

Uniplast forming lines

*For hard candy, chewy candy
and chewing **gum***



Content

Die forming lines by Hansella	3
Application examples: Production lines for hard candy, chewy candy and chewing gum	4
Batch former for hard and chewy candy: BSK 0100	5
Hard sugar extruder: BEK 0800–1500	6
Chewy candy and chewing gum extruder: RopeX-Series WEF 1010–2020	7
Tempering and filling pump: BFK	8
Calibration of filled and non-filled rope batches: BAK 0150	9
Forming machine for filled and non-filled rope batches: BPK 0150	10
High-performance forming line: BPK 0240	11
Die-heads: BPE 0161/0162 and die-head types	12–14
Cooling tunnel: BCK 0500–2000	15

Hansella forming lines

Hansella die forming lines achieve the highest quality standards while producing up to more than a million candy pieces per hour, with a rope speed of up to 240 m/min. The broad portfolio enables the production of various products from filled chewing gum pillows, to highly filled hard candy and very small candy as well as ring-eye candy.



Batch former
for hard and chewy candy



Hard sugar extruder,
incl. option for stripes



Chewy candy and chewing
gum extruder



Tempering and filling
pump



Rope sizer and die forming
machine



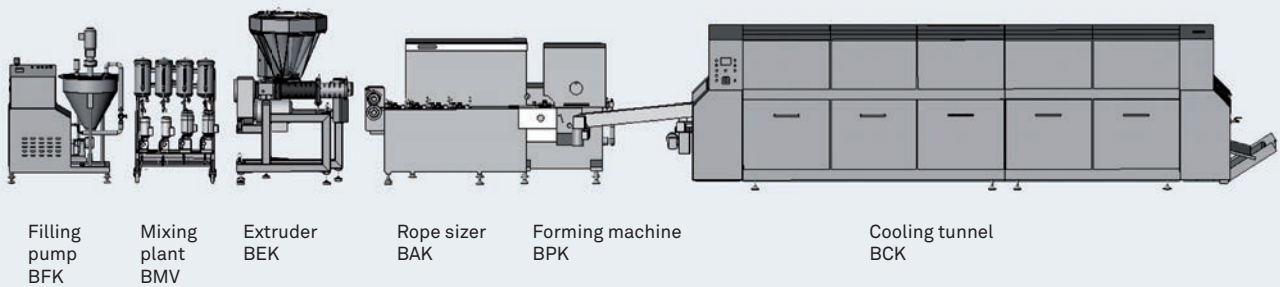
Cooling tunnel

Hansella offers extensive consulting and competence in problem solving from the dissolving of the ingredients through to the final packaging. We provide equipment solutions that cover the entire production range and serve as a contact partner for all processes. We deliver well-engineered machines and concepts, quality and reliability, know-how, expert knowledge and ideas. We are your partner for success.

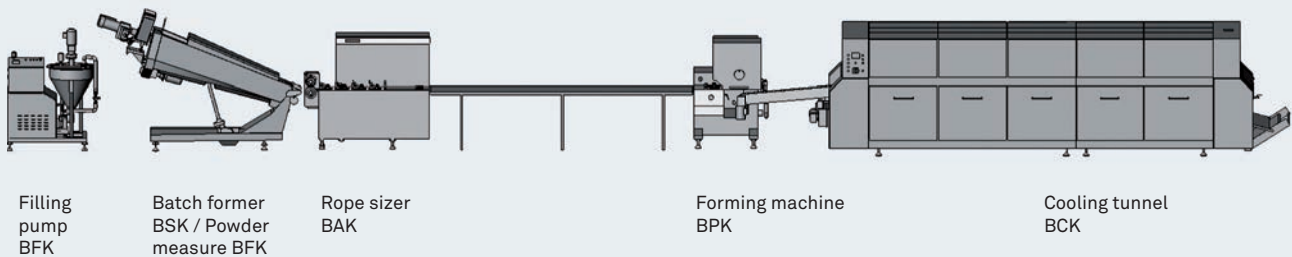
Application examples

Hansella die forming lines offer individual options, for example production lines for hard candy, chewy candy, toffee and eclairs, as well as chewing gum. Different shapes, filling proportions, and colors make every piece of candy a unique product.

