1000 kgs) etc. in solid form or buckets, barrels, bulk road tankers, ISO tanks etc. in liquid form.
- Melters to melt ingredients in solid form
- Transfer of ingredients to liquid tanks of sizes and shapes to suit Client's storage requirements and site conditions
- Inline Strainers, Magnets etc. to ensure food safety
- Fully automatic dosing, weighing and batching of ingredients according to the recipe, using weighing hoppers or flow transmitters, coarse and fine dosing to ensure high accuracy
- Transfer of batched quantities of ingredients to the Paste Mixer/Conches
- System capacities to suit chocolate manufacturing of **500 kgs/hr to 10,000 kgs/hr**; higher capacities can be offered on request.



# Cocoa Mass Melters



# Fat Melters

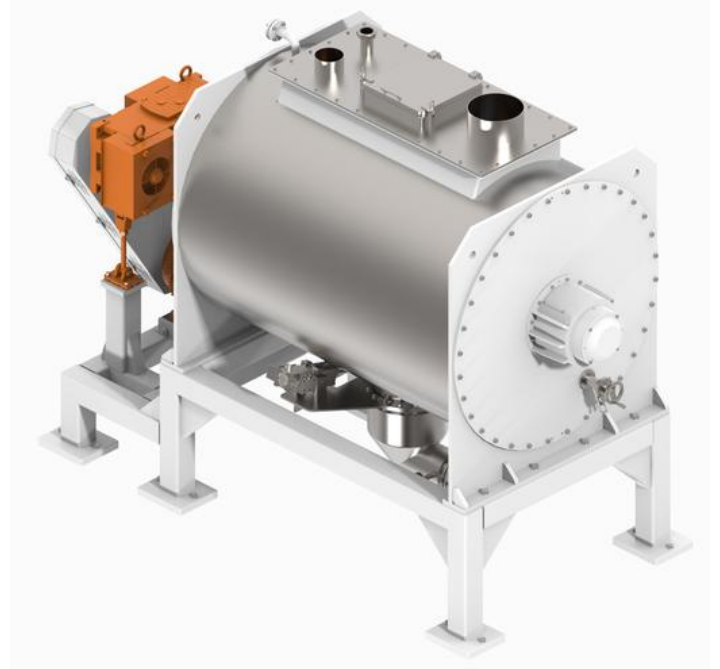
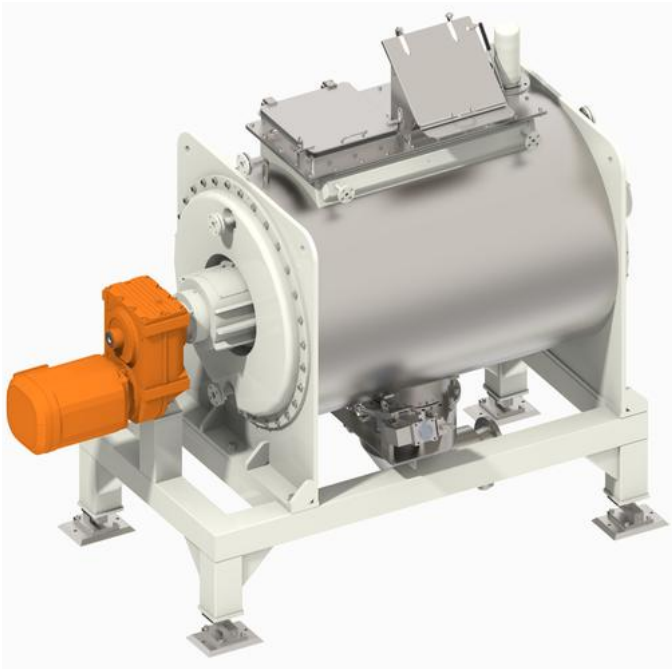


A unique and integrated solution suitable for all types pumpable masses, i.e. for chocolate, cocoa mass, cocoa butter and much more.

- **Capacity: 500 kgs/hr to 2000 kgs/hr**



# Paste Mixers



- The Axtel Paste mixer allows you to mix and knead your chocolate ingredients with a single machine. This produces a high-quality chocolate mass.
- Short mixing time, high throughput rates, and hygienic design are just a few of the key advantages.
- Compact design to save space in mixing area.
- Load cells optional for batch weighment.
- Standard batch capacity sizes are **0.25 T, 0.5 T, 1 T, 1.5 T, and 2 T.**

# Steel Belt Conveyors



Steel belt conveyors can be tailored to meet the needs of the customer. They enable automated and precise conveyance of flakes in chocolate manufacturing process.

