



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



Tanisei[®]

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

Clear, fresh, consistent flavour, colour and structure... the secret of good gums and jellies is in the production process. The trick is using the properties of all ingredients such that the structure is developing optimally. Tanis Confectionery performs this trick well, because we understand the craft of making confectionery. Therefore Tanis Confectionery is capable of developing and manufacturing machines that deliver optimal result. Even in the development phase we would be happy to offer you our expertise.

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 chewy 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

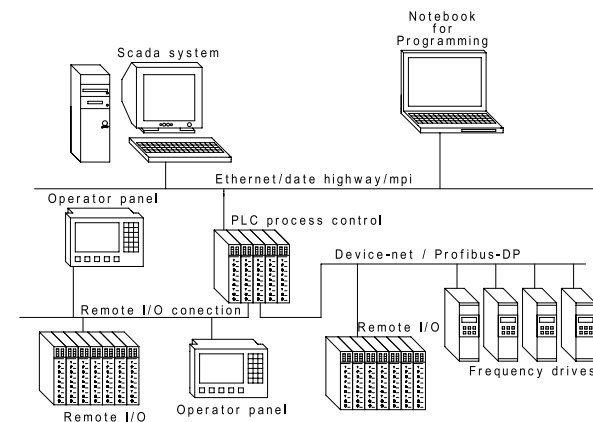


Controls



The operators in the industry are - in general - craftsmen knowing how to manufacture a good product and not just technicians. Each control system is built and programmed to operate the plant with the skills to understand the process. No extensive knowledge of computer systems is necessary.

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 of consistent, clear gums and jellies is the extremely careful weighing and mixing of ingredients, exactly according to recipe. During the mixing process the solution is heated and emulsified. To avoid inaccuracy and loss of Gel force the colloid(s) are dosed directly into the batch; for low percentages loss-in-weight units are applied.



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

The chef's secret is in the cooking



Dissolving and pre-heating

The mass is pre-dissolved in the weighing vessel followed by a buffer vessel to make the process continuous. Low pressure steam in the jacketed bottom of the vessel is used to virtually eliminate any risk of overheating of the hydrocolloids (gelatin, pectin, gum arabic, agar agar, carrageen, starch, etc.). The result is a perfect homogeneous premix at the right temperature.

Cooking and cooling

The premix is pumped through a specially designed stainless steel heat exchanger creating a clear solution in no time. The solution is quickly cooled by vacuum after heating to fix the dry substance value and avoid deterioration of the mass. The vacuum also removes any air bubbles from the solution, creating a clear mass ready to pump to a unit for colour, flavour and acid to be added.

Transfer and lay-out

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, whilst more maintenance is required.
- 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!

