



Plants and Machines For Chocolate



Together from ideas to masterpieces



OUR HISTORY





PACCO CONCORSO EUROPA

THE ORIGINS

The company's history began in 1947 when Domenico Del Carlo purchased "LA VITTORIA", a small confectionery industry in Modena founded in 1915.

After several years of activity, the Delver trademark was launched in 1953 to identify the company's superior quality chocolates and sweets. Boeri, layer articles, gianduiotti, Easter eggs and candies are produced by Delver and distributed all over Italy.

The in-depth knowledge of chocolate and of the problems linked with its production process, gathered from direct experience, began to take shape during this period and Delver now uses it to design and create all its plants.



DELVER WORKSHOPS

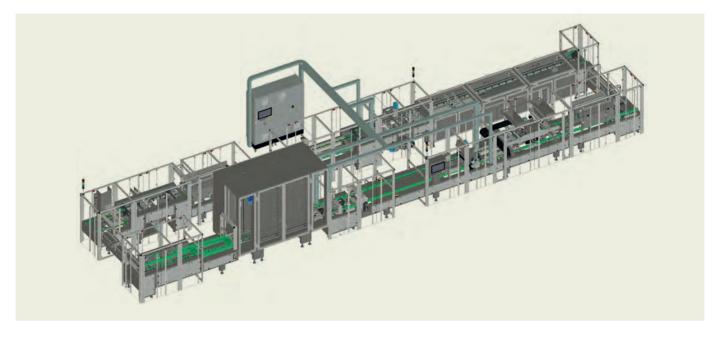
Delver had already started to produce its own machinery for chocolate in the 1950's, even though it was designed for in-house use only.

But it was not long before Domenico Del Carlo's enterprising spirit took the business well beyond this by starting to sell the machinery it produced.

It was so successful that in 1964 the firm focused entirely on producing machinery.

This is how the first Delver automatic lines were conceived for the production of Italian confectionery classics, such as layer articles, boeri and Easter eggs.

DELVER PLANTS

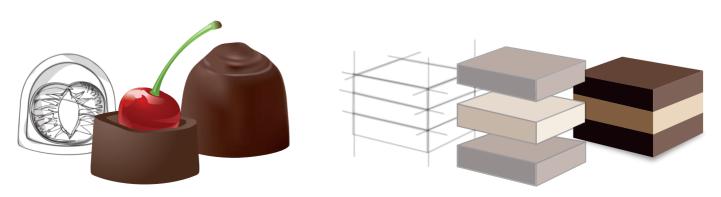


Delver has been delivering plants for making chocolates since the early 60s, continuously introducing innovations, progressively expanding its offer and participating over time in creating numerous milestones in the chocolate industry.

Thanks to this long evolution, today Delver has a complete range of solutions for the entire production process, from the preparation and storage of raw materials to feeding the wrapping machines, with installations all over the world making it a reference partner for its customers.

Delver provides its customers with the best technical solutions, a careful study of the operating flow in the production area as well as its experience in selecting shapes and ingredients, which are all key factors for reaching targets in an ever-changing and increasingly competitive market.

Therefore, Delver does not simply offer customised machinery, but above all a 360-degree approach to guide customers down the path that leads from a brilliant idea to a successful product.



MOULDING LINES MSA CREAM





Automatic universal moulding lines with loose moulds for the production of solid and filled chocolate articles in three stages (shell, centre filling and bottom).

The main characteristic of the MSA Cream line is its absolute versatility in producing any type of chocolate item: praline, snack or bar, solid, filled or with a surprise, with flat base or double-sided.

The modular structure makes it easy to upgrade at a later stage to progressively expand the range of items produced or to increase their output, also guaranteeing complete accessibility to all line parts.

A latest-generation supervising software with graphic interface grants simple plant programming and management, also for the particularly challenging production processes required by the most complex and innovative items.

MOULDING LINES RAPID CREAM





Automatic moulding lines with loose moulds for solid and one-shot filled items.

The Rapid Cream lines are designed to combine absolute efficiency and reliability with maximum flexibility and extremely reduced footprint, getting the best from the one-shot production system, thereby guaranteeing very simple and quick changeovers.

The design of the Delver one-shot depositors, which are the core of these lines, guarantees extreme depositing precision and versatility for solid and filled items, while their sophisticated supervising software provides perfect control when forming the chocolate shells and distributing the fillings, even the most delicate ones.



MOULDING LINES CAVI CREAM

Automatic moulding lines for hollow and filled items with injection technology.

