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MASBORG

ABOUT US: Why HASBORG:

• 25 years in the confectionery business providing machines and devices for production automation • our machines are present in over 50 countries around the world

• own team of experienced designers and engineers • we listen to and implement the ideas of practitioners from the confectionery industry

• we introduce innovative solutions that facilitate work

• we have a wide offer intended for small scale production as well as for large industrial production

• we have a modern machine park and we are able to produce technologically advanced parts

• all parts are made in European Union

• we have an extensive laboratory for testing new solutions and developing individual recipes

• we conduct our own research and development works HA

• we provide full technical support at the implementation and operation stage

• we provide warranty and post-warranty care provided by an experienced team of service technicians equipped with remote diagnostic systems

• we implement individual projects which require specific solutions taking into account the client's needs and we adapt projects to the dimensions of the client's production hall

 we sell through a net of distributors and local representatives in various parts of the world

• we provide training, seminars and demonstrations both in our facilities, on site at the client's premises, as well as on-line, adapting to individual needs and preferences

Production Plant





TWE CARE ABOUT THE ENVIRONMENT Our machines and devices are designed to achieve target of lowest possi-

ble energy consumption.

We use energy-saving drive systems, modern and efficient heat exchangers. That technology allows us to reduce the consumption of utilities such I as gas or electricity.

Our products are made of durable materials that meet strict standards for the food industry.

The customer gains, the nature that surrounds us gains.

WE CARE ABOUT PFOPLE

From the very beginning, HASBORG has been guided by the principle that good products are created by people who approach work with passion and commitment. Modern solutions are created in teams that take care of every detail, to the satisfaction of customers who can enjoy the investment in HASBORG machines for many years.

WE CARE ABOUT THE MACHINES

Each of our products pass the rigorous tests before leaving the plant, which gives us the certainty that it will work for the client for many years to the satisfaction of all of us.

BUT WHAT IF A FAILURF OCCURS?

Neither the customer nor the machine are left without our help. Our service • is an experienced engineering staff, equipped with modern tools for remote diagnostics of HASBORG machines and devices

• short service response time, because we know that production cannot wait, ¹ so we react quickly to every request

• we provide warranty and post-warranty service based on our own human resources as well as a net of Distributors operating locally in many different markets; our partners keep their knowledge of our products up-to-date thanks to practical trainings, courses and seminars conducted in a stationary manner and with the use of modern videoconference forms

Our Engineers department

- are experienced people for whom design is a passion
- in teamwork, we create innovative solutions and tailor projects to the individual-needs of the client-
- we have innovative software for designing calculations and simulating designed devices
- we constantly improve our solutions to make them work even more effi-
- ciently





















- Slat with nozzles rotation
- Brass nozzles for one colour cookies
- Slat for top decoration

- Slat for shutter option 2 colour cookies
- オ Wire-cut system
- Slat for wire-cut option 2 colour cookies

- Slat for 2 colour cookies with 2 fillings

- Slat for sponge tops
- オ Slat for puff cookies, lady fingers
- **オ** Slat for muffins
- Automatic tray feeder
- Possible work with tunnel oven



- Brass nozzles for one colour cookies
- Brass nozzles for two colour cookies
- Slat for top decoration

- Slat for shutter option 2 colour cookies
- → Slat for wire-cut option 1 colour cookies
- Slat for wire-cut option 2 colour cookies
- Islat for wire-cut option − special shapes / patterns
- Slat for guillotine option special shapes / patterns

- Slat for muffins
- オ Automatic tray feeder

- CHOCOLATE



















TRIOMAX



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- Slat for sponge tops



- Slat with nozzles rotation
- Brass nozzles for one colour cookies
- Brass nozzles for two colour cookies
- Shutter cutting system
- ス Slat for shutter option 1 colour cookies

- Islat for wire-cut option 1 colour cookies
- ✓ Slat for wire-cut option 2 colour cookies

- **オ** Slat for muffins



- Slat with nozzles rotation
- Brass nozzles for one colour cookies
- Brass nozzles for two colour cookies

- ス Slat for shutter option 1 colour cookies

- Slat for wire-cut option 1 colour cookies

- Slat for guillotine option special shapes / patter

- Slat for muffins









- HEAD FOR MUFFINS WITH FILLING
- HEAD WITH PISTON MECHANISM
- **7** The Duomax M400 machine is a perfect example of innovation and technological development of our company. The proof of this is the exchangeable forming head installed in the DUOMAX M400 that convert this depositor into the rotary moulder machine. This solution is designed for the production of high-fat cookies squeezed from forming roller. The shapes of cookies and their patterns can be customized and designed according to the customer's expectations. The forming rollers are interchangeable and easy to replace. Converting a standard machine into the rotary moulder is quick and easy. It gives an opportunity to produce a completely new range of cookies without purchasing of a completely different machine.
- Another development of the machine is the exchangeable head for stuffed muffins.

