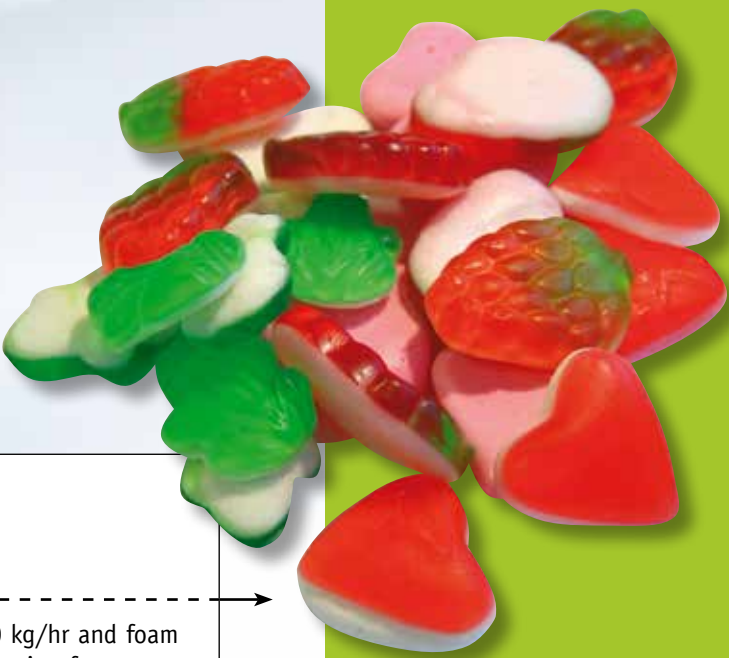
Continuous aeration

For the production of marshmallow masses (used, for example, for layered products) a continuous aerator can be incorporated in the production line. All continuous aerators are fully automated machines including everything needed to secure precise final density. The special mixing head design means that a lower rotation speed is possible, which in turn 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.

Where one colour / flavour for the marshmallow mass is required, a continuous dosing system can be combined with the aerator. If and when more colours are needed the mass can be transferred to the ABS unit for the blending in of colour and flavour and direct depositing.

Range

Capacity range: Jellies 400 - 6.500 kg/hr and foam 200 - 2.000 kg/hr with densities ranging from 0.25kg / ltr upwards. Combinations for two stage process (frappé and mass) or, where required, with a scraped surface heat exchanger for extruded marshmallow.



Colour and more...



Tanis ABS

The additives are dosed in a batch by weight, in order to achieve accurate dosing independently of the density of the additive. The module weighs separate quantities of colour, flavour, acid solution and fruit concentrate, etc. The batch of mass is weighed into the blending vessel so no level probes, which avoids the risk of contamination and makes everything easy to clean. An intermediate vessel – on load cell to control the level - between the blending vessel and the hopper compartment of the depositing plant, is for a higher capacity or when the hopper of the mogul is too small.

Tanis AMS

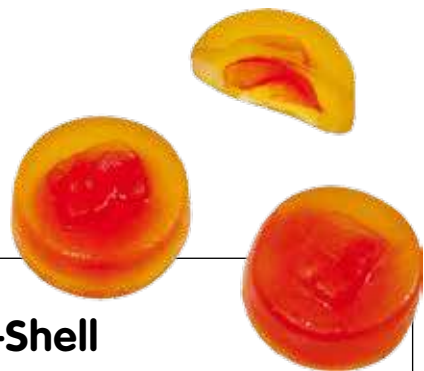
In those production plants where the flexibility and super control of the ABS is not required or where the extra height is not available, the in-line dosing system 'Additive Mixing System' will do the job using static in-line mixers and dosing pumps. To ascertain better control of dosing flow, indicators will be fitted. There is an option for the improved dividing of the mass through the use of pumps and flow meters. For quick change-over, extra tanks can be fitted with by-passes for easy cleaning.

Options

- Single 'deck' execution for smaller capacities
- Loss-in-weight dosing with manual supply of the additives (small capacities only)
- Special stirrer configuration for aerated products
- Direct dosing - by weight - of additives at higher percentages, such as fruit concentrate into the blending vessel(s)
- SCADA systems integrated with production control software (ERP)
- CIP Cleaning

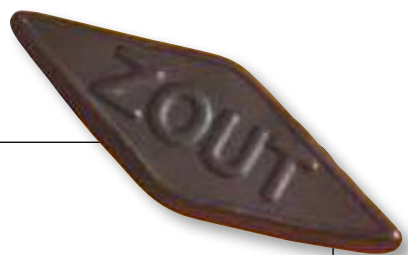


Side orders...



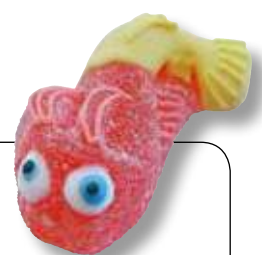
Centre-in-Shell

We ensure a complete setting with integrated dissolving and cooling of the centre-in-shell mass. The ready premix is dissolved in-line followed by immediate cooling, likewise in-line. This process allows for the use of, for example, high percentages of fruit concentrate and / or incorporation of alcohol as the heat load on the mass is short and so discolouration or loss of alcohol is non-existent.



