



**GUM & JELLY · CHOCOLATE · HARD CANDY
FONDANT & TOFFEE · VISCOUS MASSES · OTC**

**TECHNOLOGY FOR THE
CONFECTIONERY INDUSTRY**



WDS SERVICE**2 – 3**

ABOUT WDS	2
FULL-SERVICE PROVIDER	3

**GUM & JELLY
IN STARCH****4 – 7**

MOGUL PLANT TYPE 462B/1 AND 462CL	5
MOGUL PLANT TYPE 462B/1GL	6
MOGUL PLANT TYPE 660	7

**GUM & JELLY
STARCHLESS****8-13**

Confec ECO - Jelly	8
Confec PRO - Jelly	10
Confec VARIO - Jelly	12

CHOCOLATE**14 – 21**

MOULDING PLANT TYPE 273	15
Confec ECO	16
Confec PRO	18
Confec VARIO	20

**FONDANT, TOFFEE &
HARD CANDY****22 – 23**

DEPOSITING PLANT TYPE 163/165	22
-------------------------------	----

VISCOUS MASSES**24 – 25**

EXTRUDER TYPE 352	24
-------------------	----

**LAB EQUIPMENT
& TECHNOLOGY LAB****26 – 27**

LAB DEPOSITOR	26
WDS LAB & INNOVATION CENTER	27

**TECHNICAL
SERVICE****28 – 29****SWEET OTC****30 – 31**

EVERY PASSION STARTS FROM TECHNOLOGY WITH KNOW-HOW!

Winkler und Dünnebier Süßwarenmaschinen GmbH stands for quality, innovation and tradition worldwide for more than hundred years and thus, is one of the world's leading manufacturers of confectionery machines.

As a specialist for moulding plants, we are able to cover the entire spectrum of deposited sweets with different applications and throughputs.

We know that quality, innovation, short response times and a worldwide distribution built on superior customer service are exactly the requirements that the global markets demand from a modern company of our time.

Through the decades of experience as one of the world's leading manufacturers of confectionery machines, WDS knows the requirements of its clients, but also the market mechanisms with which customers have to deal day by day very precisely. For this reason, WDS is no longer only a manufacturer of confectionery machines, but also a service provider that supports its customers in all areas related to production.

FROM THE PRODUCT IDEA TO THE PRODUCTION PLANT

... AND FAR BEYOND!



Engineering



Production



LifeCycleCare - an entire machine life long



Product technology & innovation center

The WDS-broad-based service department offers detailed advice, modernisation of existing facilities, local staff training and services far beyond.

It offers individual support with qualified personnel available in a 24h service for any questions and tasks, in order to limit possible machine downtime to a minimum.

Furthermore WDS has got a special service concept. With LifeCycleCare we are at your side - an entire machine life long. Commissioning, start-up service, troubleshooting and optimisation can be carried out by our serviceteam via remote maintenance or on site.

UNLIMITED VARIETY FOR GUM & JELLY

Confectionery of gum and jelly is very popular with the consumers. With the WDS Mogul plants there is hardly any limit in the manufacture of attractive products. Combine exceptional shapes with the widest variety of colour and filling possibilities and produce confectionery that stands out on the markets.



Scan and
learn more

Mogul plant *TYPE 462B/1 AND 462CL*

The Mogul Plants Type 462B/1 and 462CL are customised for the manufacture of all starch-moulded products, such as jelly and gum (on pectin basis, gum arabic, gelatine, agar-agar, carrageenan) as well as liquorice, fondant, cream, marshmallow foam and similar items. Furthermore, the equipment is suitable for depositing liqueur.



Highlights

- Optionally continuous or intermittent starch tray transport, depending on product requirements
- Depositing chain outside the product area
- Large selection of depositors, half-tray or full-tray technology, Mono, One-Shot, Starlight with filling
- Brushless design of the whole plant
- Extractable sifting unit with separation and cleaning sieve
- High plant availability
- Low maintenance
- Easy operation and highest hygienic standards

Technical Data

- Plant speed Mogul 462/B1 up to 32 trays per min.
- Plant speed Mogul 462/CL up to 35 trays per min.
- Working high Mogul 462/B1 1340 mm, Mogul 462/CL 1410 mm
- Tray dimensions Mogul 462B/1: 760 – 840 x 360 – 440 mm
- Tray dimensions Mogul 462CL: 1160 – 1240 x 360 – 440 mm
- Starch tray stacking height up to 3200 mm
- Steel pallets for 2 or 3 stacks
- Up to 12 colours/flavours per depositor
- Pump system depending on product data, i.e.

