



T-Bar®



TANIS Confectionery
Distributieweg 10
4906 AD Oosterhout
The Netherlands
Tel. +31 (0)88 523 5400
Fax +31 (0)88 523 5401
sales@tanisconfectionery.eu
www.tanisconfectionery.eu



From concept to final product

Tanis Confectionery is the expert in designing and manufacturing process equipment for the production of sugar confectionery. Our production lines weigh, add, mix, heat, boil, cool and shape the ingredients of your final product. However, supplying process equipment for candy production is only half the story.

Due to a unique combination of knowledge and experience, Tanis not only knows how to design the perfect candy production line, but also masters every detail of the production process. We know what it takes to make it work.

That's why we take candy confectionery again one step further. Not only do we have the technical know-how for making customized process equipment, but we also have the vision to create an entire production line. From start to finish, we are proud of our reputation as process designers.

Why Tanis Confectionery?

- We have years of experience in the confectionery industry all over the world.
- We have our own Tanis Candy Innovation Centre.
- We have highly qualified, enthusiastic, and professional personnel.
- We offer Total Solutions from start to finish.

Tanis Confectionery

a recipe for success

Craftsmanship

Consistent texture... the secret of good nougat, caramel or fruit base is in the production process. The trick is processing the ingredients to a good well-saturated solution and to aerate the solution – in the case of nougat – with precision. Tanis Confectionery performs this trick well, because we understand the craft of making confectionery. We use these skills to develop and manufacture machines that deliver optimal results. We are happy to share our expertise with you, right from the development phase.

Flexibility

Each machine delivered by Tanis Confectionery is custom-made on the basis of modules. As our client, you decide the production volume. You decide which raw materials, the number of colours, flavours and acids to be added. You decide the end result, because you know your market and your clients. We translate your recipe into a concept and a working plan. All applied techniques are in-house developments and one hundred percent suitable for the production of nougat or caramel mass candy. The result of years of experience and advancing expertise.

European refinement

The entire installation can be placed in one or more frames making it easier to transport, taking relatively little space and making it quick to erect and to connect. The dimensions are adjusted to the intended location of the machine. Its round stainless steel contours look very smart and are a model of hygiene and durability.



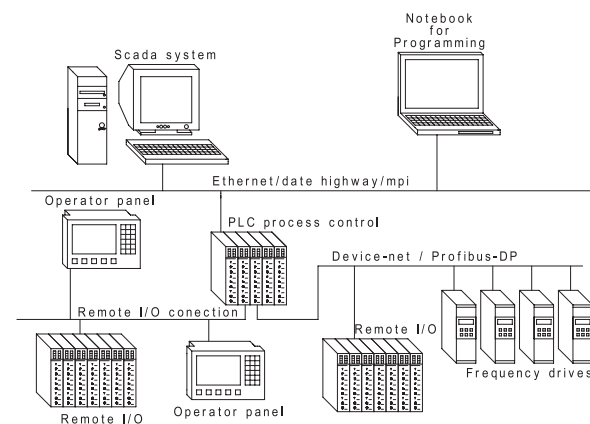
Starters

Controls



The operators in the industry are - in general - craftsmen knowing how to manufacture a good product and not just technicians. Tanis control systems are built and designed to operate the plant without the need for special computer skills.

Based on the process flow diagram, the lay-out, the required level of automation and the availability of hard- and software, a system is selected with, for example, a local operator panel (HMI) and / or, central control with SCADA (Supervisory Control and Data Acquisition), networks and hardware. This allows for a selection of the soft- and hardware already in use in the factory resulting in less investment in programming tools and spare parts.