Additions

For special products such as those with dairy ingredients or – typically Dutch / Scandinavian – liquorice / ammonium chloride, Tanis Confectionery develops made-to-measure solutions not only in terms of size but which also use special materials to avoid oxidation and cleaning-in-place to avoid contamination of the masses.



Tanis BatchCooker

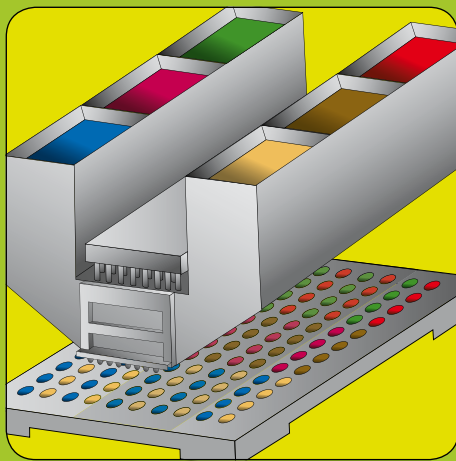
This is our reliable batch cooker in all-stainless steel finish for those masses where either there is low capacity, or the number, type and quantity of ingredients is high or (very) low. In these situations the Tanis BatchCooker is the optimum process solution. It is available in several sizes, with or without vacuum and air pressure discharge. Combinations with weighing + preparation- or buffer vessel for quick change-over of recipe and...
...of course the signature of Tanis Confectionery: skid built.



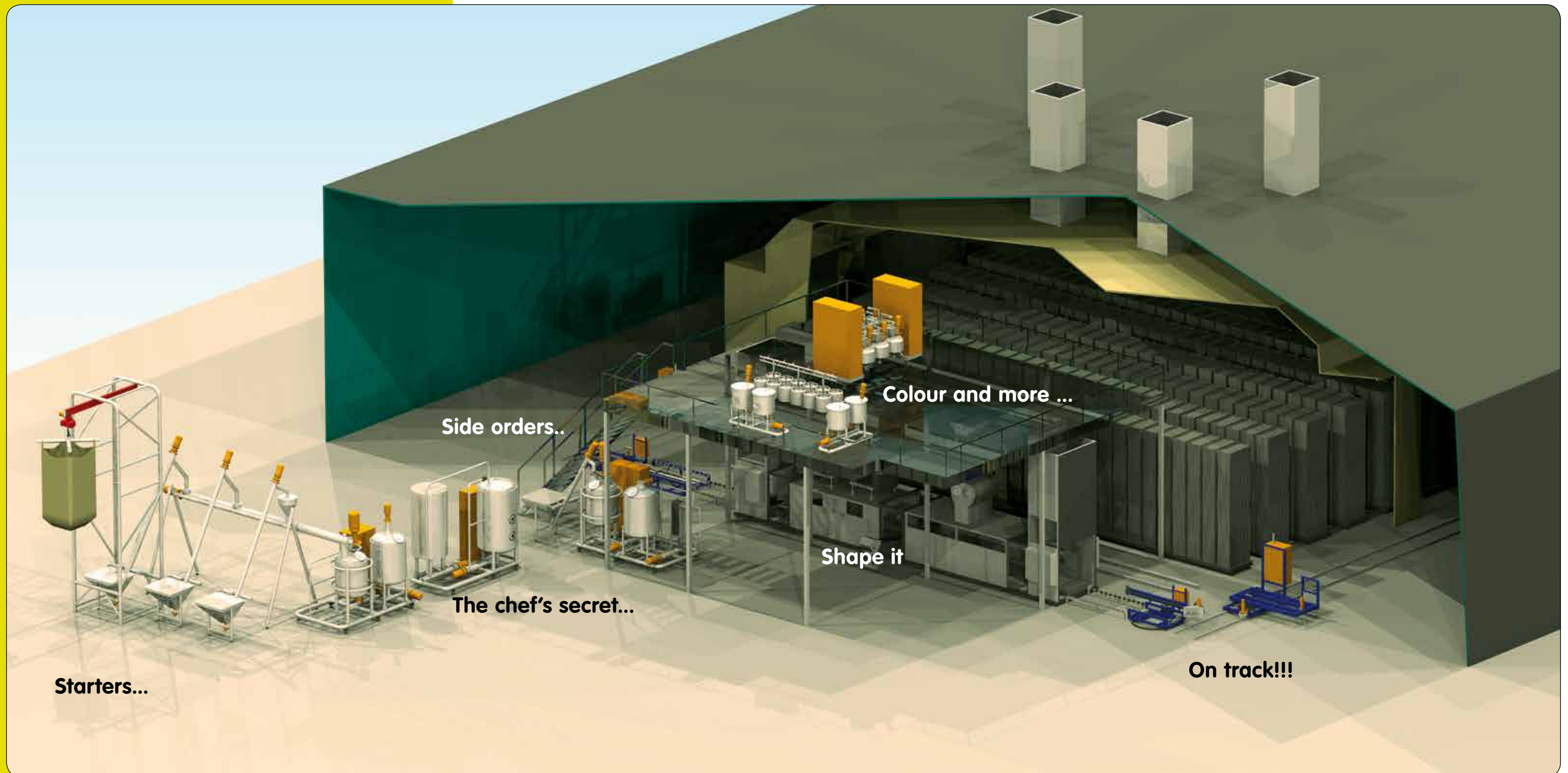
Shape it!