Mogul 462B/1	Full-tray system up to 22 x 38 pistons
	Multiple-stroke system up to 14 x 42 pistons
Mogul 462CL	Full-tray system up to 22 x 56 pistons

Mogul plant TYPE 462B/1GL

The Mogul Plant Type 462B/1GL is designed for the manufacture of all starch-moulded products such as jelly and gum (on pectin basis, gum arabic, gelatine, agar-agar, carrageenan) as well as liquorice, fondant, cream, marshmallow foam and similar items. Furthermore, the equipment is suitable for depositing liqueur and especially for all products which are to be coated with chocolate subsequently.



Highlights

- Optionally continuous or intermittent starch tray transport, depending on product requirements
- Depositing chain outside the product area
- Large selection of depositors, half-tray or full-tray technology, Mono, One-Shot, Starlight with filling
- Brushless design of the whole plant
- Regimented discharge onto wire mesh belt
- Extractable product-cleaning unit
- High plant availability
- Low maintenance a.o. thanks to programmable single servo-electrical drives

Technical Data

- Plant speed up to 22 trays per min.
- Working height 1370 mm
- Starch tray dimensions 790 – 828 x 360 – 420 mm
- Starch tray stacking height up to 3200 mm
- Steel pallets for 2 or 3 stacks
- Up to 12 colours/flavours per depositor
- Pump system depending on product data, i.e.
Full-tray system up to 22 x 38 pistons
Multiple-stroke system up to 14 x 42 pistons

Mogul plant TYPE 660

The Mogul Plant type 660 enables highest accuracy thanks to WDS GuidedPusherSystem (GPS). All starch-moulded products on pectin, gum arabic, gelatine, agar-agar or carrageenan basis as well as liquorice, fondant, cream, marshmallow foam and similar items can be manufactured. Furthermore the equipment is suitable for depositing liqueur. The large variety of depositing systems, full-tray technology, Mono, One-Shot, Starlight with filling etc. allows various depositing processes.



Highlights

- Professional processing with stainless steel and rust-proof materials
- Various depositing processes through easy extension
- Easy accessibility and maintenance, extractable sifting station with proven WDS-flat sieve
- Delivery of complete systems with starch-conditioning equipment, cooling tunnel and product finishing
- Chainless tray transport failure-free thanks to WDS-GuidedPusherSystem
- Extractable depositor

Technical Data

- Mechanic plant speed up to 35 trays per minute
- Up to 8 colours/flavour per depositor
- Pump system depending on product data
Full-tray system up to 22 x 38 pistons
- Tray dimensions 360 – 440 x 760 – 840 mm
- Starch tray stacking height up to 3200 mm
- Pallets for 2 or 3 stacks
- Working height 1340 mm / 1370 mm

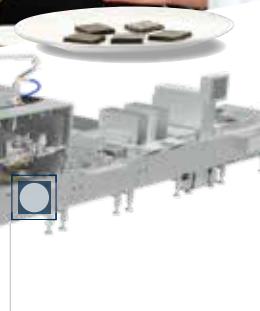
ConfecECO

The ConfecECO was specially developed for emerging companies and manufacturers. It makes the cost-effective production of high-quality solid and filled gum and jelly products on the basis of pectin, carrageen, toffee and fondant in different sizes and quantities possible. Three automation levels in two plant widths allow customised configuration and production capacity. The ConfecECO XL was equipped with a wider mould format and is designed for higher production capacities.



ConfecECO-DC

ConfecECO-DCM



ConfecECO-D

1 ConfecECO-D

Manual mould supply, spraying, depositing, manual mould withdrawal.

2 ConfecECO-DC

Manual mould supply, spraying, depositing, cooling, manual mould withdrawal.

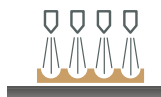
3 ConfecECO-DCM

Full line featuring spraying, depositing, cooling and ordered demoulding in combination with a fully automated mould circulation. Mould exchanger or plate inserter can also be integrated.



