From ingredient to final product

LET'S CREATE TOGETHER

T-Bar®

TANIS Confectionery
From concept...

At Tanis, we don't just develop machines. We design and develop solutions! Creative and effective solutions that improve and enhance the process. The production, the colour and the flavour. In short, solutions that shape the definitive product. Your product!

...to final product

This requires broad expertise and close cooperation. After all, we can only generate synergies if we leverage one another’s knowledge and experience. And we’re capable of performing optimally and keep taking steps towards our end goal. At the highest possible level.

In so doing, we work from question to answer. From doubt to certainty. From ideas to implementation. From concept to reality. Always directed at coming up with the best possible solution for your question, your objective and your product. And that’s what we deliver. In the form of an installation, the best installation. For the very best sweets in the world. That’s our focus; together with you. Let’s create together!
Our production lines weigh, add, mix, heat, boil, cool and shape the ingredients of your final product.

World leader in confectionery
The Tanis Confectionery team delivers to candy manufacturers who want to produce as efficiently and inventively as possible. Tanis supports the design and testing of their products, and is a world leader in expertise and experience in the field of producing gums & jellies, fondants and chewy candy.

Share our expertise around the globe
We believe in nurturing traditional knowledge and skills and the added value of a family owned business in a global market. As the Tanis Confectionery team we want to continue to promote these values and expertise in the future and share them with all our customers.

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 Candy Innovation Centre
Proof: Proving that we can create the product of the end customer on our process machinery.
Demo: Giving demos of the capabilities of our production lines.
Development: Recipe development or improvement.
Training: Training courses, learning how to produce confectionery products.

Return on Investment
• Energy saving.
• Automated production lines, which result in less personnel.

From ingredient to final product
• One supplier.
• One operating system.
• Time to production.
• Less risk.

Success means nothing less than meeting your requirements and expectations. We follow a simple but effective process to ensure a smooth transition from recipe development and process design to final commissioning of your production line.
Advantages

• No dependence on factory infrastructure
• Greater flexibility in choice of dry ingredients
• One dry material (sugar) mixed and not weighed
• 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 kitchen is the first part of a T-bar line; the kitchen is the plant for making nougat-like and/or caramel syrup or [binder] masses. Wet and dry ingredients are combined and mixed according to a recipe, and then cooked and mixed as needed with ingredients such as nuts or cereals.

Tanis Confectionery uses its T-Control concept on all its equipment. Independent of whether you require an Allen Bradley or a Siemens control platform or whether you require UL or CE-certification, the T-control concept guarantees an intuitive, modular and user friendly interface to every module of your Tanis production line.

The heart of the T-control concept consists of an intuitive and consistent HMI layout with standard features like detailed alarm handling, recipe handling, machine status and system settings in combination with a well-structured and documented PLC program.

Remote maintenance from the Tanis Confectionery head office is obtained by means of a built-in VPN router. Besides the standard features of T-Control, each module of your Tanis production line has its own detailed graphic process view on the HMI. In automatic mode, this graphic view provides you details on the status of the running process. In manual mode, the same graphic view shows you the actual status of the process equipment and gives you the ability of manual control.

The field components of each module of your Tanis production line are wired directly to a control panel that is located on the module’s frame. All modules are interconnected to each other by an industrial fieldbus like Ethernet/IP or Profinet. If centralised supervisory control, recipe management, extended reporting, extended trending or change logs are required an additional SCADA system can be supplied to provide these features.

Remote I/O

VPN

MODULE FRAME

MODULE FRAME

MODULE FRAME

CONTROL PANEL

FIELDBUS

CONTROL PANEL

CONTROL PANEL

HMI

PLC

Tanis KITCHEN

The Tanis Weigher is the unit for the preparation of a premix by weighing ingredients (liquid and dry) into the vessel and mix. The order of weighing the ingredients and mixing time depends on the recipe. The dry materials can be dosed by a Tanis FEEDER(s) which has a hopper and a frame with a bigbag is optional.

Tanis WEIGHER

The basic masses for nougat and caramel; water, sugar, glucose premix are weighed and mixed separately from the extra ingredients for the caramel (condensed milk, fat, milk or whey powder and emulsifier) to avoid contamination.

Capacities / ranges

Pilot - 400 - 600 - 800 mm wide slab

Tanis KITCHEN PREPARATION

The basic masses for nougat and caramel; water, sugar, glucose premix are weighed and mixed separately from the extra ingredients for the caramel (condensed milk, fat, milk or whey powder and emulsifier) to avoid contamination.
Advantages

- Proven technology
- The special design of the heating coil creates a very fast and accurate dissolving/cooking cycle.
- Caramel or binder quickly cooled by vacuum after heating to fix the dry substance and stop further caramelization.

NOUGAT type masses

The premix for nougat is sucked into the special ‘Tanis Thermosyphon’ cooker by vacuum, cooked to the preset temperature followed by vacuumising before discharging into the buffer vessel. The production process depends on a quick, controlled heating of the solution in order to obtain a clear well-saturated sugar solution.

