

Equipment Catalogue

Equipment and solutions for the food industry.



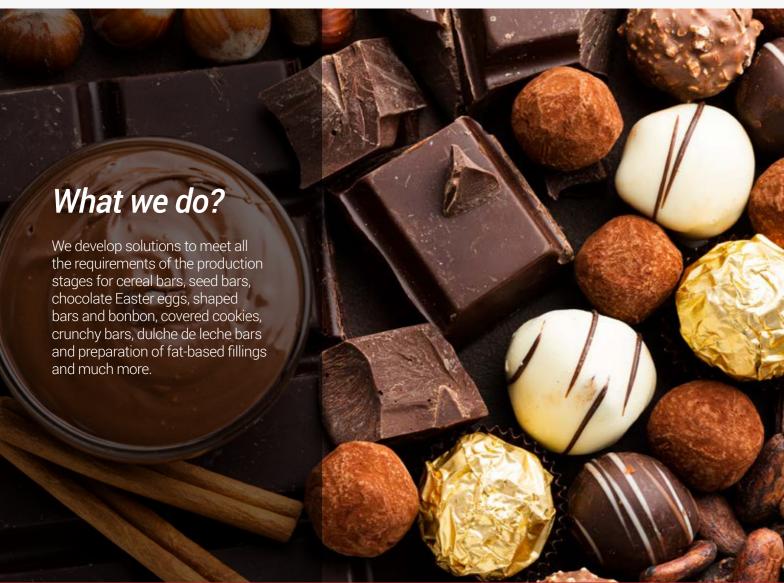


About us

Over 30 years operating in the Food Industry Market, **LITEQ** has developed, in this period, its own technology for the manufacture of its equipment and services mainly at the food industry.

LITEQ provides complete processing lines, equipment's for the food like, biscuit, chocolate bars and candies, cereal and protein bars in Brazil, South America, North America and Europe. Our goal is to find solutions to make our customer's work easier, helping them to develop new products, and also to rationalize their production processes.

LITEQ struggle for excellence in after-sales services, to provide customers a flexible and tailor-made solutions, adaptable to any need. Regardless of geographical location, service is guaranteed, fast and efficient anytime, anywhere.



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Laboratory

Liteq provides a well-equipped laboratory for testing. Here you will find a large selection of machines, dough mixers and confectionery resources to ensure reliable small-scale test production. Liteq can provide support with experienced chocolate and confectionery experts as well as engineers with international experience. The laboratory is also available for market test production runs – all with the utmost confidentiality.

EQUIPMENT AVAILABLE:

- Tempering 400 kg/h;
- Molding Machine / Extruder;
- Bars Forming Machine;
- Filling Injector;
- Lentil Forming Machine (like M&M);
- Dragee Machine;
- Melting and storage tank;
- · Sigma-type mixer;
- Cooking Machine;
- Infrastructure for hot and cold water (up to -20°C).

Worldwide

Liteq is represented globally and provides a global sales and service network through local partners, ensuring the individual support you need everywhere.

Liteq places great emphasis on reliable support, to attend the requests of their clients.



NORTH AMERICA

MEXICO

SOUTH AMERICA

ARGENTINA BRAZIL CHILE COLOMBIA ECUADOR PERU VENEZUELA

EUROPE

MOLDAVIA



Chocolates

- Tempering;
 Mass Cooling Machines;
 Rotary Chocolate;
 Dosing Machine;
 Device for forming and breaking kibbles and mini kibbles;
 Piston Chocolate Depositor;
 Lentil Forming Machine (like M&M);
 T-Mold Compact.

Tempering

Chocolate tempering machine is crucial for quality, for a better shelf life, product shine, thermo resistance, easy demoulding, the crystallization speed and the temperature control, directly depend on the quality of this equipment.

LITEQ's tempering machines provide an exceptional rate of crystal formation, not only working with pure chocolates (which use only cocoa butter), but also with chocolates with a high milk percentage, fat or with additions of butter equivalent to cocoa butter.

The capacities of our equipment range from 400 to 5,000 kg/h.



Chocolates

Confectionery

Mass Cooling Machines

Mass coolers are essential equipment for the correct control of the temperature and homogeneity of a mass, whether it is a "compound" mass used for the topping of chocolate candy or a fat-based mass used as a filling of molded chocolate.

