Discover the sweetest dreams of innovation with the newly designed Bühler universal cooking system in hygienic design. Premium product quality proven by flexible mass preparation, perfect applicability, reduced cleaning, minimum requirements for spare parts, and long-term reliability for many years of trouble-free operation.

Recipes for sweets and candies are individual and diverse, so the demands made on new cookers and production systems that handle the broad range of masses and confectionery, change day by day. Some requirements, however, are ever-present: Variety, flexibility and rapidity. Bühler’s plant solutions satisfy the most exacting process requirements and conditions with their unique modular design and capacity for migration. All-in-one, batch-wise, and continuous, for all types of aerated, unaerated, or binding masses, for any kind of gum, jelly, nougat, caramel, and hard or soft candy.

JOIN OUR PASSION FOR A WIDE RANGE OF ADVANCED RECIPES!
NOUGAT/CARAMEL
Exemplarily the process flowsheets of the nougat and caramel production lines indicate the range of individual options. Bühler offers experience of process technology for batch-wise and continuous dosing, dissolving, cooking, whipping and mixing systems for all types of aerated and unaerated masses for the countlines production.

Corresponding recipes are available. For the production of masses it does not matter whether they contain raw additions such as nuts, almonds, raisins, pieces of fruit, crisp or puffed rice.
NOUGAT – BATCH
Taylor-made cooking plant for the countlines production based on CoolMix™ weighing and mixing system and PresWhip™ including thermosyphon cooker and beating system.
Bars without boundaries.
Nougat processing step by step.

Efficient technology all along the value chain – from raw material to finished confectioneries or countlines, perfected by excellent taste and shape.

Innovation in line with perfection
Precision does not allow any compromise. If you highly appreciate a constant gentle processing and delivery of ambitious nougat masses for your automated countlines production, then a Bühler nougat production plant is excellently suited for highest demands. Premium product quality of sophisticated countlines recipes is proofed worldwide by exacting mass preparation, precise heating and cooling, and process monitoring with fully integrated line control.

Nougat recipe by Bühler:
Ingredients:
• 37,5 % sugar, 45,7 % glucose syrup, 11,5 % water.
• 0,7 % albumen powder, 1,3 % water, 3,3 % glucose syrup.
Procedure:
• Sugar slurry cook to 125 °C.
• Vacuumize to 110 °C.
• Feed beater with cooked syrup and whipping agent, and aerate at 3,0 bar for 3 min.
• Inline dosing and mixing 15,5 % fat/powder.
CARAMEL – CONTINUOUSLY
Taylor-made cooking plant for the countlines production based on CaraMix™ weighing and mixing system and CandyFlex™ 3-phase working system.
Delicious mass in high-class. Caramel processing step by step.

Versatile cooking line with unique flexibility for all kinds of caramel. Serving the broad range from very light colored to dark brown - from soft chewy to hard candy.

**Continuous cooking system**
Manufacturing of caramel is a science on its own. Myths and legends have sprung up around secret recipes for the production of this mass in a delicious quality. Every producer is proud of his own caramel, in the unrivalled cases the result of long experience and development. With the Bühler CandyFlex™ you can achieve the whole range of different caramels in regards to color as well as flavor and texture.

**Caramel recipe by Bühler:**
Ingredients:
- 31,5% glucose syrup, 23,4% sugar, 27,6% milk, 9,2% water, 6,1% fat, 1,8% butter, 0,4% salt.

Procedure:
- Prepare the slurry.
- Caramelize and dissolve at 120 °C and 2 bar.
- Cook/evaporate at 118 °C (atmos.).
- Cool down to forming temperature.
Supersoft and fine caramel

2. Fudge toffees: legendary cream candies, hand-cutted and wrapped piece by piece.
3. Chocolate-flavored caramel toffees: dark chocolate covered chewy candies, popular for their delicious caramel taste.
4. Fruit chewy candy: soft fruity chews with delicious tasting in many different colors and flavors.
CHEWY CANDY – CONTINUOUSLY
Taylor-made solution for the most flexible production of soft candies with or without milk, based on a coil cooker.
Bühler chewy process line
A universal system for continuously producing sensitive or light products containing milk or fruit juice.

Chewy candy recipe by Bühler:
Ingredients:
• 10 parts water, 43 parts granulated sugar, 48 parts glucose syrup.
• 1 part gelatine, 1 part water.
• 2 parts fat.
• 5 parts icing sugar.
Procedure:
• Sugar slurry cooking temperature 137 °C.
• Add gelatine solution.
• Vacuumize to 89 °C (0.6 bar).
• Add fat/lecithin premix and color, flavor and acid in line.
• Mix mass with icing sugar.
• Cool down to extrusion temperature.

Sweets for my Sweet.
Flexible and continuous chewy production.

Advanced cooking technology for the processing of stable chewy articles varying in each flavors and consistency.

Continuous cooking system
Flexible product variations in the world of chewy candies are one domain of the Bühler TBK-C™, which is well established all over the world. Being an all-round talent, the cooking system in hygienic design proves its adaptability in processing varied soft and chewy candies, what enables manufacturers to produce different products with ingredients as milk or fruit juice with one single plant.
DEPOSITED HARD CANDY – CONTINUOUSLY
Taylor-made solution for the most flexible production of hard candies, based on a rotor cooker.
The sweet side of life.
Gentle cooking for transparent candies.

Cooking system with shortest cooking time for very clear candies, perfect control of color and maximum degree of transparency for highest product quality.