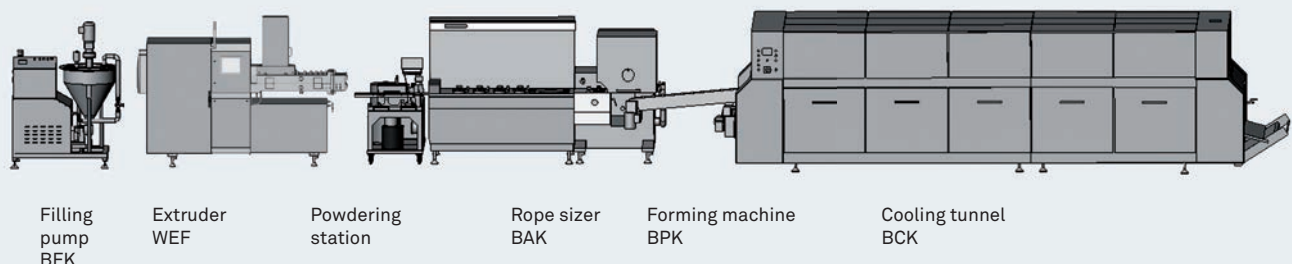
Production line for filled and striped hard candy



Production line for chewy candy / toffee / eclairs



Production line for filled chewing gum pillows / chewy candy



BSK 0100

Batch former

The batch former BSK 0100 is designed for shaping filled and non-filled sugar cones for high-boiled candy, lollipops, dairy toffees and chewy candy. A filling pump for liquid or pasty fillings as well as a dosing device for powder/granulate fillings can be added. Special applications allow the extrusion of filling, such as chewy mass, into the cone.



Technical data

Capacity	75–100 kg
Rope outfeed	min. 35 mm
Drive (roller cone)	Motor 0.75 kW, frequency-controlled
Connection load	approx. 5 kVA
Dimensions (L x W x H) in mm	2450 x 1090 x 1720
Weight	820 kg

Advantages

- Frame and all drive elements made of stainless steel
- The roller cones can easily be removed for cleaning
- Stepless control of the electrical heater
- Adjustable sugar rope outfeed diameter to assure that feed to automatic forming machine / cutting and wrapping machine is precisely matched
- Dosing devices for powder / granulate fillings available
- Synchronization with up- and downstream machines (pumps, metering screws, extruder)
- Optional swivelling feeder for sugar-mass infeed



BSK 0100

BEK 0800–1500

Hard sugar extruder

All extruders can be configured with fluid to highly viscous fillings, with up to eight stripes, in up to four colours, in a rope. The extruder enables a wide range of product variety with absolutely constant characteristics: the stripes are exactly defined in depth and width and are sharply visible.



Advantages

- Filling: up to 25%, rope diameter of 20–45 mm
- Striped proportional: < 5%
- High flexibility: suitable for crunchy products, filled or non-filled, hard and chewy candies and sugar-free products
- An exactly dimensioned and homogeneous rope without any air inclusions
- Filling of the rope is performed with a high degree of volume uniformity and centering precision
- Optional: regulation of filling percentage with flow meter
- Co-extruder: combinations with two different masses “side by side“, “center in shell“, or striped
- Special design: vertical batch feeder is optional directly above the BAK, or as a supply device deployable for the BEK, to enable the production of simple candies without the use of the BEK

Technical data

	Output [kg/h]	Dimensions L x W x H [mm]	Weight [kg]
Mono-extruder			
BEK 0800 MO	400–800	2800 x 1400 x 2000	1900
BEK 1200 MO	600–1200	2800 x 1400 x 2000	2500
Co-extruder			
BEK 1200 CO	600–1200	3100 x 2200 x 2000	2800
BEK 1500 CO	750–1500	3100 x 2200 x 2000	3000

BEK 0800
incl. option for stripes



RopeX WEF 1010–2020

Mass extrusion and continuous forming

The modular construction of the RopeX series offers flexibility that allows its use in almost all application areas and production lines. No matter if multicolored, striped, highly filled or combined from various ropes, the WEF 1010–2020 extruder processes all kinds of soft-boiled sugar masses, as mono- or co-execution.