The capacities of our equipment range from 500 to 1,500 kg/h.

Piston Chocolate Depositor

The piston chocolate depositor is an extremely versatile and precise equipment, designed to work in intermittent dosing function. The point and one shot system allows the dosage of tablets (with or without fillings), chocolate cadies and Easter eggs. In this Depositor model, the mass intake, dosing and suction movements are controlled via power-assisted motors, which allows a high control over the chocolate dosage / filling, ensuring great precision in the control of the net weight of the final product. The equipment can work with single, one shot and tongue dosage.









T-Mold Compact

Composed of a Doser, Vibrating System, Cooling Tunnel, Automatic Unmolding System and Mold Reheating System. The equipment allows the automatic production up to 15 product molds per minute, without the use of labor. With a flexible design and fast setup, we guarantee a wide variety of products, meeting the highest quality standards. Below we can see some of the products and production capacity with the standard molds 275 x 175 mm or 300 x 300 mm, used in the production of molded chocolates with biscuits.



Product	Product Weight (g)	Product Dimension (mm)	Product per Minute	Production (kg/h)
	18	61x6	220	238
	10	57x43x10	275	165
	20	72x34x13	247,5	297
	50	74x64x13	123,75	372
HART.	100	125x70x13	55	330

Product	Product Weight (g)	Product Dimension (mm)	Product per Minute	Production (kg/h)
4	60	Ø40x100	80	280
Filled	14	32x19	299,4	252
Solid	14	32x19	449,2	378
Filled	26	35x27	220	344
	6	38x30x5	577,5	208

Rotary Chocolate Dosing Machine

We have Dosing Chocolate Machine with high precision, productive efficiency, high quality and technology. We can supply solutions for different problems (or demand), adapting to our costumers needs.

The implemented design allows an equipment of easy clean process, low maintenance, what allows a higher efficiency on the production. This Dosing machine is design to dose directly from the moving sheet from a tunel: drops, chips tablets, chocolate candies, irregular kibbles, regular mini kibbles and micro kibbles. Besides that, the equipment can deposit chocolate in forms made of poliycarbonate, viabilizing the crafting process for a ton of products that have a tablet form.

The equipment is supplied with a metering plate completely built-in aluminum, in which its internal mass distribution, depends on the type of product to be dosed (based on the customer's blueprint).

Models from 420 to 1,600 mm track width.



Chocolates

Device for Forming and Breaking Irregular Kibbles, Regular Mini Kibbles and Micro Kibbles

This machinery was developed for the formation of kibble (pieces) of liquor, chocolate or similar products. It is installed on the conveyor of the cooling tunnel in both outlets, forming strips of products, after the product is crystallized, the device breaks these strips into pieces.

Lentil Forming Machine

The equipment is designed to form chocolate lentils or similar mass. The product is formed in cylinders with cavities specific to the shape of the product. Resulting in a perfectly molded final product with excellent shine and consistency.







Confectionery

- Cooking Machine;
 Bars Forming Machine;
 Molding Machine / Extruder;
 Rotary Filling Depositor;
 Solid Ingredient Dosing System;
 Cutting Stations (longitudinal and transverse);
 Enrobing Machine;
 Dragee Machine.

Bars Forming Machine



The forming machine is a suitable equipment for the manufacture of products made from dough by mixing solids (seeds, cereals, dehydrated fruits, etc.) with a liquid bonding element (soft or crunchy), very well-suited production of cereal bars, fruit bars and seed bars. This system can also be used in the lamination of dough sheets, either caramel or sugar based and possesses the great and great density stability, keeping the integrity of its ingredients unchanged. Widths from 420 to 1,050 mm.



Molding /Extruder Machine

The molding machine is an extremely economical and versatile equipment, developed to manufacture filling bars, usually covered with chocolate or similar dough. Is suitable for a multitude of confectionery dough, whether it is fondant, caramel, marzipan or puff pastry. The distinctive factor of this equipment is the simplification of the production process, eliminating the need to use different longitudinal and transverse cutting equipment in your line. **Models from 320 to 1,300 mm track width.**



Cooking Machine

This equipment is used to cook syrup used for several types of products, but mainly to cereal, nuts and protein bars production. It can also produce other types of fillings such as caramels, dulce de leche, etc. The kitchen is designed to store the syrup or filling, dosing the product in a controlled manner directly into the mixer, ribbon blender, or also into filling application equipment, using an insulated dosing pump.