After bringing ingredients together and mixing, dissolving, cooking and cooling, the jellies or gums need to be shaped.

This part of the process cannot be done by equipment supplied by Tanis Confectionery, but reliable co-suppliers.



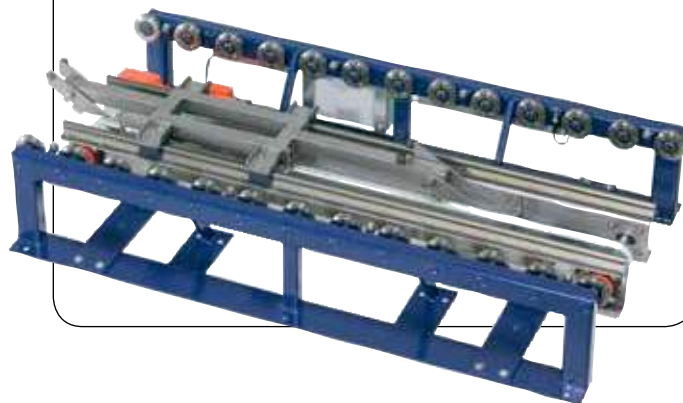
A menu



On track

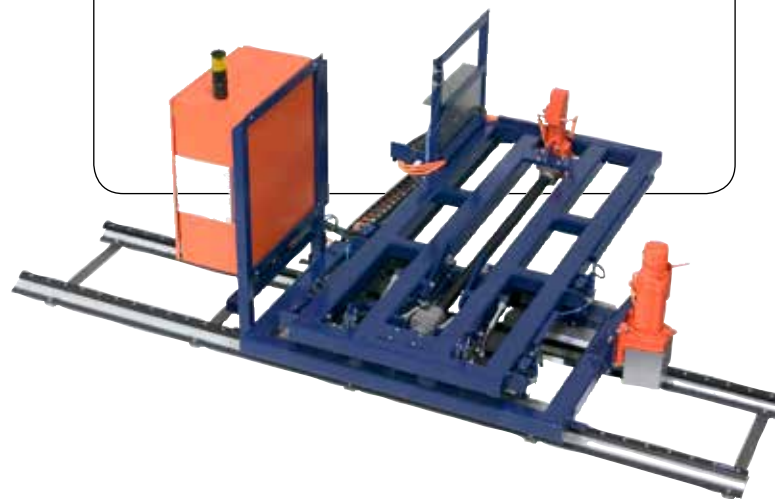
Extracting device

The pallets with 2 or 3 stacks of trays are extracted from the starch moulding plant onto the track system.