CARAMEL or BINDER masses

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.

T-Bar KITCHEN COOKING

For the continuous production of nougat a two-phase system aerator is used: one mixing head prepares the ‘whipping agent’ at a very low density which is then mixed with sugar mass in a second head. This results in a low density mass wherein additives such as fat, powdered sugar, milk and cocoa powder can be mixed.

Advantages
- Hygienic design allows easy cleaning without dismantling [mixheads]
- The head design offers a slower rotation speed, is possible, which means that a minimum of frictional heat is added to the product.

T-Bar KITCHEN AERATION

AERATION Nougat

For producing a protein bar a protein powder and a liquid will be mixed. This is done in a Z-mixer.

Advantages
- Hygienic design allows easy cleaning without dismantling [mixheads]
- The head design offers a slower rotation speed, is possible, which means that a minimum of frictional heat is added to the product.

AERATION Protein
Double Roll Slab Former
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 a cooling tunnel.

Single Roll Slab Former
The Single Roll Slab Former has a heated infeed and a jacketed forming drum with adjustable speed. The drum produces an accurate layer. The slab thickness is adjustable from 3 mm to 5 mm.

Slab Calibration Roller
For cereal bars a sizing roller is needed for sizing / pressing the cereal / binder mix to the required height of the bar.

T-Bar KITCHEN BLENDING/MIXING

NOUGAT type masses
After aerating, the mass is transported to the Tanis Dynamic mixer where powders, fat and additives (vanillin, etc.) are mixed in. The prepared mix is then discharged into the hopper of the slab former.

CARAMEL or binder masses
The cooked caramel or binder mass can be mixed with nuts or cereals. This will be done in the Tanis Single screw mixer.
The cooling tunnel is where the slabbed products are cooled before they are slit and cut. On the infeed table the slabs are discharged onto cooled bottom plates to cool the slab immediately. After this first step of cooling, the slabs are transported through the tunnel where cooled air circulates.

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.

Tanis cutting systems are developed to meet the requirements of the bar that the customer wants. All widths and lengths are possible. Tanis Slitter has a nose bar to take over the slab from the conveyor (of the slab forming line), to slit it into roles. The slitter features 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 disc shaft has lifting eyes on the end.

Advantages:
- Accurate
- Changeover is simple for different widths
- Easy to clean

Tanis Spreaders need to be spread after the slit to avoid sticking of the product. Independent Teflon ropes with linked speed control for separation to fit infeed and outfeed conveyors. Depending the product, Tanis has a flat version but also a high-low version.

Advantages:
- Retractable infeed
- Water-cooled, stainless steel bottom plates
- Infeed table with enforcing for Calibration Roller
- Caps that can be opened
- Air handler
- Cooling units contain a built-in semi hermetic air cooled or water-cooled compressor, a recirculation fan and an evaporator as standard
- Cooling compressor housing designed for easy cleaning
- Energy efficiency and environmental safety
- FDA approved belt
- Automatic belt tracking

Tanis Cutter Ultrasonic
The Support base to mount the cutter infeed belt with speed control and pneumatic belt tracker linked to the longitudinal slit. Guillotine cutter with double servo system for vertical and horizontal movement. Encoder with mounting bracket used in conjunction with the 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.
**NOUGAT**
This candy bar is made from nougat covered with chocolate or compound. The nougat is made of aerated sugar mass with egg white and fat paste.

**CARAMEL/NOUGAT**
This is an example of a candy bar with chocolate nougat covered with a layer of caramel. The nougat is made of aerated sugar mass with egg white and fat paste. Also cocoa powder is added for the chocolate taste and colour. The caramel is made from sugar, water, glucose, milk and fat.

**CARAMEL/NOUGAT & NUTS**
This chocolate candy bar has nougat covered with a layer of caramel both containing nuts. The nougat and the caramel mass are mixed after cooking with the nuts. This can be done batchwise or continuous.

**BRITTLE**
This candy bar is brittle; this is a type of confection consisting of flat broken pieces of hard sugar candy embedded with nuts such as pecans, almonds or peanuts.

**CEREALS**
The cereal candy bar is a candy bar that consists of oats, bran flakes and crispies bound with honey. The binder that keeps the different cereals together can also be a caramel.

**CEREAL & NUTS**
The cereal candies come in a variety of flours: Almond, Macadamia, Hazelnut, Cranberry & Orange, Fruit & Nut, Peanut Butter, Mixed Berry, Chocolate Chip and Toasted Coconut.

**CEREAL WITH CHOCOLATE**
The cereal candybars can also be enrobed with real chocolate or a compound. This can be at the bottom or throughout.

**PROTEIN/ENERGY/HEALTH BAR**
This is a protein candybar. These bars have more protein than a normal candy bar. They can be supplemented bars containing protein and other high energy foods targeted at people who require quick energy but do not have time for a meal.