## Features:

- Very flexible design, fitting every transport requirement
- Easy to Clean
- Hygienic
- Stable Product Quality
- **Belt Widths: 400/500 mm**





# Single Shaft Intensive Mixers / Conches



- The Axtel single shaft conche blends cutting-edge engineering with time-tested conching technology. It enables you to alter rheological qualities and remove undesirable volatiles for accurate flavor and texture while reducing overall conching time.
- The Client can interface the equipment to their plant automation system, using industry-standard interfaces like Profinet or Ethernet. Support is made easy by Axtel's remote assistance facility over the Internet. The machine is ready for SmartFactory solutions, which allows customers to generate reports, run remote diagnostics, and monitor processes using smart mobile devices.
- Standard batch capacity sizes are **1 T, 1.5 T, 3 T, 4.5 T and 6 T**

## Thermoregulation Units

- Axtel offers Thermoregulation Units for each size of Conche, which offers accurate product temperature control during conching operations.
- Steam, hot water and electrical heating versions are available.



# Chocolate / Fats Storage And Flavour Mixing Tanks



- Axtel's hygienic storage tanks are made of stainless steel and are available in a variety of sizes – for chocolate ranging from **100 kgs to 30,000 kgs** and for fats upto **100,000 kgs** in capacity. Chocolate and flavour mixing tanks have top-driven anchor or mixing agitators, as required.
- Storage tanks are all temperature-controlled and completely insulated.
- Products are loaded from either side of the top lids and flow out the valve located at the bottom of the tank.



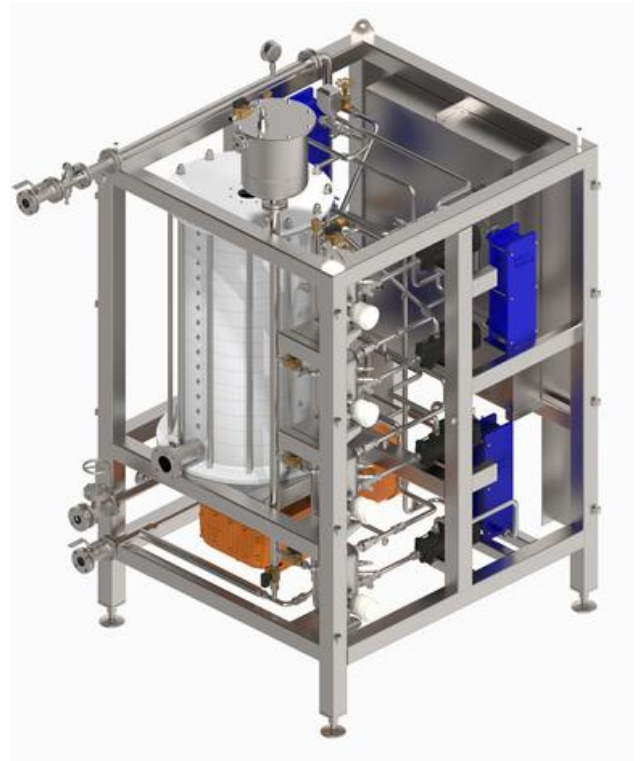
# Chocolate Vibrosieves



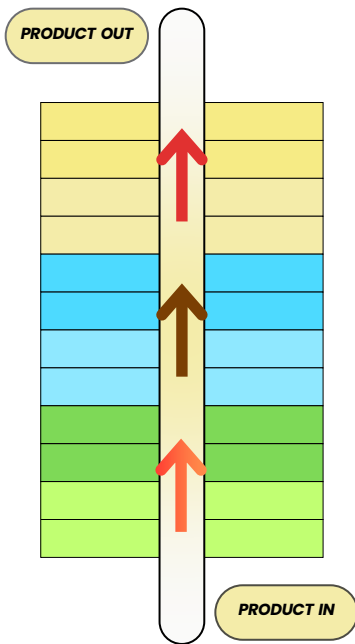
Axtel's vibrosieves are designed to raise the integrity of your chocolate liquid goods by eliminating oversize contamination in a variety of applications.