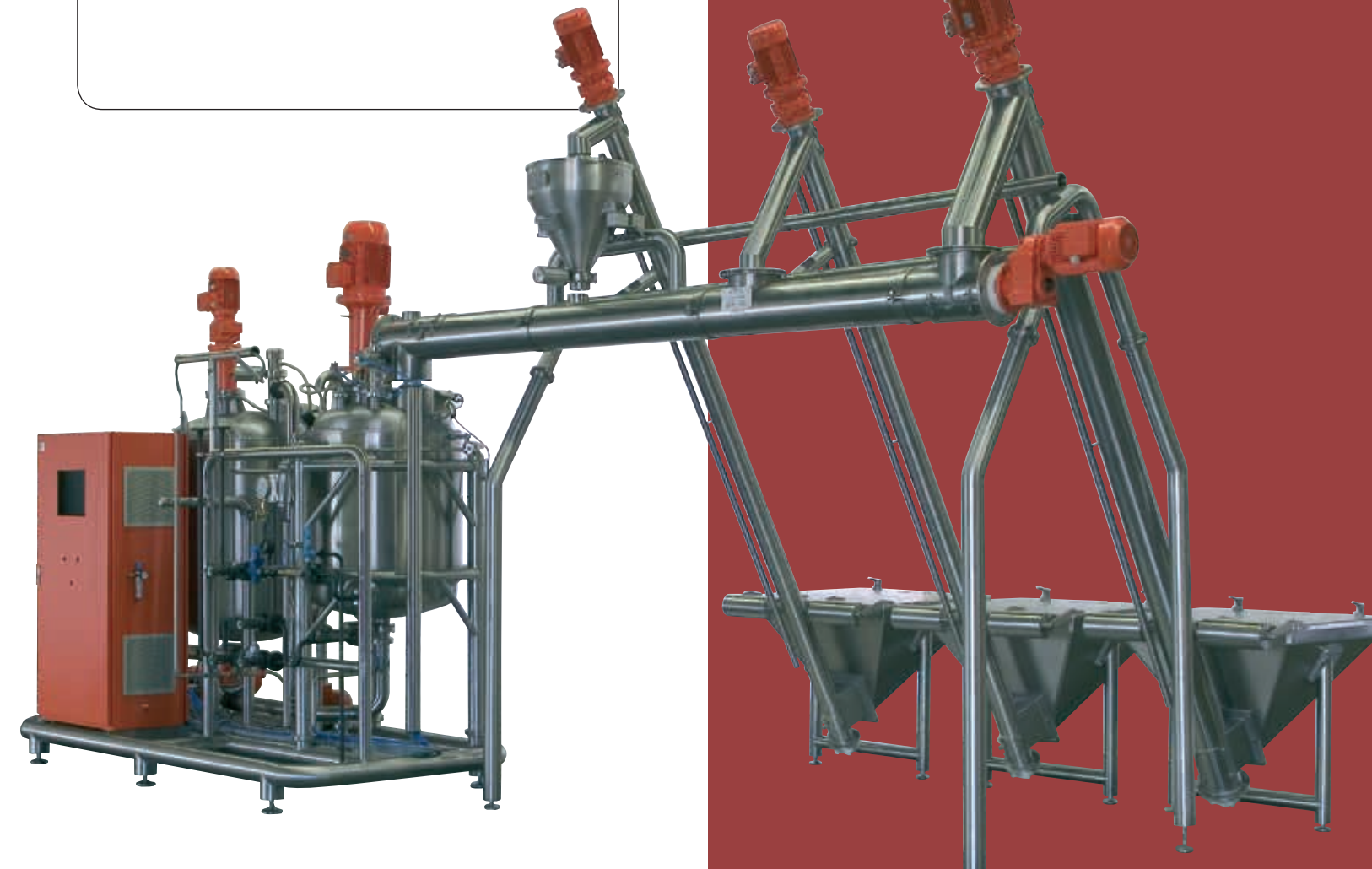
Conveying / dosing system

- Hopper, contents approx. 200 litres with dumping grate.
- Stainless steel conveying screw.
- Optional is a subframe in which the hopper of the screw conveyor will be mounted with a hoist to lift the BigBag/SuperSack.
- Further option: dumping cabinet with dust exhaust and filter.



Weighing, dosing and mixing

Crucial for the production process is the careful weighing and mixing of ingredients, exactly according to recipe. The basic water, sugar, glucose premix for nougat and caramel is weighed and mixed separately from the extra ingredients for the caramel (condensed milk, fat, milk-or whey powder and emulsifier) to avoid contamination. The mass is then led directly into the cooker by vacuum, requiring no pumps and thereby saving in maintenance and cleaning.