**3-phase working system**
The market of deposited hard candies demands articles with very clear appearance. Furthermore any stickiness and air bubbles are not accepted. With the CoolMix™ rotor cooker process line with its unique short cooking time Bühler offers the right solution to meet the international market requirements for highly efficient and flexible solutions. Of course, the process line is developed and designed according to state-of-the-art technical and hygienic standards.

**Bühler CandyFlex™ cooking system**
A universal system for continuously producing very clear products containing sugar and syrup.

**Hard candy recipe by Bühler:**
Ingredients:
- 10 parts water.
- 24 parts white granulated sugar.
- 24 parts glucose syrup.

Procedure:
- Prepare sugar slurry.
- Dissolve and precook to approx. 120 ºC.
- Final cooking in the rotor cooker to 150 ºC.
- Vacuumize to approx. 145 ºC.
FONDANT
SMALL IS SUITABLE. SMOOTH CRYSTALS <15 μm
With the TBCF™ system, suitable for the production of fondant masses or moulded fondant articles, a crystal size smaller than 15 µm can be achieved.
Sweet seasons greetings.
Confectionery fondant processing.

Fondant is used for several applications on the field of sweets, for example as filling mass, icing and deposited articles.

**Crystallized sugar mass**
Originally developed as coverage, decoration or filling for cakes and pastries, fondant is a creamy confection consisting of sugar, water and glucose syrup cooked to the soft-ball stage, cooled slightly, and beaten until it is an opaque mass with a defined crystal size distribution. Seasonal products such as easter eggs are made of fondant, as well as fillings of first-class toffees or pralines which contain inverted sugar syrup, produced by processing fondant with invertase.

**Bühler fondant production system**
This continuous production system comprises 4 separate production stages, including dissolving/cooking, cooling, crystallization and tempering.

**Fondant recipe by Bühler:**
Ingredients:
- 67,4 % granulated sugar.
- 22,5 % water.
- 10,1 % glucose syrup.
Procedure:
- Prepare sugar slurry.
- Dissolve and cook to 119 °C.
- Crystallize and cool to 70 °C.
SWEET DREAMS ARE MADE OF THIS
SWEET DREAMS ARE MADE OF THIS
JELLY AND MARSHMALLOW – CONTINUOUSLY

The TBSC™ static cooker offers numerous advantages compared to traditional systems such as low energy, raw material and colloid consumption and a high level of flexibility and versatility.
Some dictionaries define marshmallows as sweet white confection usually in the form of a spread or small spongy cylindrical pieces usually made from corn syrup, sugar, egg white, and gelatine. The name was adapted in the last century of a pink-flowered herb naturalized in the eastern USA, well known for its roots used in herbal remedies. Today marshmallows of all kinds are fame and highly demanded as sweet and spongy dreams by people of all ages.

**Bühler static cooker**
This static cooking system is developed particularly for the production of colloidal based products, as for the processing of nearly all types of jelly products.

**Marshmallows recipe by Bühler:**
Ingredients:
- 24,7 % sugar, 29,7 % glucose syrup, 16,3 % water.
- 25,3 % water, 1,3 % pectin amid.
- 0,2 % albumen powder, 2,5 % water.

Procedure:
- Prepare pectin and/or gelatine premix.
- Mix sugar, water, glucose syrup and premixes and preheat to 65 °C.
- Cook to 113 °C.
- Vacuumize to 90 °C.
- Add whipping agent and acid.
- Aerate the mass to required density.

**Continuous continuous aerating**
Continuous cooking and foaming system for the production of confectionery such as marshmallows and other light foam products either moulded in starch powder or extruded onto a wide conveyor belt.
**SUGAR BINDER**

**HOTMIX™**
Water
Glucose

Sugar

**WEIGHING AND MIXING VESSEL**

**TBT™**

**BUFFER VESSEL**

**MASS PUMP**

**CONTIMIX™**

**CEREAL BAR MIX**

**BINDER – BATCH**
Efficient cooking plant for the batch-wise preparing of sugar binder based on HotMix™ weighing and mixing system and TBT™ batch cooker.
Sweets sticky secrets. Reliable preparation of binding masses.

Universal weighing, mixing and batch cooking system technology covering a wide range of confectionery products and highly flexible capacities. Well established solution in multiple designs deliverable on request.

Operating fixed in the mix
Discovering the secrets of most successful production of cereal and granola bars longs for useful know-how: The preparation of binders to adhere raw material and ingredients therefore is one of the keys. Powering the world of sweets for many years HotMix™ is the right choice for the production of sugar binders, fruit masses, caramel, jellies and toffees. Due to the batch design, the system is easy to operate and predestined for a frequent change of delicious recipe ideas.

Bühlertm process line
Strong and robust process line particularly for the preparing of binding masses used for cereal bars and a broad variety of sweets and candies.

Binder recipe by Bühlertm:
Ingredients:
- 52.5 % sugar.
- 31.0 % glucose syrup.
- 16.5 % water.
Procedure:
- Prepare the slurry.
- Cook to 121 °C.
- Add flavor.
Applications Center

Bühler designs your systems for the production of all confectionery masses from the raw material processing to the finished product. Discover at Bühler Application Center how dedicated engineers handle your challenges of production projects for the sweets and candy production.

Significant investments require well-grounded decisions – good, if you can trust in mandatory production data. This philosophy has encouraged Bühler to provide you with an experimental platform on which your production tasks and innovation plans precisely are simulated. So development and test of successful materials and products are repeatedly fulfilled. Bühler supports the ambition to provide a durable basis of success for your brand products by improving the production quality and efficiency, and supporting you with innovative process engineering.

CORE COMPETENCE FOR MOST APPETIZING RESULTS.