- Long-life sieve material, easily replaceable.
- Interchangeable mesh sieves.
- Stainless steel design, hygienic support construction.
- **Capacities: 200 kgs/hr – 4000 kgs/hr**

# Chocolate Tempering Machines



- The Tempering Machine is the core of all chocolate processing technologies, establishing the prerequisites for a flawless result. With Axtel's chocolate tempering equipment, you can achieve the ideal conditions for superior gloss, long shelf life, good snap, and a heat-resistant product.
- Operation of Temperers is made easy by interactive human machine interface touch screen panels and skillfully developed PLC programs. The HMI provides complete overview of Temperer operation, interlocks and alarms. The instantaneous trends are also available for observation of various process parameters of the Tempering operation.
- Axtel manufactures Temperers of various capacities, from **300 kgs/hr up to 6000 kgs/hr**, suitable for all chocolate categories, cocoa mass, cocoa butter and creams.
- Higher capacity versions can be offered on request.

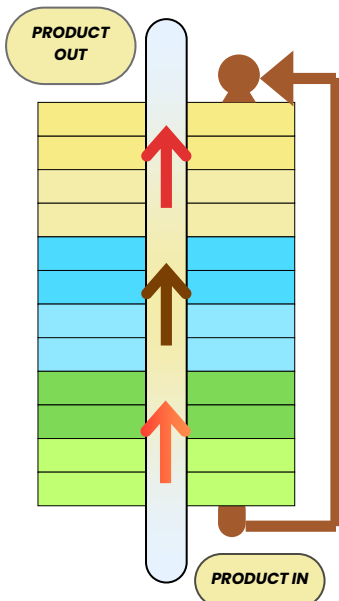


Typical Sectional View  
For Chamber  
Assembly

### ***Temperer – Heavy Duty module***

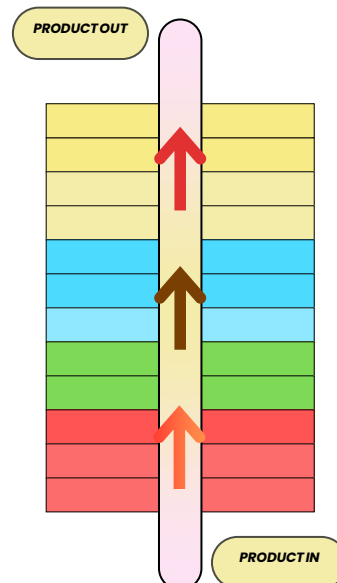
- A unique and integrated solution suitable for all types pumpable masses, i.e. for chocolate, cocoa mass, cocoa butter and much more while ensuring a completely homogenous distribution of Beta V seeding crystals throughout the mass.