The Cavi Cream lines production process starts by forming complete two-sided chocolate shells, rotating the moulds on three-axes so to guarantee perfectly uniform and homogeneous shell thickness.









After the filling is injected, the shells are sealed by hermetically closing the injection hole, which makes them particularly suitable for containing the most delicate creams, with the most particular rheology as well as alcoholic or liquid fillings in general.

For the lines used to produce seasonal hollow goods, item decorating stations can be installed together with robotised systems for the insertion of surprise gifts.

MOULDING LINES WAFER CREAM



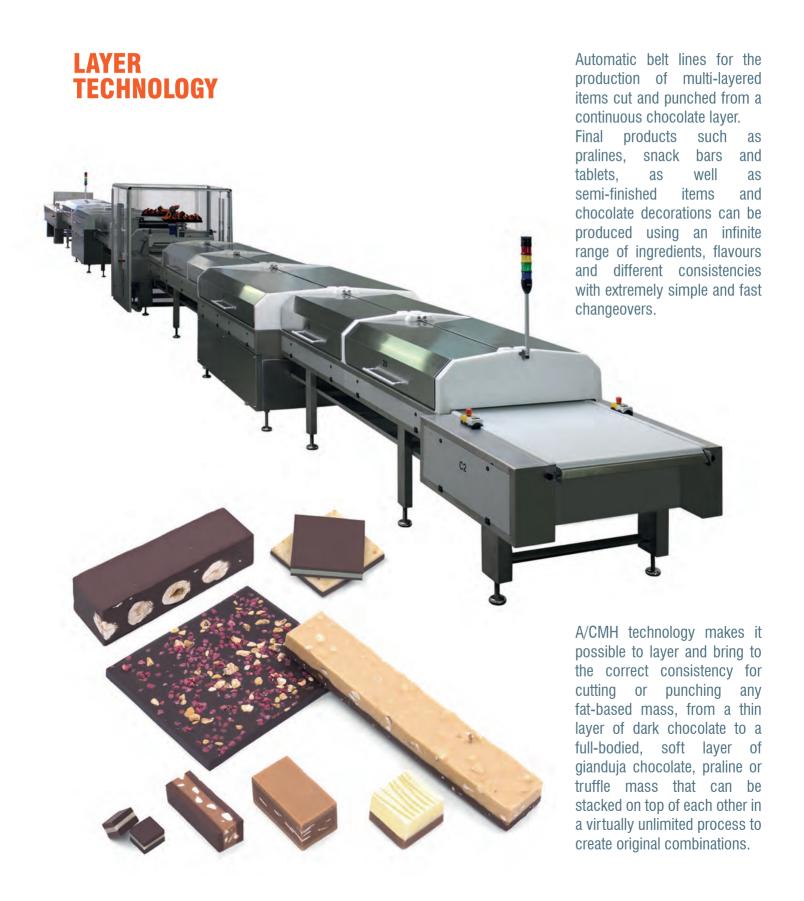
Automatic lines for the production of pralines and snacks in wafer shells that combine Delver's extensive experience in moulding technology with that in cutting and punching systems.

In the Wafer Cream lines, the wafer sheets with cavities are used as moulds. The creamy or sugar-based fillings are deposited with maximum precision into the cavities together with small or large-sized granules. The crunchy wafer shells perfectly protect the creamiest fillings, preserving them and providing an excellent barrier to keep the fats from migrating.



After filling and cooling, the individual products are portioned by cutting or punching the wafer sheets and separating the wafer reworks in completely automatic stations, from which the articles are directed to the enrobing or decoration lines.

BELT LINES A/CMH



CUTTING SYSTEMS

Different combinations of sophisticated cutting systems allow to portion the chocolate layer in the required products with outstanding results for each item category.



CROSS CUTTER

For cutting thick, multi-layered items that also contain large-sized granules

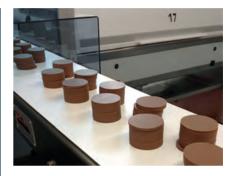




GUILLOTINE

For the production of thin or small sized items and to reach the highest output





PUNCHER

For punching rounded or irregular shapes, such as discs for chocolate coins



DECORATION

The production process on A/CMH lines makes it easy to finish the items with different decorating techniques, from granules sprinkling to coloured cocoa butter spraying and serigraphic printing transfer, all of which can be integrated in the line with the desired automation level.



BELT LINES A/DE



The line is completed by a sophisticated cooling control system and the most advanced high-speed cutting technology that allows to produce on a single line the complete range of semi-finished items for re-melting, inclusion and decoration.