Advantages

- Nearly unlimited variations of color and shape possible
- Up to two colors and tastes in one rope
- Easy accessibility and cleaning
- Low maintenance requirements
- Separate speed adjustment of extruder screws and infeed rollers
- Stainless steel design
- Teflon-coated hopper



WEF 2010

Technical data

	Output up to[kg/h]	Dimensions L x W x H [mm]	Weight [kg]	Connected load [kVA]
Mono-extruder				
WEF 1010	850	2480 x 1354 x 2167	1800	40
WEF 1020	1750	2850 x 1354 x 2200	3500	46
Co-extruder				
WEF 2010	1200	2500 x 2120 x 2000	3500	72
WEF 2020	2250	3263 x 1944 x 2200	6500	80

BFK

Tempering and filling

The BFK filling machine continuously tempers and accurately delivers adjustable quantities of liquid, semiliquid or pasty products, and has a precise metering and tempering system. The production of center-filled confectionery, such as hard candies, chewy candies or chewing gum is done in combination with the batch former or a Hansella extruder.



Technical data

Output	500 kg/h
Temperature	40–85 °C
Temperature fluctuation	max. \pm 2 °C
Viscosity	1–40,000 MPAS
Density	approx. 1.3 kg/L
Electrical connected load	9 kVA
Dimensions (L x W x H) in mm	740 x 1200 x 1800
Weight	approx. 700 kg

Advantages

- Modular system that can be easily be adapted to customer requirements
- Compact design: all components, such as the pump, product hopper and control cabinet, as well as the tempering section with hot water heating unit, are assembled on one frame
- Stainless steel execution
- Easy operation and cleaning for fast product changeovers
- Constant filling rates
- Wide application range: from liquid to pasty fillings, from hard sugar to chewing gum
- Optional: optimized temperature control for the filling masses, flow meter, several types of the stirring unit

BFK



BAK 0150

Forming and calibration of solid and filled ropes

Filled and non-filled ropes are automatically formed and calibrated for the widest range of products and led to downstream machines.

BAK 150



Technical data

Throughput	up to 150 m/min, stepless adjustments
Drive	Electronically adjustable single-servo-drives
Connected loads	approx. 35 kVA
Dimensions (L x W x H) mm	1930 X 1320 X 1032
Weight	1100 kg

Advantages

- A centrally controlled heater is installed under every sizing roller
- Gentle rope reduction by means of infinite adjustment of the rotary speed for each pair of sizing rollers
- Setting parameters can be saved and retrieved by the push of a button
- Change of rope thickness by easily exchangeable sizing rollers
- Capacitive rope registration for optimum speed
- Effectors in the rope controller serve as a link to downstream machines, to regulate uniform supply
- Optional: vertically positioned pair of draw-off rollers, cover to meet the highest hygienic requirements
- Air cooling located under each sizing roller infeed
- Optional: additional sizing rollers (six at max.) and servo-motors for even smoother processing of the candy rope



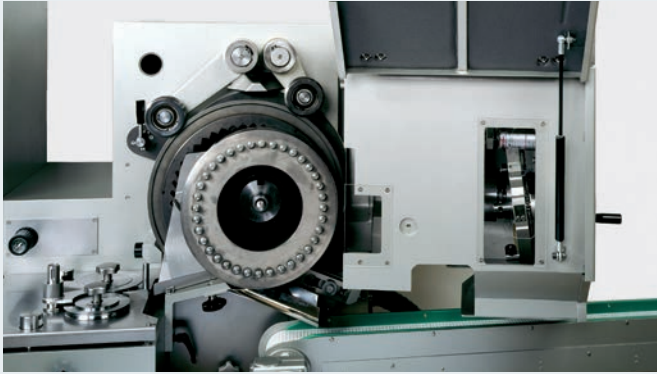
Pharmaceutical execution

Hansella configures the Uniplast forming line in an additional pharmaceutically usable version. The coating of the rope sizer is made out of FDA-approved material (therefore free from copper), as well as the scraper and downholder. To guarantee highest standards the table cover plate is made out of CrNi-steel 316.