**Capacity: 300 kgs/hr to 6000 kg/hr**



Capacities:  
300 kgs/hr to  
2000 kgs/hr

### ***Temperer – CTS module***

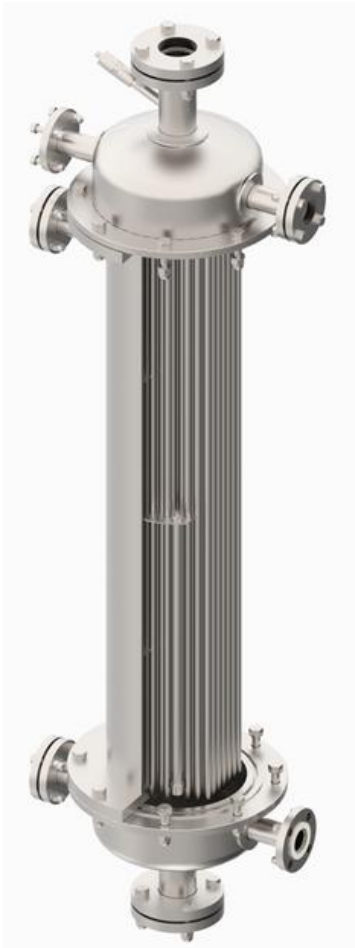


Capacities:  
300 kgs/hr to  
4000 kgs/hr

### ***Temperer – Pre heat module***



# Detempering Units & Compound Conditioners

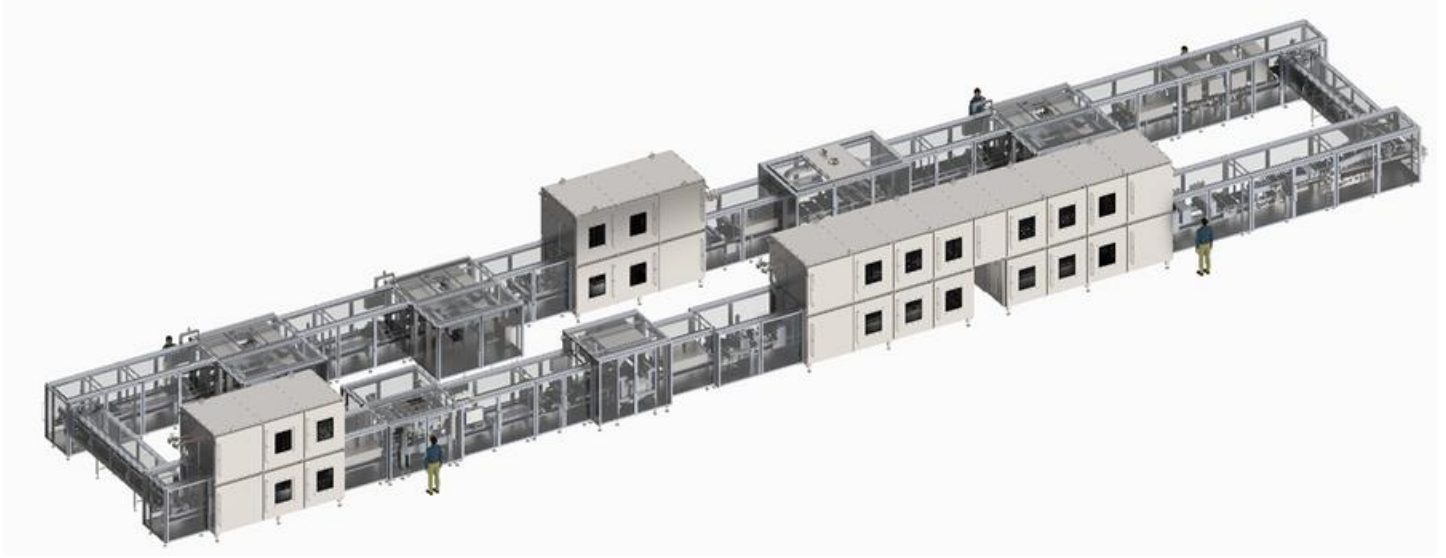


- Heat any excess chocolate mass to 45°C to melt the crystals before returning it to the tempering machine.
- **Capacities: 100 kgs/hr to 9000 kgs/hr**

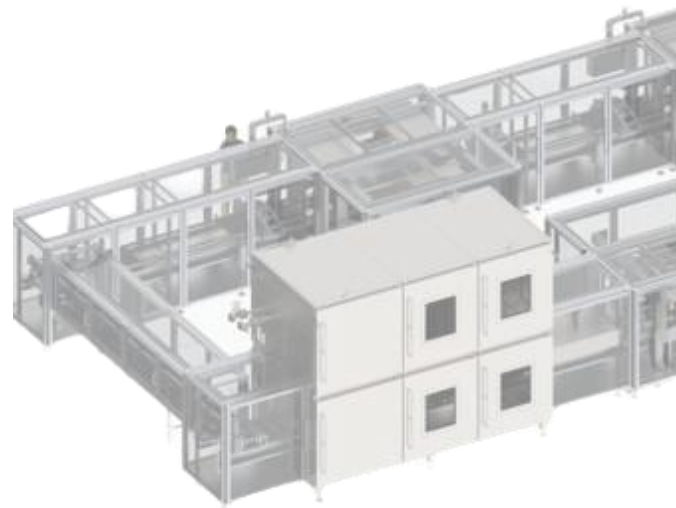


- Cooling the compound chocolate from approximately 50°C to 36°C.
- **Capacities: 200 kgs/hr to 8000 kgs/hr**