Shuttle

The pallet with the stacks of trays is transported to one of the conditioning rooms with the shuttle. When the shuttle is at the pre-programmed conditioning room the pallet will be pushed on the designated track inside the room.

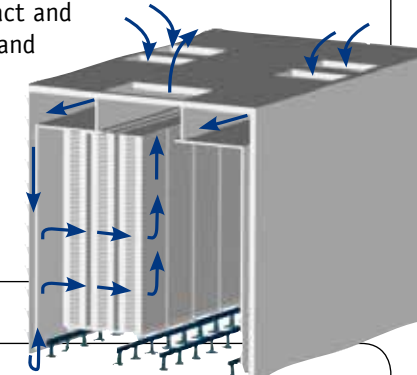


Drying Rooms

Automatic filled drying room

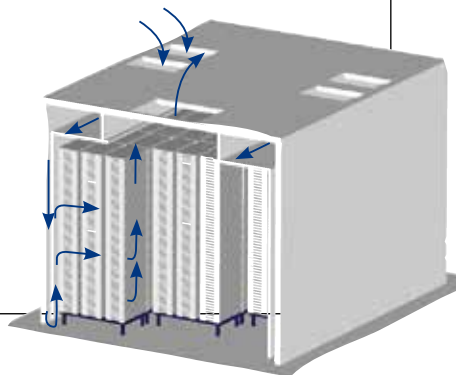
Each room has two tracks for the pallets carrying stacks of trays. A software program with HMI will control:

- The temperature, humidity and air speed in each conditioning room
- The 'pick and place' movements of the shuttles
- The units to extract and pull pallets from and to the starch moulding plant



Manually- filled drying room

These rooms can be filled and emptied by using pallet trucks. Temperature, humidity and airspeed are controlled by PLC and HMI; inventory and residence time have to be controlled by the operators manually.



An automated system feeds and discharges pallets with stacks of filled trays in and out of the conditioning rooms. This system consists of:

- an extracting unit to pull the pallet with either 2 or 3 stacks of trays from the starch moulding plant
- 2 turning tables
- 2 shuttles
- 2 tracks in each conditioning room
- 1 by-pass track
- a pulling unit to put the pallet into the stack feeder of the starch moulding plant.



The final course



Candy cooler



Tanis Confectionery has designed new candy coolers especially for the following types of confectionery:

- Gum-, jelly- & foam articles.
- Die-formed hard candy.

The system is designed with multiple story belt transport and a closed-loop cooling system. The products will be spread over an oscillating belt on the top belt and will be moved from top to bottom. Discharge can be on the same side or on the opposite side of the system. The system can be supplied in a finish that makes it suitable for complete wash down.



Sanding turbine

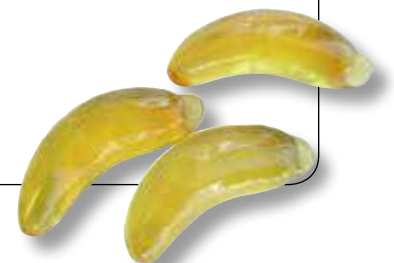


- All stainless steel sugar sanders with all necessary accessories such as:
- Steamer with special exhaust to avoid too much moisture
 - Heaters to dry the air and sugar
 - Inclination adjustment
 - Compression rings when non-pareil (raspberries) is used
 - An all-stainless steel finish that makes it suitable for acidifying