BPK 0150

Forming machine for filled and non-filled candy

This machine is designed for the forming of seamless, burr-free, non-filled and filled candy pieces, hard and chewy candy at rope speeds up to 150 m/min.



Advantages

- Individual servo drives for each roller pair
- Simple operation, fast change of forming dies
- Easy maintenance and cleaning due to simple visual and physical access and smooth external surfaces
- Technical conformity allows installation of older forming dies
- Cooling of sizing rollers and forming die with compressed air
- Pneumatically adjustable cutting force on the cutter ring

Technical data

Through put	up to 150 m/min rope speed
Drive	4 kW
Electrical connected load	8 kVA
Dimensions (L x W x H) in mm	2600 x 1300 x 1640
Weight	approx. 1600 kg

Output

For a candy with a length of 25 mm and weight of 4.5 g the output is approximately 1500 kg/h, equates to approximately 5600 candies per minute.



BPK 0240

High-performance forming machine

The high-performance forming line delivers more than one million candy pieces per hour, while operating with a rope speed of up to 240 m/minute on die-heads with a working diameter of 450 mm.



Advantages

- Control of sizing rollers and forming machine by separate, yet synchronized servo-motors
- Automatic synchronization of batch former and forming machine
- Capacitive rope sensor for optimum speed
- Pneumatically adjustable cutting force on the cutter ring
- Setting parameters can be saved and retrieved by the push of a button
- Uncomplicated and fast exchange of the forming dies

Output

For a candy with a length of 25 mm and weight of 4.5 g the output is approximately 2445 kg/h, equates to approximately 9000 candies per minute.

Technical data

Throughput	up to 240 m/min rope speed
Drive	4 kW
Electrical connected load	40 kVA
Dimensions (L x W x H) in mm	4100 x 1300 x 1600
Weight	approx. 2600 kg

BPK 0240



Candy die-heads

The BPE 0161 and 0162 candy die-heads are available in different executions for various applications. They guarantee smooth-running, low-wear and perfect shape at rope speeds up to 240 m/min, also for high-filled candy and in stainless steel execution.



Hansella die-heads are the world leaders in the industry

Hansella forming dies are durable, precisely designed and functionally reliable. This creates all the conditions for the customer to produce his confectionery products extremely economically. Because of Hansella's innovative strength and high quality standards, this competitive advantage applies not only today but also tomorrow.

- The inner mold of the die (candy shape) is created by the cold-forge method that produces smooth, clean molds
- Latest technologies support the fast and flexible production of dies and shapes, individually designed from logos and lettering to patterns and pictures
- Exact mold precision from die to die, also for new deliveries
- The knife-rings (cutter rings) and die-plate ring (cavity ring) are made out of high-quality steel and are surface-hardened
- The pressure curves and forming rollers are made out of wear-resistant, hardened steel
- Special materials selection for dies forged in high-quality steel
- Both fruit and fat masses as well as powder can be used as filling
- Different die-heads can be combined with Hansella automatic forming machines for different outputs
- Double stamps to form very small, highly filled candy pieces (executions: BPE 0161 TD / TDF und BPE 0162 TD / TDF)
- By further optimizing the cutter geometry, the filling level can be significantly increased
- Maximum protection against rust due to the usage of 316 L-steel (executions: BPE 0161 TAS / TDS - stainless)
- Within the pharma execution the punch head is made of stainless steel and the knife- and cavity-ring are coated with FDA-approved material (therefore free of copper) to meet highest standards

Customer-oriented, reliable and long-term partnership with Hansella

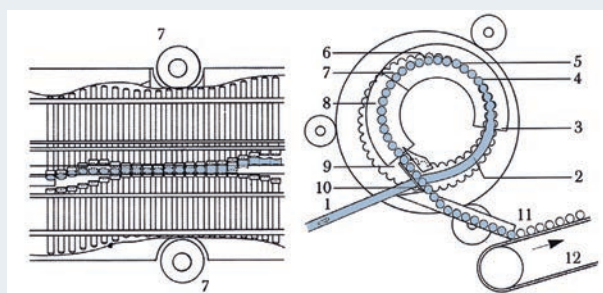
Spare parts and die heads are available even after decades – even for forming machines that are no longer in the sales program.