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BABY - MAXDROP 400

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 - Brass nozzles for one colour cookies

- Slat for sponge tops
- Slat for puff cookies, lady fingers
- Slat for muffins



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ROTARY MOULDING MACHINE ROLLS AP IS A DEVICE DESIGNED FOR THE PRODUCTION OF SHORTBREAD BISCUITS EXTRUDED FROM TO OBTAIN PRODUCTS OF VERY DIFFEREN SHAPES AND PATTERNS, WITH EMBOSSING DRAWINGS COMPANY LOGOS FTC DEPENDING ON THE SPECIFIC NEEDS OF TH CUSTOME

THE PATTERN IS CHANGED BY REPLACING THE FORMING ROLLER. IT IS ALSO POSSIBLE TO INSTALL SEVERAL DIFFERENT BISCUITS FORMS ON ROLLER WITH SIMILAR SIZE AND SHAPE, THANKS TO WHICH WE CAN GET TH

■ IT IS EQUIPPED WITH AUTOMATIC TRAY

ROLLS AP

HASBORG













EXAMPLES OF COOKIES

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FORMING NOZZLES



WIRE-CUT" PATTERNS EXAMPLES.

8 0



CHOCOLATE

We introduce a series of devices dedicated to work with real chocolate that operate independently, and can be assembled into an automatic line designed for plants producing original, effective and tasty chocolate products.

TEMPERING MACHINE HTM



- TEMPERING MACHINE HTM

TEMPERING MACHINE HTM S

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- confectioneries. ➔ It allows to coat products, fill molds and supply
 - other machines with tempered chocolate.

- Automatic tempering unit HTM is designed to provide chocolate controlled heating and cooling process within restricted temperature frame work. This technic creates possibility to control cocoa butter crystallization process, which gives chocolate required hardiness, durability and shine.
- fill with chocolate prefabricated forms, covering cakes and biscuits with a layer of tempered chocolate and as a refiller of tempered chocolate to other units like enrobers, decorators or 'praline' type dosing units.















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CHOCO MAX

- dosing system gives the pralines an impeccable, repeatable appearance.



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- This device is designed for chocolate tempering process and enrobing of confectionery products with real chocolate. A compact machine from the "Choco" line designed to coat a wide range of products with real chocolate subjected to a controlled melting and cooling process during tempering. It is perfect solution for craft plants specializing in the production of high-quality products made of real chocolate, giving them a unique look, shine and durability of the coating. Our enrobing machine allows the product to be completely covered, either only from the top or only from the bottom. It is equipped with an efficient function of "blowing system" of excess chocolate and vibration of the transporting mesh, thanks to which we obtain a smooth surface. The heated table has a positive effect on the speed of recovering unused chocolate in the process of enrobing, which returns to the tank where it is subjected to another tempering process, and from there goes again to the working tank.



Device for the automated production of pralines, chocolates and filled chocolates.









HASBORG

COOLING TUNNEL FOR REAL CHOCOLATE

Cooling tunnel with a modular structure, cooperating

with devices from the "Choco" line for real chocolate. A cooling tunnel is a modern device designed to cool various types of products, in particular coated with real chocolate or various types of coatings and masses. Most often it works directly with enrobing machines, from which the product is directed to the belt of the cooling tunnel.

















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- Islat for wire-cut option 1 colour cookies
- ✓ Slat for wire-cut option 2 colour cookies
- Islat for wire-cut option special shapes / patterns
- Guillotine cutting system
- Islat for 2 colour cookies with 2 fillings
- ↗ Roller option for flat cookies

- ↗ Slat for puff cookies, lady fingers





INDUSTRIAL FORMING MACHINES

- A SERIES OF MACHINES OPERATING IN THE TECHNOLOGICAL INDUSTRIAL LINES INDUSTRIAL PROCESSING DEPOSITORS CAN BE EQUIPPED WITH 4 TANKS (QUATROMAX), 3 TANKS (TRIOMAX), 2 TANKS (DUOAMX) OR ONE TANK (MAXDROP).

TANDEM







High production efficiency

industrial lines

Possibility of adapting devices to existing

Possibility of installing the machine directly above the tunnel oven belt or in front of it

Two types of forming heads: VDC or VDS

Cooperation with cookies aligning systems

systems (shutter, guillotine, wire-cut)





HASBORG

(increasing product density on the oven belt) Possibility of cooperation with various cutting Options available for stamping, flattening, etc.

Hasborg machines can work in various configuration. A frequently used solution is a "tandem" system, in which both cooperating machines are properly

synchronized. Such a combination has the effect of doubling the efficiency of the production line.