Automatic belt lines designed for the production of deposited or extruded semi-finished items such as chocolate drops and mini-drops, bars, chunks, curls, flakes and shavings.

Chocolate, fat based creams and compounds for enrobing or bake stable can be used with no differences on the line.

A/DE lines make use of the unique characteristics of the DE depositors-extruders that are able to combine depositing and extruding functionalities in a single device, switching in a few seconds from depositing chocolate drops to extruding continuous ribbons to be cut into the required item sizes.

EXTRUSION

DEPOSITING





BELT LINES A/DT

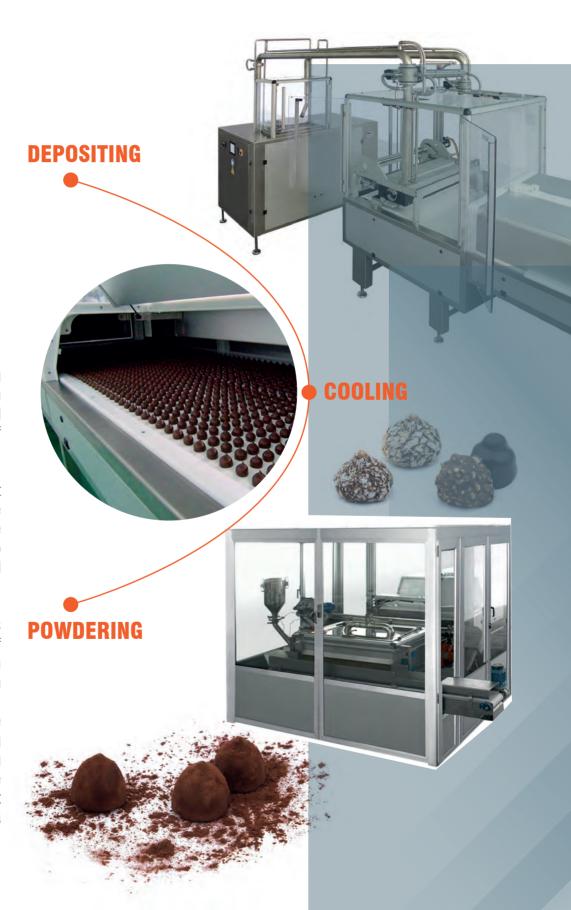
Automatic lines for the production of chocolate truffles and belt deposited pralines.

The A/DT lines guarantee perfect control and complete automation of the production process for these delicate items, while maintaining the appearance of an artisan creation.

Sophisticated product forming stations combine maximum accuracy in item depositing and forming with perfect control of mass conditions stability.

After that, accurate and efficient cooling tunnels prepare the product to be transferred to the enrobing lines or, if required, to the station for being decorated with cocoa powder.

The TP decorating stations ensure the uniform enrobing of chocolate truffles with a thin layer of cocoa powder, which is ideal for item decoration, guaranteeing proportionate flavouring and facilitating wrapping. The TP decorating stations also protect the surrounding work environment from the dispersion of cocoa powder.



CONCHES CH

Conches for chocolate and creams with output starting from 500 kg per batch.

The CH conches reproduce the conching process of traditional longitudinal conches, improving their efficiency through an innovative circular movement that eliminates downtimes and static areas in the mass.

The forced ventilation on a large film of chocolate speeds up oxidation, reduces acidity and humidity to the desired values and eliminates unpleasant odours.







It is easy to clean every part of the CH conche when changing the product, which usually is, on the contrary, a very complex operation to carry out during this phase of the process.

TEMPERING MACHINES TEMPERMASTER

TEMPERMASTER automatic and continuous tempering machines use an exclusive tempering system designed to reach the highest standards of product shine and stability in combination with extremely quick and simple product changeovers.

They are also provided with a user-friendly graphic interface supervising system that makes it easy for the operator to optimise the process parameters according to the characteristics of each product.



TEMPERMASTER CX

Tempermaster CX for an output starting from 200 kg/h. The vertical layout of the tempering unit was designed to minimise the overall dimensions and guarantee complete emptying during production changeovers in order to minimise cleaning times and the risk of contamination.



TEMPERMASTER CXO

Tempermaster CXO for an output starting from 1.000 kg/h. Fitted with multiple tempering units with highly sophisticated individual electronic control of the process to reach tempering perfection at high production levels.



CONTINUOUS MIXERS MIXERMATIC



Automatic and continuous mixers for chocolate and creams designed to drastically simplify the management of a wide range of different flavourings.