Advantages

- No dependence on factory infrastructure
- Great flexibility in choice of dry ingredients
- One dry material feed on the weighing / mixing vessel
- All ingredients dosed by weight
- For minor ingredients: intermediate weighing to obtain the necessary accuracy
- Where required, pre-dissolving and / or cooking in the weighing vessel

Candy Bars

Nougat is a cooked premix of sugar, glucose and water which can be mixed with a whipping agent and a fat paste. Also a small quantity of rework can be added.

Caramel can be a sugar, water, glucose, fat and condensed milk premix which will be cooked in a Tanis Batchcooker or, for larger quantities, in a Tanis FilmCooker. For more info see the T-Brown leaflet. The caramel can be used as a topping on the nougat mass. The caramel mass can be used on its own or mixed with nuts.

A binder - a cooked premix of water sugar and glucose - is used for combining the cereal, fruit and nut parts together.

Almost any combination is possible. The only limit is your imagination. Why not put your imagination to work in our own Tanis Kitchen where most processes for Confectionery are possible. See the leaflet...

The chef's secret is in the cooking

Nougat

The premix for nougat is sucked into the special 'Tanis Thermosyphon' cooker by vacuum, cooked to the preset temperature followed by vacuumizing before discharging into the aerating vessel. The production process depends on a quick, controlled heating of the solution in order to obtain a clear well-saturated sugar solution. The special design of the heating coil creates a very fast and accurate dissolving / cooking cycle.

Caramel or Binder

The Tanis BatchCooker is filled from a weighing / mixing vessel; the premix is thoroughly homogenized and cooked to the preset dry solids followed by a programmed period for caramelizing to further develop colour and flavour. Where required, the solution can be quickly cooled by vacuum after heating to fix the dry substance and stop further caramelization.

Transfer and layout

There are several possibilities for transferring mass from one vessel to another:

- By placing the weighing mixing vessel over the buffer vessel and using gravity. The advantage: no moving parts required and high speed. A disadvantage: the higher placed vessel is less easy to inspect / reach and the infeed valves, etc. have to be fitted high, making servicing more complicated.
- By using pumps. The advantage: vessels can be placed next to each other which makes inspection, cleaning and maintenance easy. Disadvantages: the required capacity of the pumps has to be oversized to transfer the mass sufficiently quickly, requires more maintenance.
- By using vacuum. The same advantages as using pumps but without the disadvantages.
- By using air pressure (for suitable vessels only). The same advantages as using pumps but without the disadvantages.



Give it air!