ROYAL ROLLS













- controlled independently from the PLC pa

client's request, any configuration of





allow for the retention of the maximum

CONVECTION TUNNEL OVEN

Controls: MITSUBISHI, Japan

- A Motors and gear-motors: SEW Germany
- Baking belt, guides, rolls: IPCO Sweden Burners: WEISHAUPT Germany

HYBRID TUNNEL OVEN



- 7 Controls: MITSUBISHI, Japan
- オ Motors and gear-motors: SEW Germany Baking belt, guides, rolls: IPCO Sweden
- **7** Burners: WEISHAUPT Germany Direct fire burners: RIELLO







HASBORG



オ Burners: WEISHAUPT Germany Direct fire burners: RIELLO









DIRECT FIRE TUNNEL OVEN







heaters. Independent control of the



























Controls: MITSUBISHI, Japan オ Motors and gear-motors: SEW Germany オ Baking tape, guides, rolls: IPCO Sweden

CREALINE

OHASBORG OHASBORG

- A cooling tunnel is a modern device designed to cool various types of products, in particular coated with real chocolate or various types of coatings and masses. Most often it works directly with enrobing machines, from which the product is directed to the belt of the cooling tunnel.
- ➔ High-class, certified thermal insulation
- The upper and lower belt completely placed inside the tunnel
- Pneumatic belt control mechanism at the end of the tunnel
- Tunnel covers opened on actuators
- Precise temperature control and regulation
- SORG CHASBORG CHASBORG CHASBORG CHASBORG CHASBO SORG CHASBORG CHASBORG
- This machine allows to cover tops, bottoms and complete coating of entire product. It is equipped with the function of "blowing" system to remove chocolate excess from the top of product and the function of the mesh conveyor vibration (shaking system). Optionally, it has a highly advanced decorator module type ZIG-ZAG, giving a wide range of possibilities for decorating products.
- A feature distinguishing this machine from other similar devices on the market is the ability to work with two types of work table: mesh and belt conveyer. The concept of the machine allows for rapid changeover between tables and quick regulation of the machine options with minimum production downtime. Thanks to movable tank it's easy to change the type of coating medium.

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 - - SORG OHASBORG OHASBORG OHASBORG
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CHOCOLATE ENROBER CREALINE

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An advanced industrial machine adapted to work in an continues production line for the processing of a wide range of confectionery products. The enrobing machine is adapted to work with natural (100% real) chocolate as well as compound.

LUXOR ENROBER

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CHOCOLATE MELTING UNIT

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OHABORG OHABORG HASSORG HASSORG OHASSORG OHASSORG







BORG PHASEORG PHASEORG PHASEORG

The device for melting and maintaining temperature of melted chocolate and other chocolate-like masses.



- This machine allows to cover tops, bottoms and complete coating of entire product. It is equipped with the function of "blowing" system to remove chocolate excess from the top of product and the function of the mesh conveyor vibration (shaking system). Optionally, it has a highly advanced decorator module type ZIG-ZAG, giving a wide range of possibilities for decorating products.
- The machine can be equipped with the function of vibrating the transport net. The removable container easily allows you to change the type of coating substance.



The temperature is fully controlled and an arm placed in the tank ensures even temperature distribution of the melted mass

The device cooperates with various types of coating machines and it is equipped with a pump feeding the molten medium directly to the coating machine.

7 This unit is designed for industrial automated production lines for decorating composed of main sprinkling unit and 5 constant circulation of spreaded material.

 A device designed to decorate bottom conveyor and from there it is

COMBINED SPRINKLER

SPRINKLER – DECORATION UNIT

confectionery products. Our spray system in food processes is designed to cover

products with a very thin layer of emulsion dispensed under pressure and sprayed by the dosing head on the top surface of the product. OHASBORG

A device for spray application of food emulsions on

SPRAYER

SPRINKLER

PREFORMER UNIT

in cylinder extruding machines.

Preforming unit prepares the dough for processing

Preformer machine supply evenly hard gingerbread or shortbread dough to the ROYAL ROLLS cylinder extruder machine.

The machine is equipped with its own tank and a loading system adapted to a special tank replenishing the dough

This machine automatically covers











Machine for production of sandwich biscuits with cream – Oreo type.

- Biscuits feeder
- Control panel

CURVE CONVEYOR

LINE CONVEYOR

- 7 It transport products along a curve and allows a free configuration of the production line to adapt its geometry to specific requirements.
- The curve conveyor is often used wherever, due to space constraints, it is not possible to run a production line in a straight line. Two 90 degree conveyors are often
- combined together to change the direction of products of 180 degrees and run them parallel to the tunnel oven.
- It transports and cools products after baking. An indispensable element in every production line, providing transport and cooling of the product after baking in a tunnel oven. It is an element of the technological sequence of an automatic production line. The conveyors are offered in modules with a standard length of 5m which, depending on the needs, are assembled into longer units. Each module is equipped with fans forcing air flow. The working net used in the conveyor enables fresh air free circulation, which facilitates evaporation and cooling of the product. Each module is equipped with its own drive.

CREA-DROP BISCUIT SANDWICHING MACHINE

DUOMAX CUK





➔ This device is designed for the production in a continuous form. DUOMAX CUK is



➔ The Cutting unit - guillotine is a professional cutting shortbread cakes, biscuit, sponge-fat, takes place directly on the tunnel oven belt

GUILLOTINE - CUTTING UNIT



REALINE



Products and photos may differ from given images.

MASBORG[®]

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