# Universal Moulding Lines



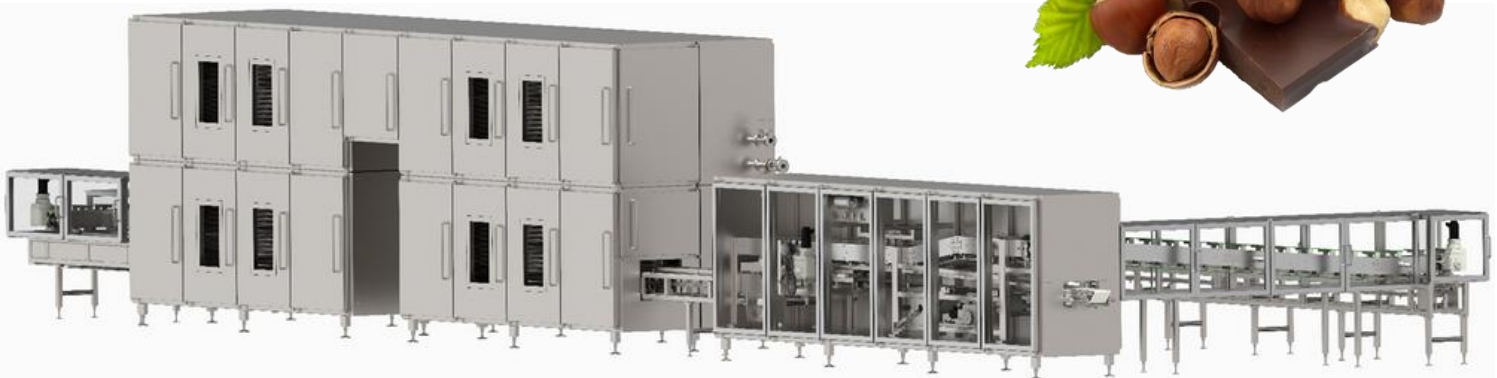
- Solid moulding
- Traditional shell moulding
- Frozen stamp moulding
- Book moulding
- Bars with Inclusions
- Center fillings
- One shot moulding
- Working widths: 420 / 620 / 820 / 1020 mm
- **Capacities: 300 kgs/hr – 2000 kgs/hr**



# Intermittent Motion Moulding Lines



- Solid bars
- Chocolate blocks
- Products with inclusions
- One shot products
- Working widths: 420 / 620 / 820 / 1020 mm
- **Capacities : 300 kgs/hr – 3000 kgs/hr**





# Continuous Motion Moulding Lines



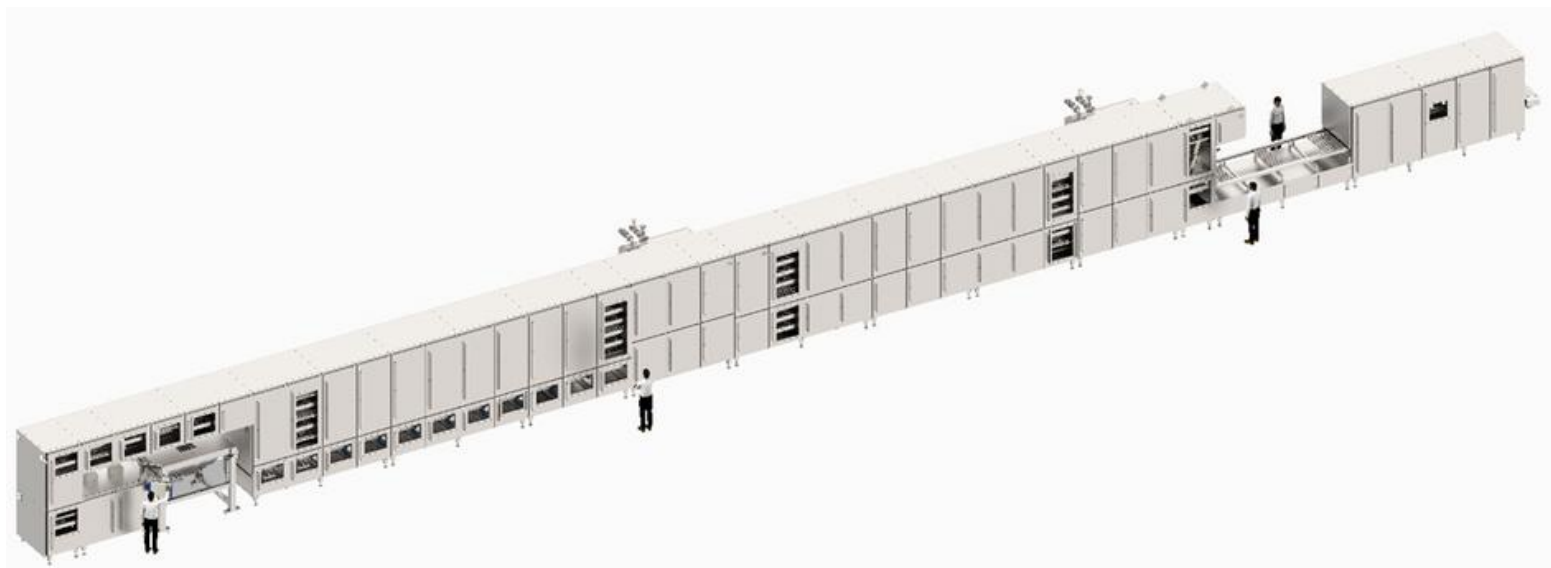
Universal design to meet your specific processing and product demands, such as:

- Solid bars
- Chocolate blocks
- Products with inclusions
- One shot products
- Working widths: 500 / 700 / 1000 / 1100 / 1200 mm
- **Capacities: 300 kgs/hr – 2500 kgs/hr**



Universal design to meet your specific processing and product demands, such as:

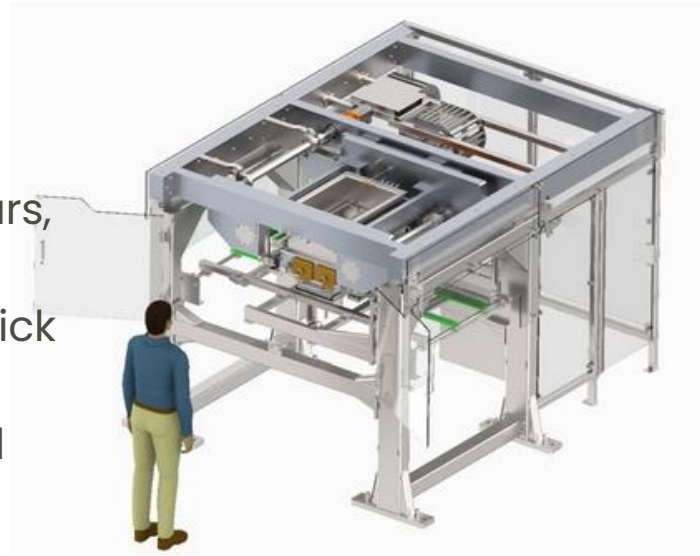
- Solid bar
- Chocolate blocks
- Products with inclusions
- One shot products
- Working widths: 500 / 700 / 1000 / 1100 / 1200 mm
- **Capacities : 1000 kgs/hr – 5000 kgs/hr**



# Create Distinctive And Precise Goods , Using an Axtel Depositor

## High Speed

- Oscillating depositors for Solid Bars, One-Shot and Inclusion Products
- Slide-out versions to facilitate quick change overs
- Quickly replaceable hoppers and pump blocks



## Cantilever

- Oscillating depositors for Solid and One-Shot products
- Suitable for lower speed lines and small widths



## Chips, Callets & Buttons

- Oscillating depositors for Chips / Callets / Buttons
- Slide-out versions to facilitate quick change overs