Technical Data

	ConfecECO	ConfecECO-XL
• Output:	up to 250 kg/h	up to 700 kg/h
• Mould sizes (mm):	462x275x30-40	640x275x30-40
• Mould material:	Polycarbonate, Silicone, Blister (option)	
• Speed:	8 moulds/minute	



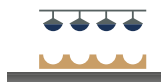
SPRAYING
Precise wetting of the individual mould cavities with release agent



DEPOSITING
Highly precise dosing of the gum and jelly masses



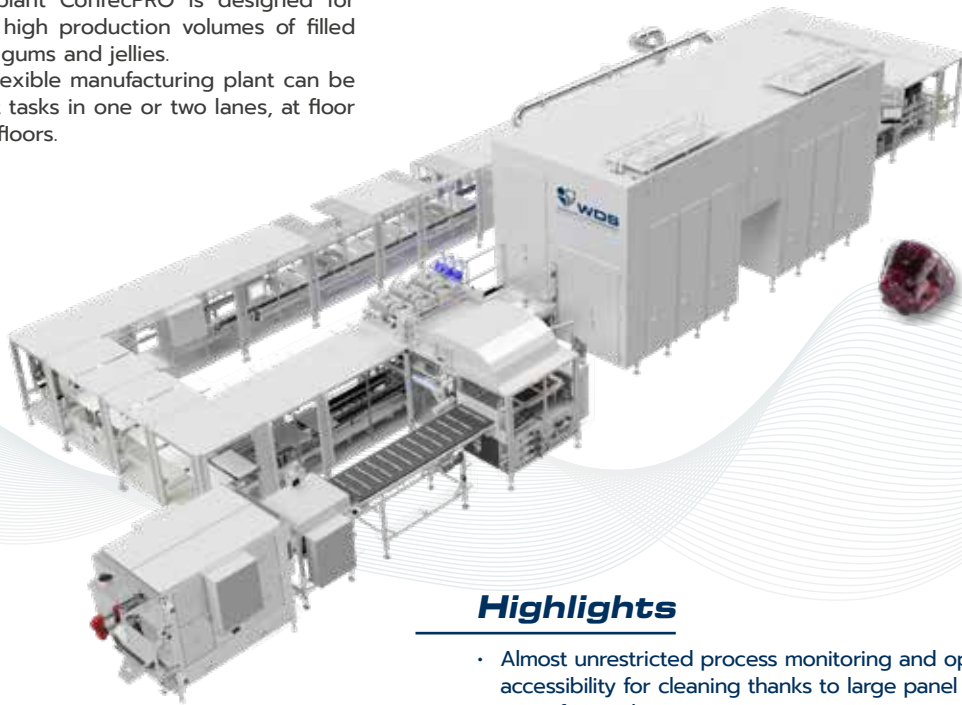
COOLING
Automatic product cooling inline



DEMOURDING
Ordered and gentle demoulding

ConfecPRO

The WDS moulding plant ConfecPRO is designed for moulding medium to high production volumes of filled and solid, fast setting gums and jellies. The modular, highly flexible manufacturing plant can be designed for different tasks in one or two lanes, at floor level or over multiple floors.



ConfecPRO

SOPHISTICATED FOR GUM AND JELLY

Starchless moulding of gum and jelly products with WDS ConfecPRO-Jelly meets the highest hygiene standards when conventional moulding processes employing starch reach their limits. Due to its particular cleanliness and avoidance of cross-contamination, ConfecPRO-Jelly is ideally suited for the production of gum and jelly products with special requirements.



Highlights

- Almost unrestricted process monitoring and optimum accessibility for cleaning thanks to large panel doors and open frame design
- Maximum depositing accuracy due to precise in-house manufacturing and wear-resistant materials
- Short set-up times for mass changes thanks to tool-free quick change of almost all plant parts in contact with mass (EasyClean)
- Compliance with the highest hygiene standards
- Fast on-site installation and easy expansion through decentralized control principle and modular components
- Floor clearance of at least 350 mm
- Wide variety of products and technologies

Technical Data

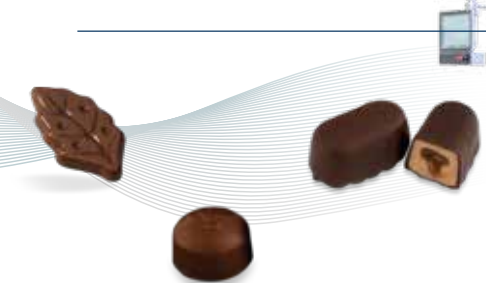
- Mould size 860 mm x 450 mm x max. 35 mm
- Plant speed up to 25 Formen/min
- Output at 5.5 g/product up to 3,8 t/h (depending on product and speed)
- Working height 1000 mm

ConfecVARIO

The new WDS machine concept ConfecVARIO ensures efficient and highly economical production of your confectionery products. The modular structure enables a high scalability of the system. Incorrect production or production downtimes due to plant downtimes are minimized by the modular structure, because parts of the plant can continue to produce when other sections fail.