Batch aeration

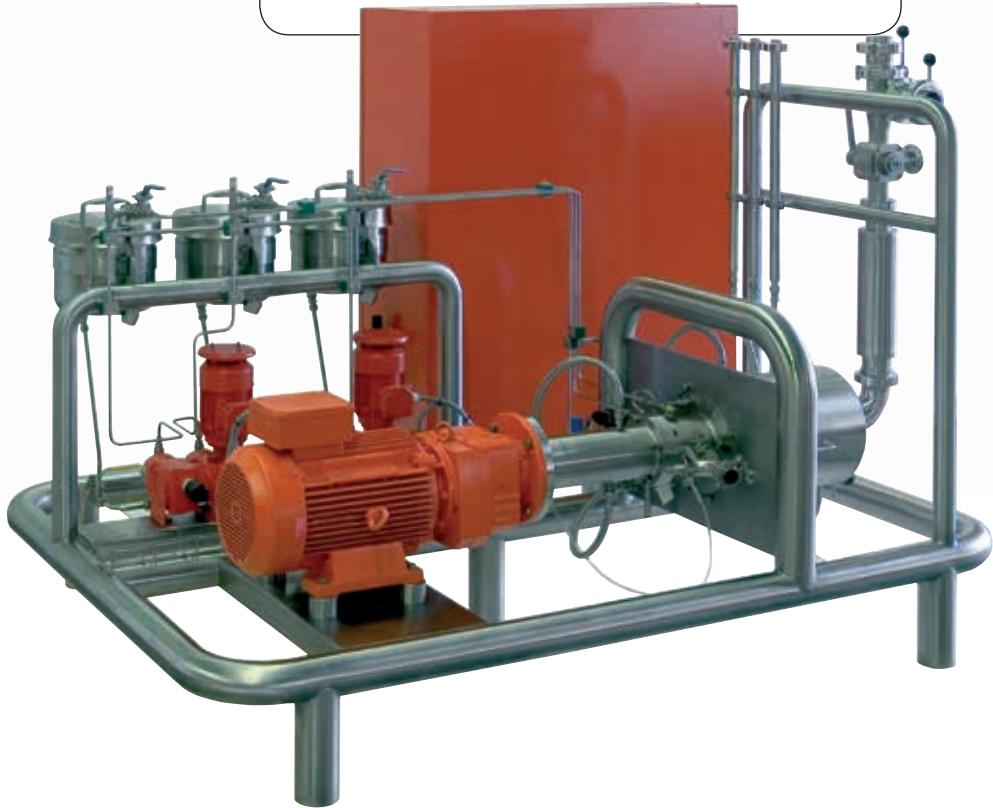
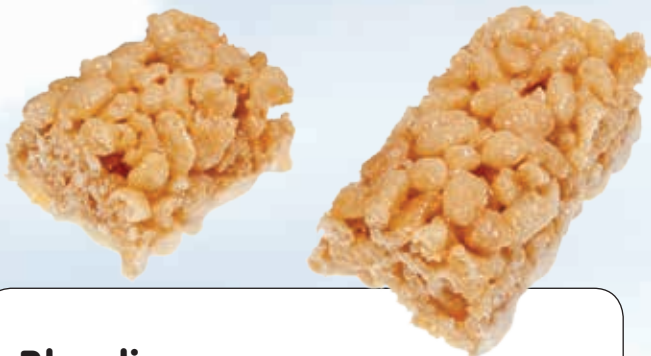
After vacuumizing in the cooker, the mass is discharged into the Tanis Batch Aerator. Here a pre-determined amount of aerating / whipping agent is mixed into the cooked mass at low speed and then 'knocked up' under pressure to evenly mix in the air into the mass. The whisk design guarantees smooth functioning even at higher rates. 'Whipping up' the mass also determines its texture, guaranteeing a consistent aerated mass. The whipping agent is metered by pump from a mixing / holding vessel or dosed loss-in-weight from an intermediate vessel.

Continuous aeration

For the continuous production of nougat a two-phase system continuous aerator can be used; one mixing head prepares a 'frappé' at a very low density which is then mixed with sugar mass in a second head. This results in a low density nougat to be mixed continuously with the required additives such as fat, powdered sugar, milk- and cocoa powder. The special mixing head design means that a lower rotation speed is possible, which means that a minimum of frictional heat is added to the product. Thanks to an up-to-date design using a flowmeter for air injection and frequency inverters on all drives, the machine can easily be embedded into existing production lines. The hygienic design allows easy cleaning without dismantling.

Blending

After aerating, the mass is discharged by air pressure into the Tanis PaddleMixer on command of the operator. Cereals, powders, fat and additives (vanillin, nuts, etc.) are manually loaded into the blender. The prepared mix is discharged into the hopper of the slab former.



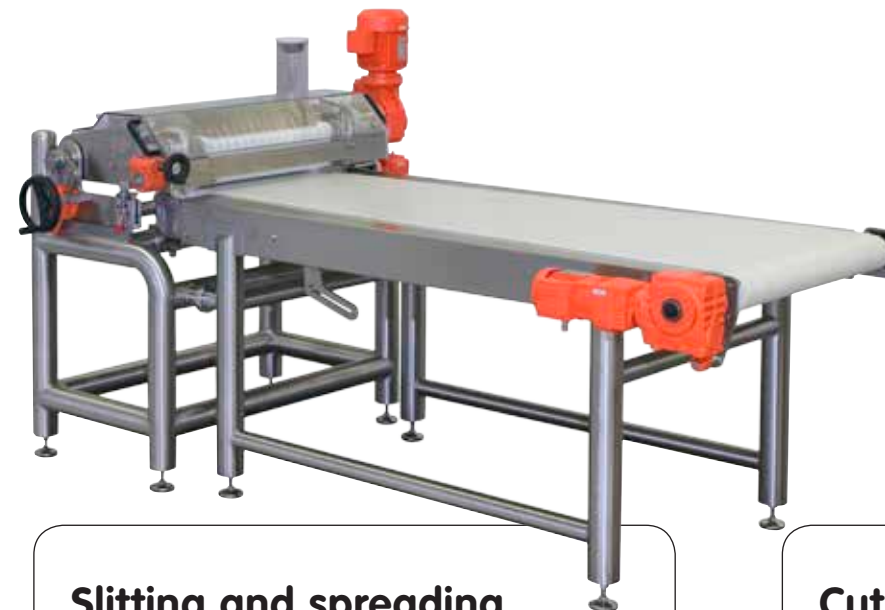
Shape it...