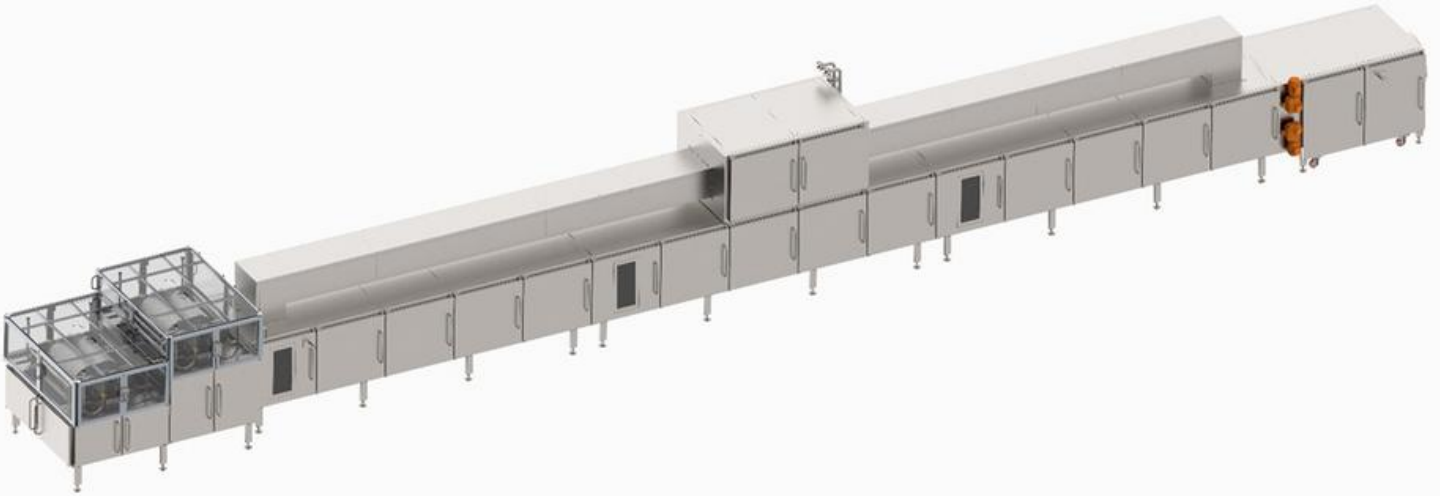
# Chocolate Chips Lines



- Suitable for chips, buttons, chunks and callets production
- Modular design and high capacities
- **Capacities: 200 kgs/hr – 3000 kgs/hr**



# Chocolate Center Forming Lines



The Chocolate Center Forming Line is widely used to create chocolate centers for small items such as lentils, balls, and eggs. These centers are often sugar coated and colour coated or polished after forming and cooling.

**Capacities: 100 kgs/hr – 1800 kgs/hr**

- **Standard versions of drop rollers:-**

Ø310 – Length 400 mm  
Ø310 – Length 600 mm  
Ø400 – Length 600 mm  
Ø400 – Length 900 mm



The roller assembly modules may be easily exchanged to switch between different products like lentils, balls, and eggs during manufacturing.



# Chocolate Enrober



Axtel's Chocolate Enrobbers represent superior chocolate-coating technology. You will also be able to embellish, fill, and bottom-coat with exceptional accuracy.

- Easy Clean – Lift the wire mesh belt with an effective mechanical apparatus.
- Frequency-controlled bottoming roller lets you create a uniform and adaptable bottom bath.
- Exterior temperature regulation for chocolate.
- Fully replicated double curtain station.
- **Available Belt Widths: 620 / 820 / 1320 mm**





# Cooling Tunnels

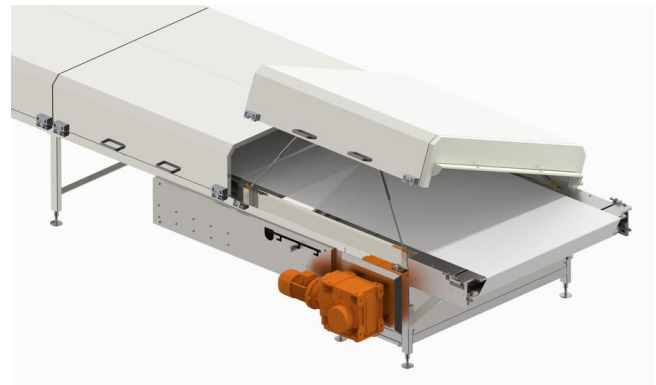


Cooling tunnels are designed to provide high-performance, precise cooling for a wide range of chocolate, chocolate-coated bars, and crème products with varying cooling requirements. They have standard band widths ranging from **300 mm to 2400 mm** and corresponding lengths.