Variety

Due to the flexible plant concept, the simultaneous production of different products and masses is possible and facilitates the realization of new ideas.



Versatility

The modular design enables a multitude of different plant layouts, each of which can be optimally adapted to the production conditions.

Velocity

High process speeds combined with short set-up times ensure a large output in the shortest possible time.

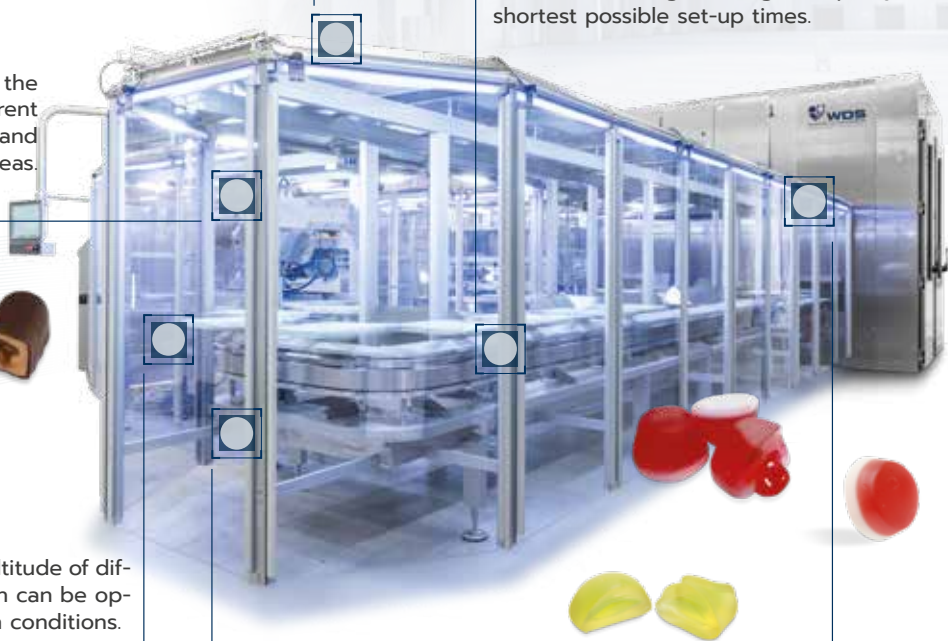
Different speeds in ongoing production are possible. The slowest process does not affect the overall line speed.

Innovation.

The new, chainless drive system opens new possibilities for highly efficient production.

Hygiene.

Sophisticated design and functionality ensure fast cleaning with highest quality and shortest possible set-up times.



Volume

Parallel processes for maintenance, repair or cleaning during ongoing production result in a high availability of the entire plant.

Flexible dwelling times for medium to high capacities on the same system alternately possible.

UNLIMITED VARIETY FOR CHOCOLATE

With the right manufacturing plants it is possible to make the widest variety of products from chocolate. The WDS-Moulding Plant Type 273 enables you to produce an almost infinite combination of shapes, fillings and colours. This allows you to react quickly to discerning market requirements and meet consumer and trade expectations.



Moulding plant TYPE 273

The WDS Moulding Plant Type 273 is designed for the production of solid chocolate products with or without ingredients and filled products by means of One-Shot (center depositing) as well as Triple-Shot technology.



Highlights

- Compact design: effective production with reduced space requirements
- Versatile production of different solid and filled chocolate products
- Future-proof through easy extension
- Easy operation: sophisticated design, good accessibility
- Highest production capacity thanks to loosemould system with mould carrier and continuous conveyor

Technical Data

- Plant speed up to 70 moulds per min.
- Mould size of 892 x 220 mm up to 1172 x 420 mm
- Output up to 18 t/h
(depends on product, mould size and speed)



Scan and
learn more

ConfecECO

The ConfecECO was specially developed for emerging companies and manufactories. It makes the cost-effective production of high-quality solid and filled chocolate products in different sizes and quantities possible.