Candy type	Maximum rope speed	Format	Die-head / filling proportions				For machine
			Standard		High filled		
Candy, filled / non-filled	125 m/min	10.0–14.8 mm 14.9–22.0 mm 22.1–49.0 mm	HC HB HA	up to 28%	– HBF HAF	up to 35%	BPK 0160 A B C D* BPK 0150 A
	150 m/min	10.0–16.9 mm 12.0–16.9 mm 17.0–22.0 mm 22.1–49.0 mm	TD - TB TA	up to 28%	– TDF TBF TAF	up to 35%	BPK 0160 D* BPK 0150 A
	240 m/min	12.0–19.6 mm > 19.6 mm	TD TA	up to 22%	TDF TAF	up to 30%	BPK 0160 H* BPK 0240 A
Chiclet candy	125 m/min 150 m/min	18.0–22.0 mm	HK TK	up to 12%			BPK 0160 A B C D* BPK 0150 A
Pillow, wafer candy	60 m/min	> 18.0 mm	L	up to 32%			BPK 0160 A B C D* BPK 0150 A
Boltgen candy	125 m/min	> 18.0 mm	M	–			BPK 0160 A B C D* BPK 0150 A
Ring-eye candy	125 m/min	5.5–8.0 mm	N	–			BPK 0160 C D* BPK 0150 A
Chewing gum and chewy candy, toffee	90 m/min	15.0–49.0 mm	S	up to 20%			BPK 0160 C D* BPK 0150 A

* No longer included in the sales program

Function BPE - H

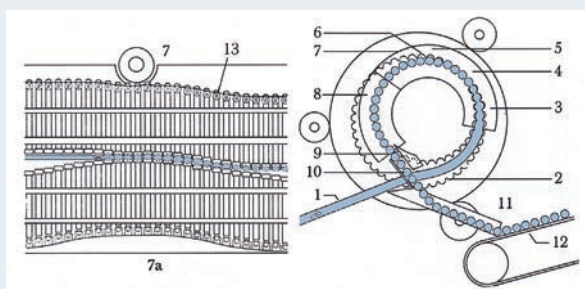
1 Rope infeed, 2 Rope lead-in, 3 Pre-separation, 4 Separation, 5 Push, 6 Pre-forming, 7 Forming by pressure roller or pressure curve, 8 Tension compensation, 9 Discharge, 10 Gliding section, 11 Feed chute to the transfer conveyor, 12 Transfer conveyor, A. Die-plate ring, B. Cutter ring



Throughput direction →

Function BPE - T

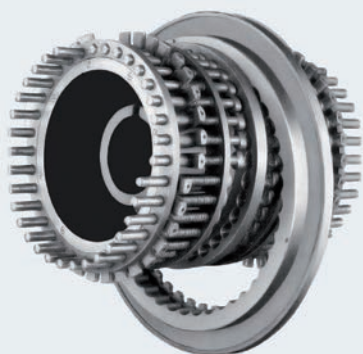
1 Rope infeed, 2 Rope lead-in, 3 Pre-separation, 4 Separation, 5 Push, 6 Pre-forming, 7 Forming by pressure roller and swash plate, 7a Swash plate, 8 Tension compensation, 9 Discharge, 10 Gliding section, 11 Feed chute to the transfer conveyor, 12 Transfer conveyor, 13 Cam followers, A Die-plate ring, B. Cutter ring