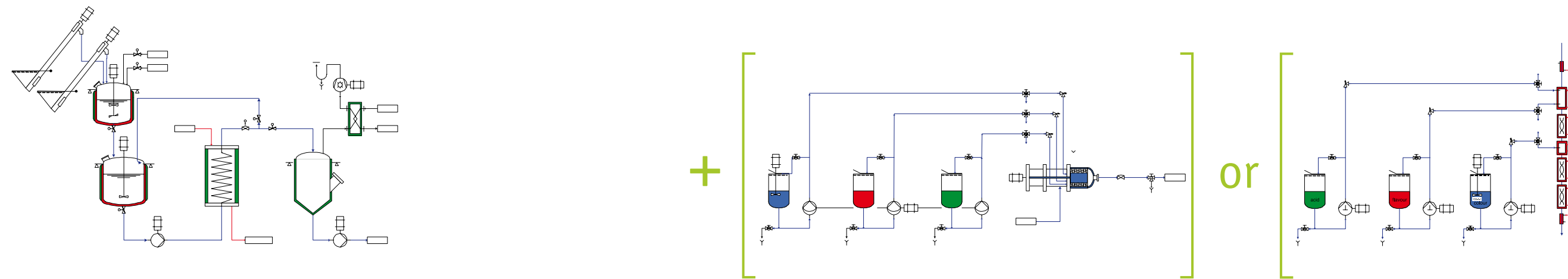
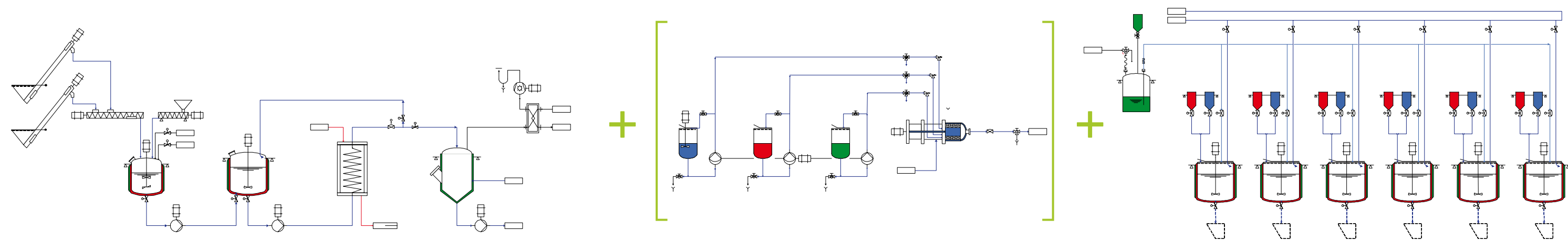
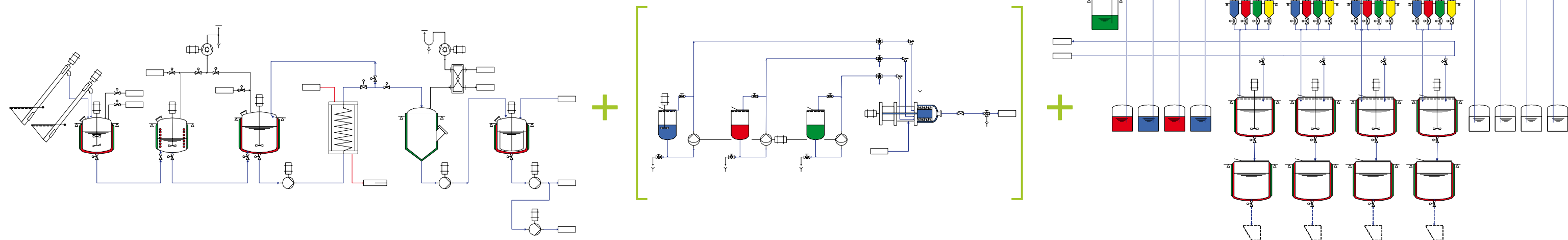