Confectionery

Forming Cylinder

The Forming cylinders system is an equipment suitable for forming mats from fat based pasta (aerated or not), sugar-based pasta, caramel-based pasta and a wide variety of pasta obtained from mixtures containing cereals, fruits and seeds. This equipment has as the greatest advantage, the ability to form mats without changing the structure of the mass (without pressure).



Rotary Filling Depositor

This equipment is designed to accurately deposit soft fillings—such as caramel, ganache, etc.—onto the formed product strips.







Confectioner

Solid Ingredient Dosing System

This equipment is designed to distribute solid ingredients over the products. It is extremely versatile, combining high precision with easy operation. This equipment is suitable for a wide range of dry products such as: rice flakes, grated coconut, chocolate sprinkles, etc.

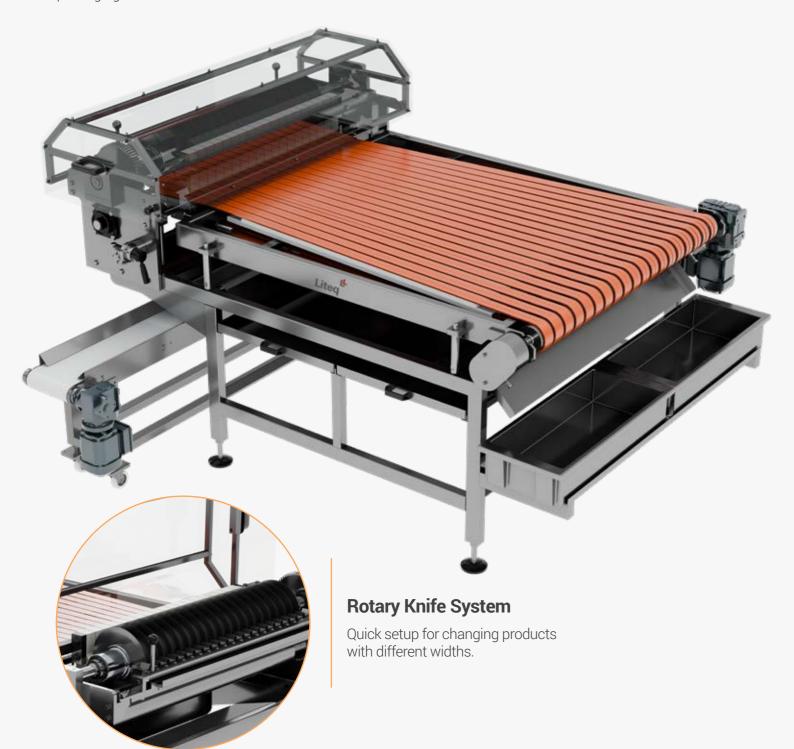
Cutting Stations (longitudinal and transverse)

The longitudinal/transverse cutting stations were designed for cutting mass mats for cereal and nuts bars, caramelbased (crunchy or soft), "fondant" bars, etc. using circular knives (longitudinal cut) and guillotine (transverse cut).

Extension Table

The extension table is a conveyor specially designed to separate / distance the rows of products from each other, immediately after the longitudinal cutting station, preventing them from sticking again.

This machinery is crucial in the preparation of products before the chocolate coating or feeding processes of the packaging machines.



Transverse cut (Guilhotine)

There are versions of our guillotine with mechanical drive (power-assisted) or pneumatic.