Slab forming and sizing

Heated infeed hopper and two hard chromed steel and jacketed - for temperature control - forming drums with adjustable speed control, through which a very accurate nougat layer is produced without compressing the product.
Slab thickness adjustable from 3 mm to 25 mm.
The unit discharges on the infeed conveyor of the cooling tunnel.

.. whilst for cereal bars a sizing roller is needed for sizing / pressing the cereal / binder mix to the required height of the bar.



Slitting and spreading

Support frame including a nose bar to take over from the conveyor of the slab forming line.
Rotary discs with 'Clam Shell' design for easy removal of slitting discs and adjustable tension to position the cutting discs on the cutting roller.
The slitter discs have scrapers and fingers in between to clean the discs in operation and to hold down the product. The cutting roller sits underneath the discs and runs at the same speed as the discs. The roller makes sure that the product is pushed through the discs. The discs shaft has lifting eyes on the end. By lifting the Lexan cover it is easy to remove the discs and replace them by another dimension shaft or clean them.
Chutes to feed the 'trimming edges' of the slab into collectors: these can be reworked so avoiding too much loss of mass.

The product ropes need to be spread after the slitter to avoid sticking of the product.
Independent Teflon ropes with linked speed control for separation to fit infeed- and outfeed conveyors.



Cutting

Support base to mount the cutter with infeed belt with speed control and pneumatic belt tracker linked to the longitudinal slitter.
Guillotine cutter with double servo system for vertical and horizontal movement. Encoder with mounting bracket used in conjunction with the cutter for required bar sizing. Stainless steel side covers.
Separation speed up belt with shaft mounted drive motor with variable speed control and pneumatic belt tracker to separate the cut centres and align them for the enrober.



Side orders....

Nut sprinkler

For the extra addition of whole or chopped nuts a (loss-in-weight) nut sprinkler can be fitted between the first and second or after the second slab former.

Sizing roller(s)

Extra accuracy in height of the slab can be obtained by using one or more sizing rollers. This extra is especially required when cereal bars are being produced which are not being enrobed.



Tilting device

Especially for the production of cereal bars a 'tilting device' can be fitted to the slab former. This manually operated device enables the angle of the slab to be adjusted so avoiding stress and / or breakages of the slab.

Whipping agent preparation

Fully automated preparation of whipping agent with a weighing / mixing vessel, automatic powder dosing and buffer vessel with circulation pump fitted in one frame for ease of installation and connection.



Rework

When mixing nougat continuously a continuous system to return the 'trimming edges' to the mixer can be fitted.



Nutmeat enrober / bottomer

The bar covered with chocolate leaves the enrober and is taken over by the wire mesh belt of the nutmeat system. The wire mesh belt is placed in a temperature controlled environment. The nuts for the bottom are evenly spread over an inclined belt by using a vibrator. The bar is transported over a bed of nuts so the bottom will be covered. It also passes under a nut-dosing belt so that the top and the sides are also covered. Under the outlet of the nut-bed belt the excess nuts are collected and recycled.



Fruit bars / layers

As the trend on the market goes to healthier and more natural products more masses are produces based on fruit concentrates, dried fruits, nuts, nutmeats and cereals. It is therefore that Tanis Confectionery developed in the 'Tanis Kitchen' masses, which can be declared as 95% fruit with no added sugar. These masses are suited to be used as a binder in health-, energy- and nutritional bars but also pure as a second layer in a bar