Oiling turbine

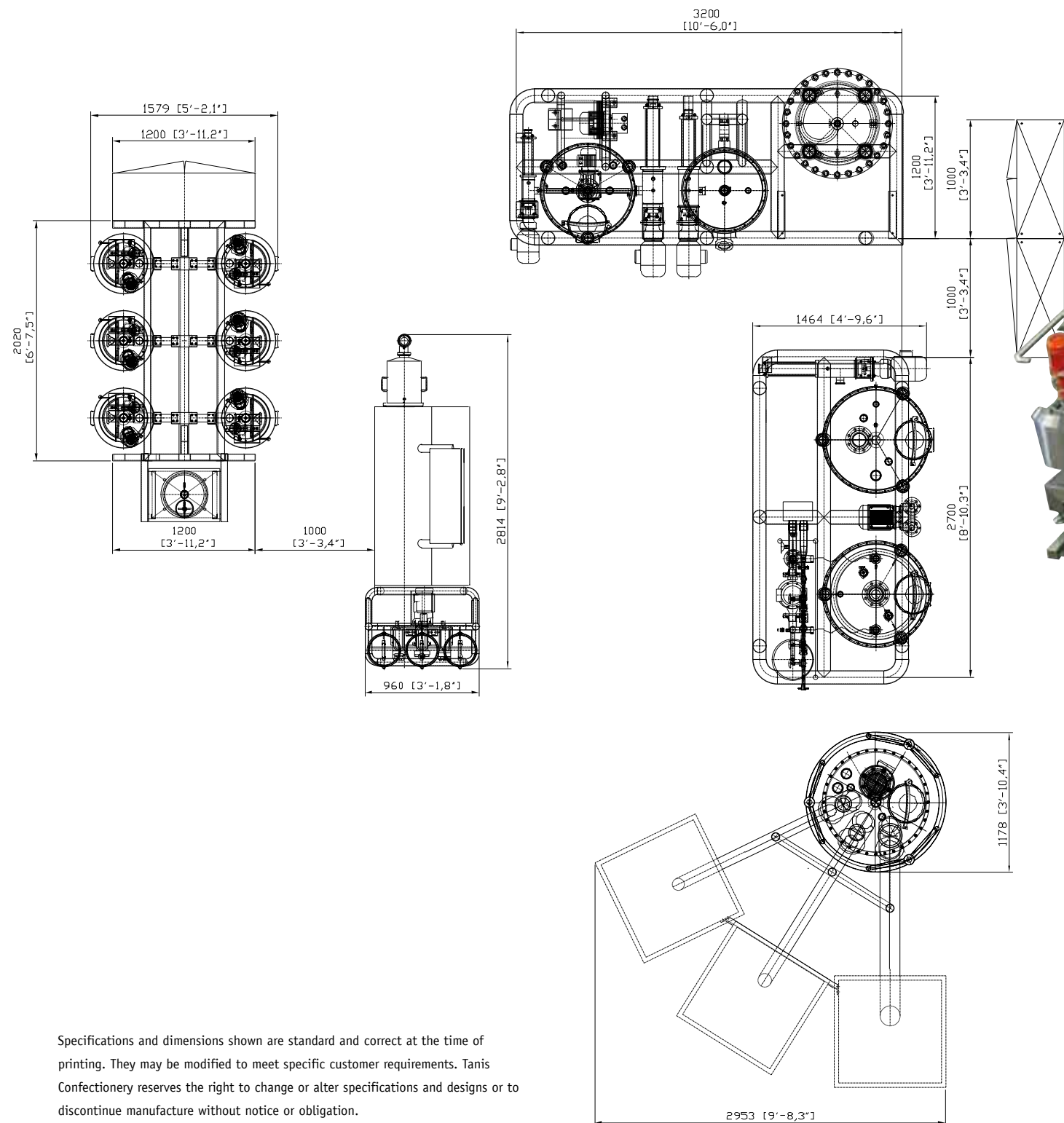
- All-stainless steel
- Inclination adjustment to control residence time
- In-series for higher capacities
- Variable dosing of polishing agent(s)



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.