Three automation levels in two plant widths allow customised configuration and production capacity.

The ConfecECO XL was equipped with a wider mould format and is designed for higher production capacities.

ConfecECO-DCM



ConfecECO-D

ConfecECO-DC



Highlights

- High flexibility through modular production line
- Future-proof through easy extension
- Variety of production facilities and different solid and filled chocolate products and products from gum & jelly
- Precise mass dosing to ensure accurate product weights
- Compact design for efficient production with reduced space requirements

1 ConfecECO-D

Core piece is the basic ConfecECO-D Mono, One-Shot, Triple-Shot or Inclusion* execution: "D" means depositing and this stage features the most important machine units relevant for the depositing of different masses, respectively the functions manual mould supply, mould heating* for chocolate or spraying for jellies, depositing, vibration*, manual mould withdrawal.

2 ConfecECO-DC

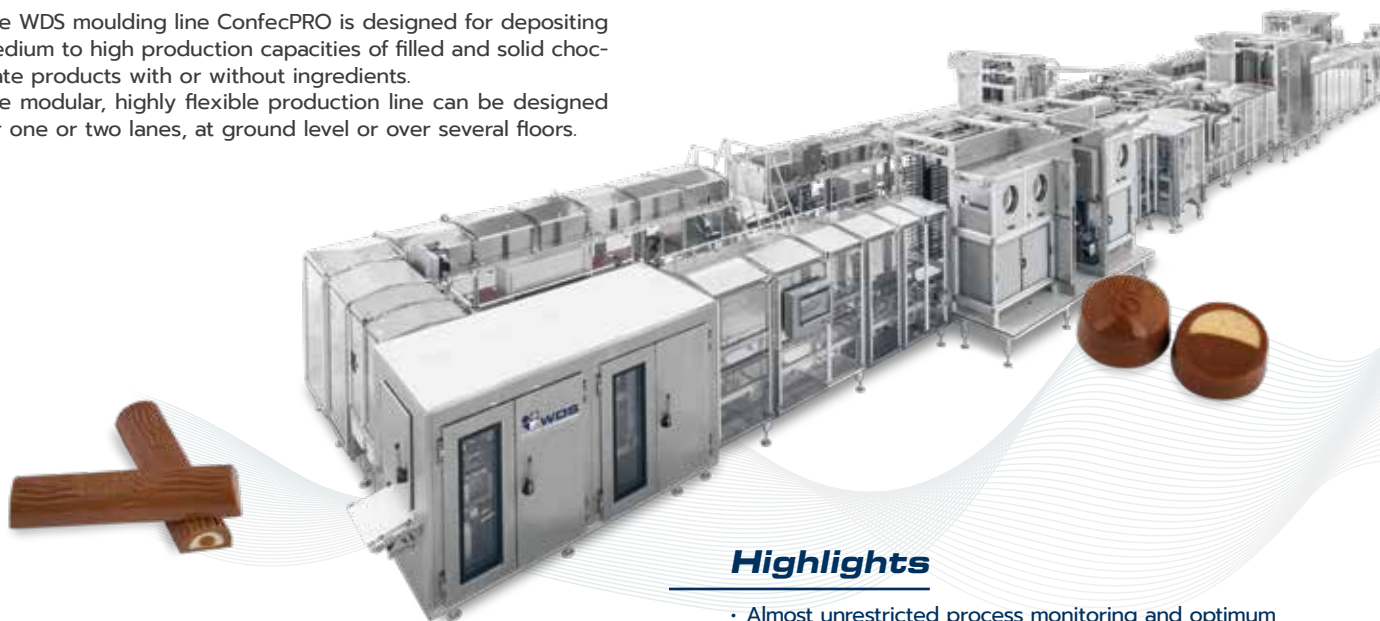
Second stage is the ConfecECO-DC: "DC" represents the depositing section completed by a standardized cooling cabinet. An upgrade by adding the cooling cabinet (30 min.) to the existing basic execution, thus changing a ConfecECO-D Mono into a Confec-ECO-DC Mono (with cooling) will be possible so that the machine can grow with the demands of the customer. In addition, also the later retrofit from a Mono to a One-Shot depositor will be possible at any time.