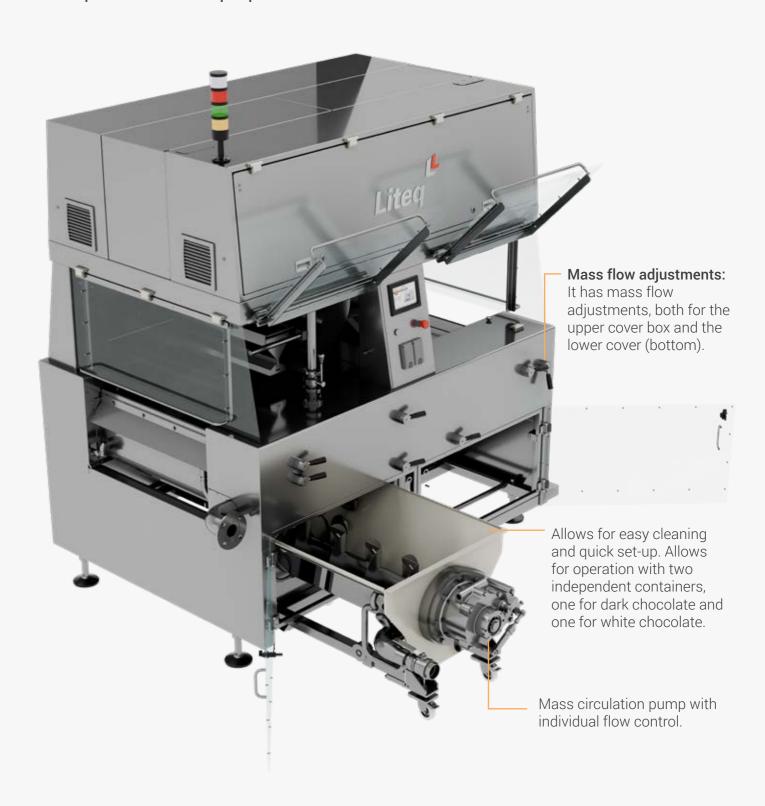
Enrobing T-Cober Master

LITEQ's enrobing machine for chocolate or compound is an extremely economical and versatile equipment, developed with the purpose of applying a thin layer of mass on filling bars, cereal bars, seed bars, cookies, among others. Our latest model was developed with the intention of adapting to the most modern concepts of hygienic engineering and easy operation (easy maneuver, easy setup, easy inspection, easy maintenance and easy cleaning), which is now the main distinguishing factor of our equipment compared to other products currently in the market. Our equipment was developed to work with speeds up to 10m / min and with widths between 620 and 1.800 mm.



DIFFERENTIALS

- Equipment designed according to hygienic engineering concepts (no sharp corners, no hollow bodies, full accessibility, fast set-up, etc.).
- Individual temperature controls for the chute and mass tank.
- Greater thermal stability of the equipment, providing less loss of stable crystals of the chocolate.
- Mobile mass container facilitates setup and cleaning, jacketed and with a special stirrer, equipped with a positive recirculation pump.



Enrobing Machine

The **COMPACT ENROBING MACHINES, 500 and 700,** are part of the **LITEQ Compact Line**. Equipment designed to allow production with the same quality and efficiency, but can be installed in reduced spaces and with excellent cost-benefit. With conveyor/enrobing speeds that can reach up to 4 m/min. The equipment can be supplied with 500 or 700 mm and have all the necessary components to provide quality enrobing. The 500 model can be equipped with a built-in tempering machine.



DIFFERENTIALS

- Tilting Top Cover: Full opening, facilitating access for maintenance and cleaning.
- Mass flow adjustments: Includes mass flow adjustments for both the upper cover box and the lower cover (bottom).
- · Water heating and circulation system.



facilitates setup and cleaning, jacketed and with special stirrer, equipped with positive recirculation pump.

Dragee Machine

The equipment is designed to cover or polish solid products with chocolate or syrup. The equipment has a cold or hot air circulation system (1) and a liquid dosing and application system (2). It also has an automatic production unloading system.



Model	Volume of Center (liters)	Diameter (mm)	Length (mm)
DG 600	50	600	600
DG 800	120	800	800
DG 1000	230	1000	1000
DG 1300	400	1000	1700

Chocolate or Syrup Spraying Device for Pannig Machines

The spraying device is designed to ensure uniform distribution of coating materials during the dragee process, such as sugar syrups, chocolate, or similar compounds. It comprises a spraying assembly that atomizes the coating medium evenly. The system is mounted on a mechanism that traverses the entire width of the equipment, allowing consistent application across all products within the panning drum.





- Cooling Tunels;Cooling Conveyors.