The final course



Enrobing

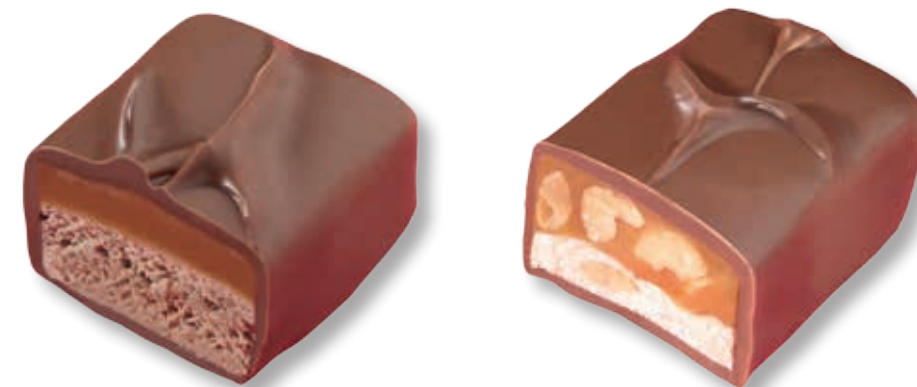
As Tanis Confectionery specializes in mass preparation and forming equipment of the highest flexibility and quality only, we collaborate with a renowned supplier of chocolate (enrobing) machines to complete our lines.

Cooling tunnel

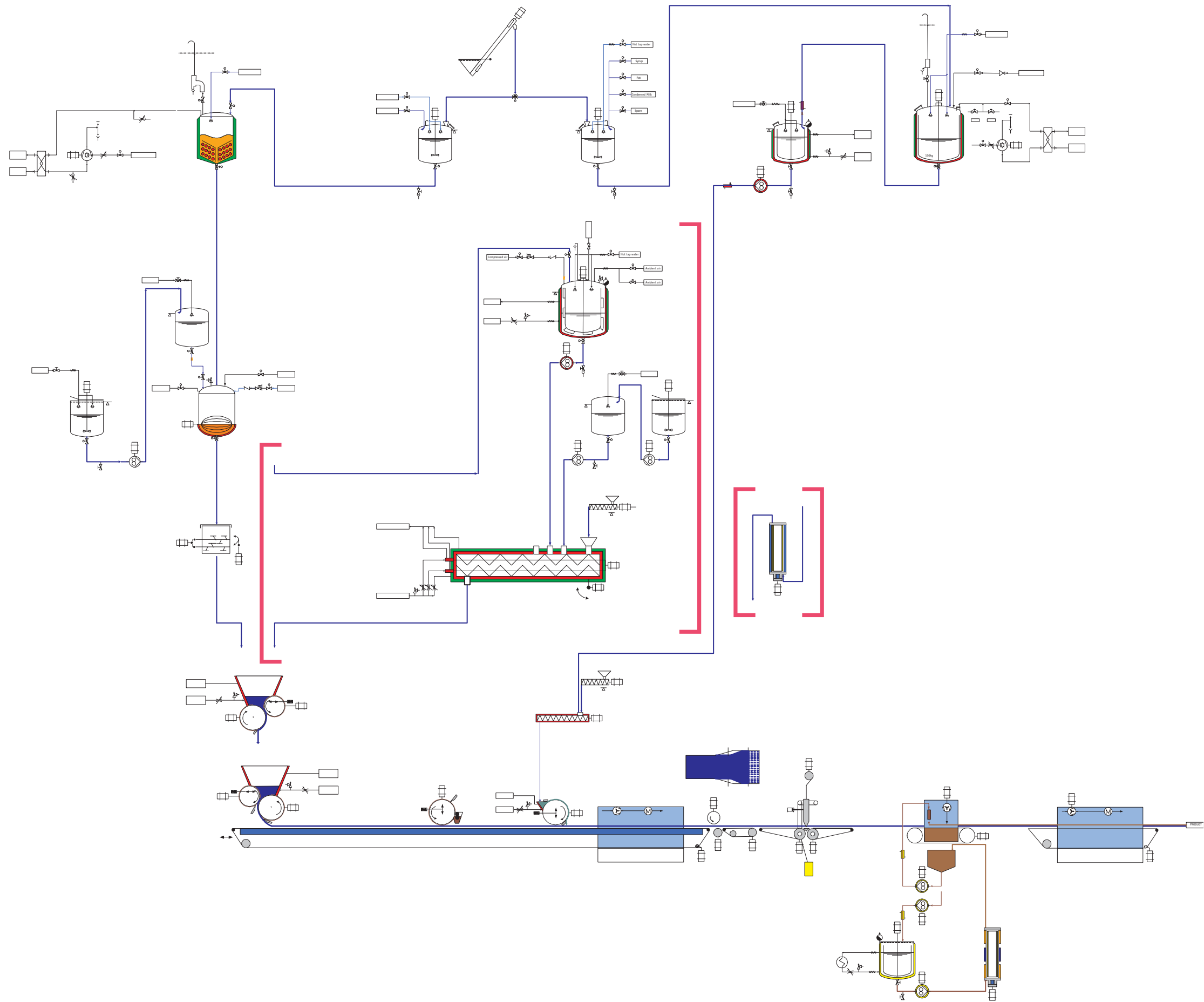
Infeed table and driving terminal. Both tables are with band steering centering the synthetic band in the cooling tunnel. The part of the band that carries the products and the return band are both placed inside the cooling tunnel. This means that no energy is needed for recooling a warmed up band. The band is placed on stainless steel trays, easy detachable for cleaning without use of tools. Complete cooling units are built into the standard cooling tunnel. The standard evaporator and the blower for air circulation are built into the compressor section. The cooling tunnel is controlled by a PID temperature regulator. The cooling tunnels are supplied with convection cooling as standard, but can also be supplied with convection and/or radiation cooling.