3 ConfecECO-DCM

Finally, the 3rd stage is the ConfecECO-DCM: "DCM" stands for Depositing + Cooling + Mould handling. The DCM execution represents the full line, featuring a complete depositing unit, cooling cabinet and demoulding section in combination with a fully automated mould circulation. A mould exchange unit or a plate feeder can also be integrated in this execution. Of course, those functions can also be added to the ConfecECO-DC later.

ConfecPRO

The WDS moulding line ConfecPRO is designed for depositing medium to high production capacities of filled and solid chocolate products with or without ingredients. The modular, highly flexible production line can be designed for one or two lanes, at ground level or over several floors.



ConfecPRO

WELL THOUGHT OUT TO THE LAST DETAIL

Due to the modular design of the WDS ConfecPRO, an adaptation or extension of the plant based on changing customer requirements is possible at any time. The decentralized control concept allows adding stations, especially when free spaces are planned. Through this flexibility and the large number of available aggregates, the widest possible product range can be realized.

Highlights

- Almost unrestricted process monitoring and optimum accessibility for cleaning thanks to large panel doors and open frame design
- Maximum depositing accuracy due to precise in-house manufacturing and wear-resistant materials
- Short set-up times for mass changes thanks to tool-free quick change of almost all plant parts in contact with mass (EasyClean)
- Compliance with the highest hygiene standards
- Fast on-site installation and easy expansion through decentralized control principle and modular components
- Floor clearance of at least 350 mm
- Wide variety of products and technologies:
 - ▶ Pralines, bars or tablets with or without ingredients
 - ▶ Solid or filled products
 - ▶ Multi-shot, cold stamping, shell forming, book mould and bunghole

Technical Data

- Mould size 425 – 860 mm x 275 – 450 mm
- Plant speed up to 25 moulds/min
- Output up to 5 t/h
(depending on product, mould size and speed)
- Working height 1000 mm

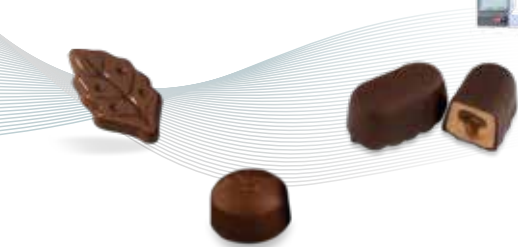


ConfecVARIO

The new machine concept ConfecVARIO ensures efficient and highly economical production of your confectionery products. The modular structure enables a high scalability of the system. Incorrect production or production downtimes due to plant downtimes are minimized by the modular structure, because parts of the plant can continue to produce when other sections fail.

Variety

Due to the flexible plant concept, the simultaneous production of different products and masses is possible and facilitates the realization of new ideas.



Versatility

The modular design enables a multitude of different plant layouts, each of which can be optimally adapted to the production conditions.

Velocity

High process speeds combined with short set-up times ensure a large output in the shortest possible time. Different speeds in ongoing production are possible. The slowest process does not affect the overall line speed.

Innovation.

The new, chainless drive system opens new possibilities for highly efficient production.

Hygiene.

Sophisticated design and functionality ensure fast cleaning with highest quality and shortest possible set-up times.



Volume

Parallel processes for maintenance, repair or cleaning during ongoing production result in a high availability of the entire plant. Flexible dwelling times for medium to high capacities on the same system alternately possible.

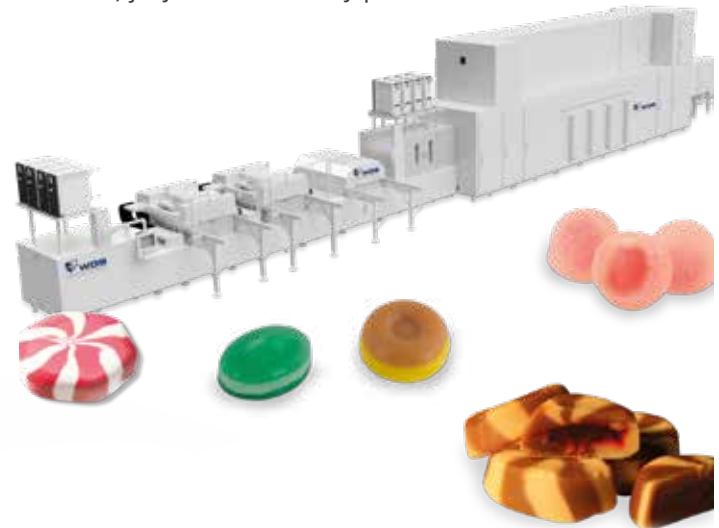
FINEST CONFECTIONERY CONVINCING IN TASTE

Confectionery products made of fondant, toffee and jelly are not only expected to taste as good as hard candies but also have to be attractive in shape and colour with sophisticated fillings. With the WDS-Manufacturing plants you are able to create attractive products and you will always meet the taste of consumers – worldwide.