Cooling Tunels

LITEQ's cooling tunnels are specially designed to optimize cooling fillings formed from confectionery products, cereal bars, crunchy bars, candy shells, chocolate covered products and/or similar product. **This equipment is designed in a modular way, in 2-meter sections 420 to 2000 mm wide.** Due to the precision adjustment of the hood, the tunnel forms an airtight assembly. According to the product, the equipment can be designed to draw energy from the product by radiation, convection and conduction, or a combining of these last two.

Hermeticity:

There are no more seals between the hoods, as the construction method guarantees 100% hermeticity of the equipment, which guarantees that there is no cold air leakage. In addition, there is no need to change the seals.



Hood system: -

The hoods are supported on the side ribs of the tables, so that they can be tilted laterally and remain open, which provides easy access to the inside of the duct for cleaning and disinfection.



Hood lifting system

with gas cylinder or

electric system.

Air cooling system:

Air cooling is generated by a coil through which chilled water (from an external chiller) circulates and blows into the distribution ducts by two centrifugal fans. Air temperature control is performed by a PT 100 and a valve monitored by a PLC installed in the central electrical panel of the equipment.

Cooling Conveyors

LITEQ's cooling tunnels is specially designed to optimize the cooling of cookies (mass or cookies). These, have been designed in a modular way and depending on the area where they will be installed and also, the type of product to be cooled, and as an option, can be installed on the ceiling, in order to optimize the working space.

Complementary equipment for chocolate, confectionery and cooling lines

Positive Pumps (chocolates)

LITEQ's positive pumps are extremely simple and strong. Your constructive form (spur gear) ensures great efficiency and low maintenance cost. This machinery can pump from 500 kg/h up to 3.000 kg/h.



Heat Exchanger / Decrystallizer

This heat exchanger features jacketed connections and piping arranged in a bidirectional circuit, where hot water flows externally while chocolate flows internally through the pipes. The chocolate moves with a turbulent flow to maximize thermal exchange efficiency. The unit is designed for full disassembly, allowing easy and thorough cleaning.

T-Mixer - Continuous Liquid Dosing and Dynamic Mixing System

The T-MIXER system offers a straight forward operation and cleaning process, designed to deliver a homogeneous mixture of liquids in a continuous flow. The equipment attends a wide range of products, including creams, chocolates, and syrups. Equipped with an integrated aroma/colorant container and a dosing pump, it ensures precise and consistent mixing, enhancing the efficiency of confectionery production lines.



Ingredient Mixers (High Viscosity)

This machinery was developed to provide a perfect homogenization of a mixture formed by solids and liquids, hot or cold. It can be used to mix cereals, crystal sugar, raisins, seeds, rice crisps, corn flakes, etc. a hot or cold liquid and its most distinguishing aspects, with a low percentage of ingredients breakdown during the mixing process.

Ingredient Mixers (Low Viscosity)

This machinery was developed to provide a perfect homogenization of a mixture formed by solids and liquids, hot or cold. This equipment can be used to mix cereals, raisins, seeds, "rice crisps", corn flakes, etc. a liquid and has as its great differential, with a low percentage of breakdown of the ingredients during the mixing process.

Decorating Machine

The purpose of this equipment is to decorate the products with chocolate fillets or similar mass. The great advantage of the LITEQ decorator lies in the nozzle pressurization system, because for each set of 4 of them there is a mini gear pump, which significantly reduces their clogging.

Chocolate / Liquor / Fat Melter

The liquor, fat, and chocolate melter was developed to optimize the melting process of liquor, chocolate, or similar fats in block or kibble form, turning this operation into a continuous and safe process.

Services and Spare Parts

Throughout your machinery's life cycle, LITEQ can provide original spare parts as well as support services such as preventive or corrective maintenance. The services contemplate keeping its production in continuous operation, through technical support in maintenance and repairs. LITEQ technicians are highly trained and qualified for their functions, always available to act promptly to detect shutdown problems caused by detected technical failures (corrective maintenance). Our goal is to solve your problem immediately, in order to keep your production running.

Guaranteed benefits:

- · Keep downtime as low as possible, troubleshooting immediately;
- Imediatly Problem Solving;
- · Lower production loss relative to downtime.



Liteq

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