Packaging

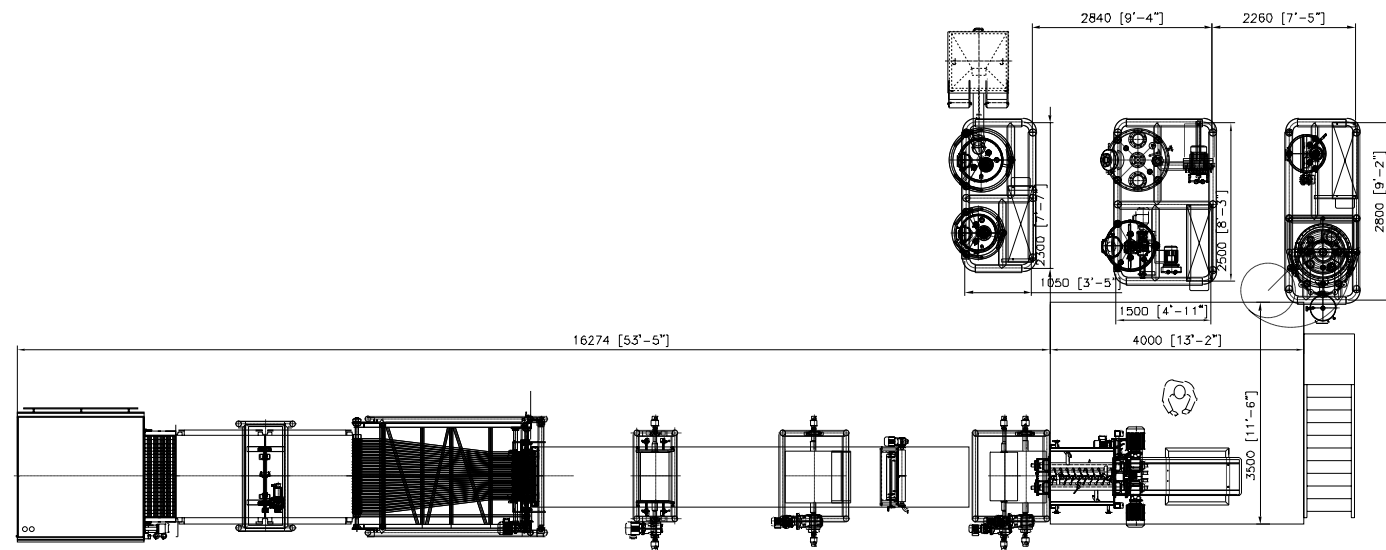
We will be happy to put you into contact with suppliers of wrapping and packaging machines to complete your production line.



Our menu



A final product



Specifications and dimensions shown are standard and correct at the time of printing. They may be modified to meet specific customer requirements. Tanis Confectionery reserves the right to change or alter specifications and designs or to discontinue manufacture without notice or obligation.