Depositing Plant TYPE 163/165

The compact, modularly constructed WDS Moulding Plant Type 163/165 is designed for the production of fondant, toffee, jelly and hard candy products.



Highlights

- Servo-electrical drives
- Memory capacity for almost unlimited number of recipes
- Frame construction of aluminium solid profiles with stainless steel coating
- Loose-mould plant with well-proven mould carriers
- Continuous product discharge
- Hygienic plant design, easy maintenance and user friendly
- Mould exchange station including empty mould detector thanks to loose-mould principle

Technical Data

- Plant speed up to 50 moulds per min.
- Mould size: 1052 x 135 x 40 mm / 1052 x 165 x 40 mm
- Silicon moulds with plastic frame or coated aluminum mould with one ejector pin and return spring per product
- Capacity up to 2 t/h (depending on product weight)

SPOT-ON DOSING

The WDS Piston and Ribbon Extruder Type 352 allows the manufacturing of pretzels, rings and similar figures. By use of a likewise servo-electrical lifting table, a product design in z-direction for e.g. spherical products is achieved. Swirled products can be extruded with fixed or driven nozzles and thus obtain their special shape.



Scan and
learn more

Extruder TYPE 352

The WDS Extruder Type 352 with secure functions and an appealing design has been developed especially for the depositing of highly viscous masses. The flexible extruder generation is alternatively available with a piston-metering system or with a pump system designed to produce ropes.



Highlights

- Versatile production of ropes or single products with one extruder
- Controlled mass infeed for gentle handling of product masses
- Extrusion of sophisticated product geometries by 3 moving axes (x-, y-, z-axis) and the widest variety of depositing nozzles
- High product output by high line speed with best availability
- Easy and quick cleaning of components

Technical Data

- Plant speed up to 35 piston strokes per minute
- Working width up to 1000 mm
- Up to 4 piston rows
- Piston diameter 19–24 mm
- Piston stroke up to 50 mm
- Viscosities 4–25 Pas

Laboratory Depositor

FOR ALL TYPES OF POUR- AND TEARABLE MASSES

WDS laboratory depositors are provided with special depositing systems which enable the production of various articles with up to three different masses at once – ideal for all sample productions in product and process development.

The machines are equipped with servo-electrically controlled, menu-supported operator guidance. Thanks to the machines' depositing and control systems, comparable to those used in the WDS industrial size plants, all trial results can be scaled up to the large scale plant.



Basic equipment

- Standard depositor with 3 servo-electrical piston drives for Mono, One-Shot and Triple-Shot dosing
- 3 servo-electrical movement axes (x-, y-, z-axis)
- Servo-electrical mould transport, adjustable to different mould sizes
- EasyClean design
- Separate servo drive for special functions
- Operating panel with clearly arranged touch screen, program storage, multilingual
- Easy and mobile design: Electrical cabinet and tempering unit integrated in the frame
- Separate heating circuits (for filling and shell masses), temperature range: 20 °C –150 °C
- Free of lacquer, mainly stainless steel and aluminium
- Mobile plant thanks to castors with brakes



WDS PRODUCT TECHNOLOGY LAB

The WDS product technology lab specializes in the development of new and the optimization of well known and existing depositing and moulding processes for the confectionery industry.

A large team of technologists with many years of professional experience supports and trains our customers. Modern servo-electrically driven pilot plants like depositors, cold stamping systems and stations for other process technologies are available (cooling, heating, book moulding, shell moulding, demoulding, post-treatment etc.).

The technology lab is very flexible and can quickly adapt to different product requirements. It thus offers ideal conditions for optimum sample production.