Mixermatic mixers make it possible to add an infinite variety of flavours, colours and inclusions to chocolate, creams or neutral compounds just before depositing or filling, moving the complexity deriving from the addition of contaminating elements downstream of the production process.

On the one hand, this makes it possible to drastically reduce the required investments in storage, tempering and transport piping systems and, on the other hand, it exponentially improves the efficiency and flexibility of the entire production facility, extremely reducing the adjustment times and costs when new items are put in production.

Furthermore differently from batchwise flavouring, Mixermatic grants a constantly controlled process, freed from human miastakes, is carried out.



The production areas which benefit from a Mixermatic mixer installation are multiple:

SEMI-FINISHED ARTICLES

semi-finished articles conceived for re-melting or inclusion and decoration items



FINAL ARTICLES DECORATION

premium pralines or decorated seasonal items



DIRECT FILLING INTO BOXES AND JARS

creams and compounds used for filling or icing, as well as the flavoured bases for pastry, ice-cream or pastry products.



DEPOSITORS



DEPOSITORS DE MULTISHOT

Thanks to the combination of multiple independent dosing units, they can manage the simultaneous depositing of 2, 3 or even 4 different fat-based masses to form eye catching multicolour bombons and fancy decoration items.



Servo-controlled piston depositors designed to guarantee maximum precision when depositing any fat, sugar-based or liquid mass, low to high viscosity, also using the one-shot system.

The mechanical design of these depositors as well as the sophisticated supervision and programming IT system are conceived to reach maximum depositing precision, accurate article forming control and absolute reliability.

The CDP depositors can be fully disassembled and easily extracted from the production line to allow for fast and complete cleaning, so to make product changeovers easy.

PISTON DEPOSITORS CDP





One-shot piston depositors designed to reproduce the characteristics of precision and reliability of the large Delver industrial lines on a small scale.

The CDP MINI depositors are designed to guarantee maximum flexibility, minimising the cleaning times when changing the product, which is especially frequent in artisan production, while maintaining maximum depositing precision and the most accurate control in article forming.

Their graphical interface supervising software was designed to make the setting of their sophisticated depositing functions simple and intuitive.

ONE-SHOT DEPOSITORS CDP MINI





FORMING DEPOSITORS ROC

Forming depositors designed to deposit hand-made looking crunchy items with a high percentage of whole or chopped granules directly onto the belt.

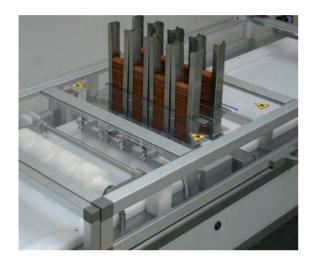
The ROC depositors make it possible to produce a wide range of items of different shapes and sizes, as well as with different types of inclusions, without the need to replace any parts on the machine.

They are also provided with an automatic and continuous ingredient mixing system integrated directly into the feeding hopper, which was designed to protect even the most delicate granules.

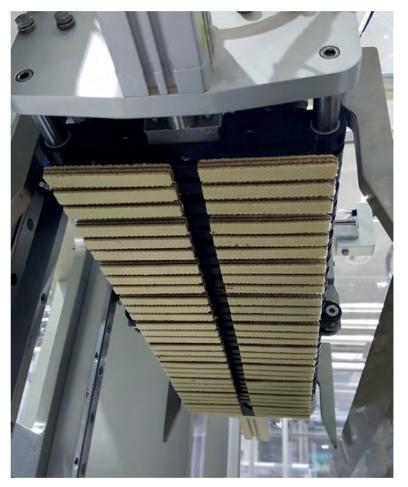


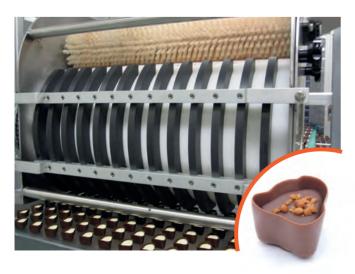
ACCESSORY DEVICES

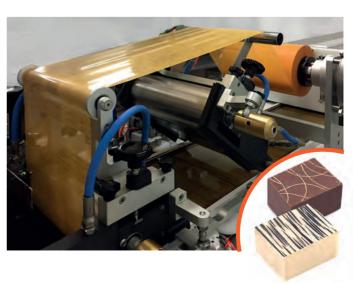
Granule and dry fruit depositors, cut and place units for wafers and biscuits, decoration and recovery systems are designed to be integrated at any moment into existing Delver lines in order to progressively increase line versatility and guarantee continuous adaptation to changing market requirements.













+39 059 367124 • delver@delver.it www.delver.it