Throughput direction →

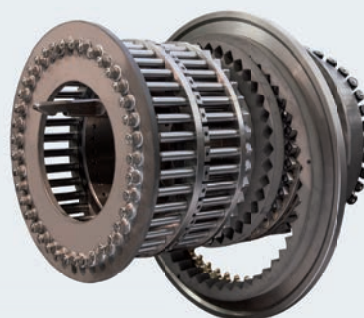
Die-head types

BPE 0161 H - The classic



Rope speed up to 125 m/min

BPE 0161 HF / TF - Filling miracles

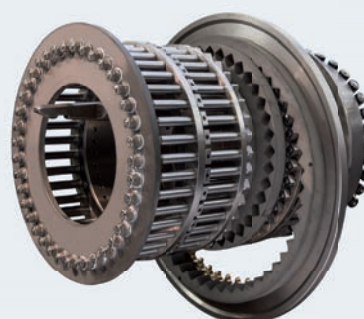


125 / 150 m/min

BPE 0161 T / TD - The low-wearing



150 m/min



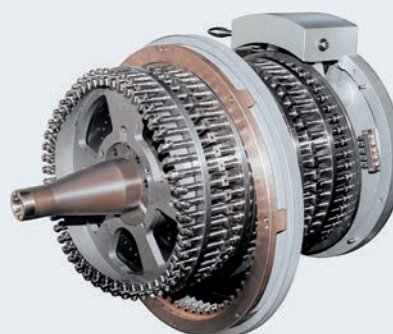
150 m/min

BPE 0161 TAS / TDS - The rust-free



150 m/min

BPE 0162 T / TD - The world-beater



240 m/min

BCK 0500–2000

Cooling tunnel

The candy cooling machine BCK 0750–2000 is designed for cooling formed, filled or non-filled candy pieces down from forming to packaging temperature. The available output range goes from 500 kg/h to 2.000 kg/h to match the throughput of corresponding Hansella cooking and forming lines.

Advantages

- A hygienic, energy-saving and reliable machine with uniform, economical cooling
- Stainless steel design and humidity reduction
- Very quiet running due to axial fans
- Velocity of air individually regulated (for small / lightweight products)
- Individual drives on the belts for optimum distribution and dwell time for the products
- Fully integrated control cabinet with operator control
- Low maintenance, as water is the coolant
- Belt width of 1200 mm

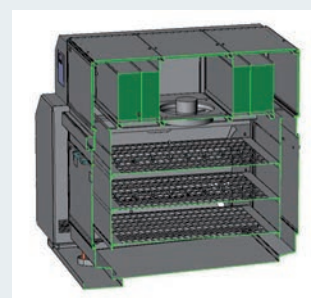
- Connection to a cold water circuit or a decentralized cold water generator
- Simple installation, without the need for a refrigeration engineer
- Good accessibility and high ground clearance for cleaning the system with water
- Optional: CIP-system, transport vehicle for side doors, integrated discharge conveyor with own drive system and adjustable inclination, auxiliary washing for belts



Technical data – belt drive 1–3

Speed (Belt 1)	1.5–9 m/min
Speed (Belt 2/3)	0.85–4.5 m/min

Sectional view



Technical data

	Output up to [kg/h]	Dimensions L x W x H [mm]	Weight [kg]	Connected load [kVA]	Installed cooling capacity [kW]
BCK 0500	500	3295 x 2046 x 1800	3080	8	25
BCK 0750	750	4340 x 2046 x 1800	3600	9	38
BCK 1000	1000	5390 x 2046 x 1800	4120	10	50
BCK 1250	1250	6435 x 2046 x 1800	4640	11	63
BCK 1500	1500	7480 x 2046 x 1800	5160	12	75
BCK 1750	1750	8530 x 2046 x 1800	5680	13	88
BCK 2000	2000	9575 x 2046 x 1800	6200	14	100

We are here to care

By investing in a product or line solution from the Rotzinger Group, you benefit from our fast, uncomplicated, and highly professional service. This applies not only in the short term, but over the entire service life of your system. We love to communicate fast and reliably, by phone, email or simply by using the QR code on the right.



Life cycle service

The way to continuous improvement and maximum performance and availability throughout the life of your system.

Helpline and remote & on-site support

We support you 24 hours a day with our telephone hotline and remote support. In addition, our worldwide service team is happy to support you.

Inspection & maintenance

Gain more safety with regular maintenance. We ensure high productivity and a long service life for your system.

Spare & wear parts

We guarantee our customers the supply of high-quality and reliable original parts.

Condition analysis

We analyze and check your system in every detail. We identify possibilities to increase performance.

Training & advice

Our knowledge - your profit. Together, we will exploit the full potential of your system.



Contact us.