Overview of Service

- Development of new depositing processes and optimisation of existing depositing processes
- Technological support for product development, process engineering and production control
- Complete developments of commissioned products in connection with plant projects and product modelling
- Training, workshops and demonstrations
- Pilot plants are available for all applications according to the latest technical standards
- Sample production in lab scale
- Rental of pilot plants with WDS-service technician on site

WORLDWIDE NETWORK

Customers' success is our goal! Our work is characterized by our focus on the best possible service as well as comprehensive advice and support.

With our keynote „Customer care with method“ we developed a network of explanations, services and support offers which is organized modularly step by step. Thereto belong, amongst others, detailed plant documentation, remote maintenance by modem and the individual customer support in all aspects of confectionery production.

MAINTENANCE & SPARE PARTS SUPPLY GUARANTEED SAFE

Regular plant inspections are the key to a smooth production process. Therefore it's a matter of course that WDS supports you with specialist staff and corresponding spare parts

- Support by a qualified service team
- Shortest delivery times
- Extensive warehouse stock
- In-house spare parts production



WDS PERFORMANCE INSPECTOR

WDS Performance inspector is the basis for a secure and transparent collaboration. The heartbeat of your plant is supervised to ensure that the remote access is available at any time when required. Detailed work reports and connection protocols record every remote access to your plant.

With an automated defect data analysis and evaluation weak points and problematic areas of your plant are reliably shown. This helps to continuously improve your production and increases the room for manoeuvre for an economic confectionery production.



Scan and
learn more



LIFECYCLECARE

AT YOUR SITE AN ENTIRE MACHINE LIFE LONG

Maximum confectionery production through WDS LifeCycleCare. Benefit from the unbeatable potential of WDS Service.

- Commissioning, simple support and operating support
- Regular check on the remote maintenance connection (heartbeat)
- Highest security standards and transparency
 - Encryption of all connections according to current safety guidelines
 - Protocol of all connections/activities
 - Defined responsibilities: Access for authorised experts only
- WDS experts for all areas are virtually at your side
- 24/7 availability of remote maintenance experts included as an option
- Full flexibility of services

Advantages

- **Expert Care:** WDS experts for all areas are virtually at your side
- **Operating Support:** Support and Optimisation as well as check on the remote maintenance connection through the heartbeat function
- **Analytics & Reporting:** e.g. automated Performance Inspector
- **Managed Security:** Safe and certified exchange of machine-related data via Ewon

REPAIR PUMP SYSTEM NON-STOP CONFECTIONERY PRODUCTION

Pump systems are the heart of your system and are largely responsible for the quality of your products and the efficiency of your plant. The high-precision components are continuously exposed to enormous thermal and abrasive loads in production.

For this reason, regular quality assurance overhauls are indispensable.

SUCCESSFULLY OPEN NEW MARKETS WITH ACTIVE OTC-SWEETS

As a specialist in the development and manufacture of confectionery machines, we are one of the leading suppliers of technologies and machinery for the production of active OTC-sweets and cannabis products (OTC = Over the counter).

For years, the number of confectionery products that are transformed into products with health-promoting or biologically effective properties through the addition of various food supplements has been on the rise. In the market, OTC products such as dietary supplements or nutraceuticals are very widely accepted as sensible, health-promoting additions to our daily diet. From vitamin sweets to fruit gums against headaches or for falling asleep and calming down – the market is diverse and constantly growing. The fruit gum or candy is becoming the modern tablet.

There is also great growth potential for over-the-counter medicines in the pharmaceutical sector. For example, medically effective analgesics (pain-killers) or cannabis oils (CBD) are already being used in some countries.



CUSTOMIZED FOR YOUR REQUIREMENTS

As a specialist in moulding lines, we can cover the entire spectrum of deposited OTC-sweets and supplement confectionery with a wide variety of applications and capacities. Our plants are customer-specifically optimized to ensure the best possible product quality with maximum efficiency and profitability. The exact dosing of active additives and the fulfilment of GMP-conformity for quality assurance is our main focus.

Services

- Cavity-specific spraying of the moulds, no overspray
- Minimum heat retention times with SmartPipe
- Effective and fast cooling in paternoster refrigerators
- Orderly and product-friendly demoulding
- Qualified and compliant with GMP regulations
- No multiple handling of moulds
- Dosing into different mould types
- Empty mould check with automatic mould exchanger
- Shift register: direct ejection of defective moulds

WDS
WINKLER und DÖNNEBIER
Süßwarenmaschinen



Scan and
learn more