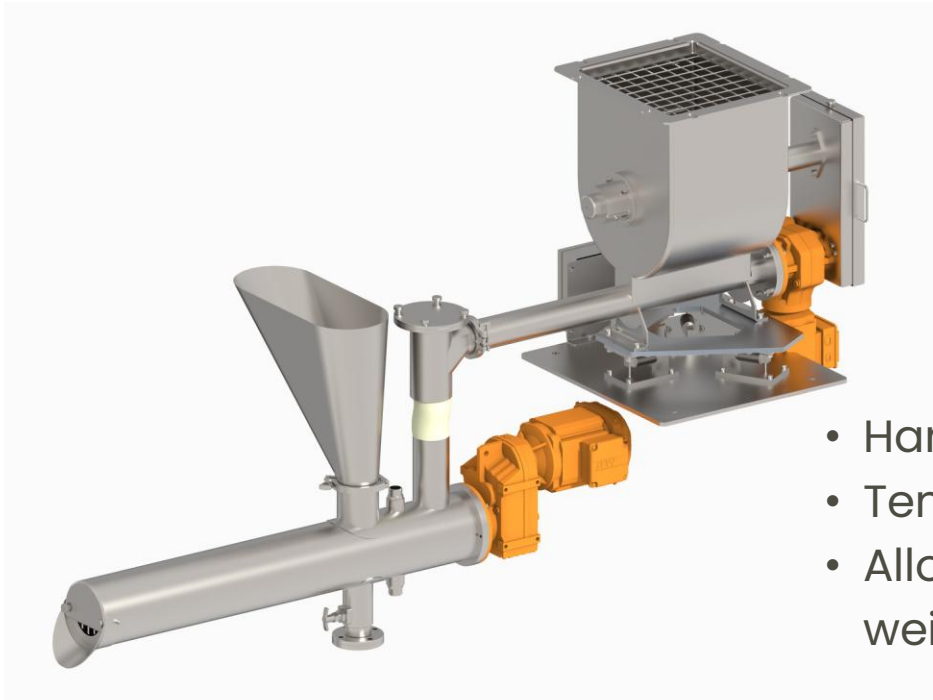
The Axtel stainless steel cooling tunnel Sanitary Design is ideal for manufacturing areas and sectors with excellent hygiene standards.

**Belt width: 300–2400 mm**



Axtel's eco cooling tunnel offers both consistency and flexibility, ensuring good quality across a diverse range of products. Cutting - edge design and engineering deliver unparalleled performance, excellence, and dependability.

# Inclusions Feeder and Feeder Mixers



- Handles large inclusions.
- Temperature-regulated
- Allow up to 25% by weight of components.

Inclusions Feeders and Feeder Mixer units incorporate materials into the tempered chocolate mass. They can adjust the percentage of components to the chocolate mass before depositing it.

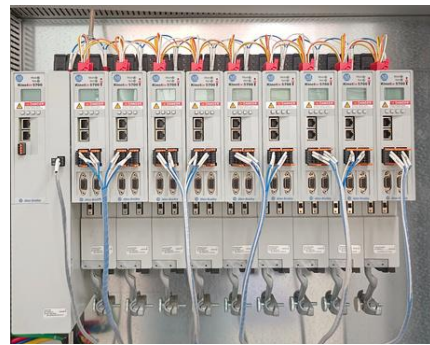
## Capacities:

- Inclusions Feeders: 100 kgs/hr to 600 kgs/hr
- Feeder Mixers: 500 kgs/hr to 3500 kgs/hr



# Axtel's Advanced Control Automation

One of Axtel's key specialties is design and manufacturing control panels for operating our chocolate moulding lines. Our tailored solutions ensure smooth and precise control over the chocolate moulding process, offering:



**Allen-Bradley**  
Kinetix 5700 Multi-Axis Servo  
Drives in ControlLogix Platform



**Siemens**  
SINAMICS S120 drive  
system in simatic  
s71500 series motion  
CPU

**Seamless Integration:** Our panels are designed to perfectly integrate with third party chocolate packing machines, downstream to Axtel's chocolate moulding lines.

**Equal Competence:** We are equally proficient in handling automation from leading brands such as Rockwell, Siemens and Mitsubishi.

**Customisable Interfaces:** HMI interface is tailored to suit our Client's specific needs, with customisable layouts and controls.

**Recipe Management:** Easily prepare and manage recipes for various chocolates, ensuring consistent quality and efficiency.

**Trend Visualization:** Visualize operational and process trends, providing valuable insights and support for process engineers.





Process  
Engineering  
Systems

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**WEBSITE**

