

[www.back-tech.com](http://www.back-tech.com)

 **BACKTECH**  
The roll plant specialists



**Element systems** 

*The flexible modular system*

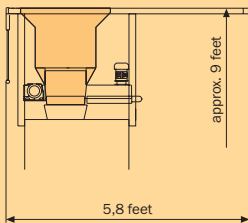
# Dough feeding

## Dough dividing and moulding systems

The quality of the end product depends mainly on the way the dough is divided and mixed. All systems are equipped with the proven BACK-TECH TSA system (gentle automatic dough handling system). Automatic dough-feeders can also be added on.



Automatic dough feeding



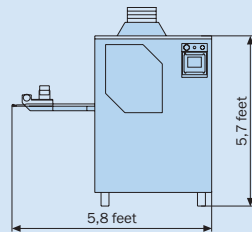
### Automatic dough feeding

Mix up to 8466 oz. of dough and transport the dough with a tilting device to the dough hopper (volume up to 8466 oz.) In the dough hopper, the dough is then transported by means of a pair of rollers. The precise amount of dough is then cut off by means of a knife and transported into the hopper of the dough dividing and moulding machine. The entire system is PLC controlled.

- ⊗ Frame powder-coated with RAL 9007
- ⊗ Hopper and side elements made from stainless steel and Teflon-coated



Primo-Star



### Primo-Star

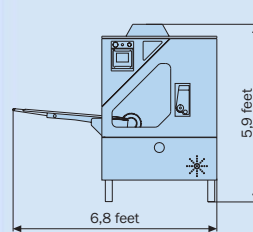
- ⊗ Max. hourly capacity: 4.800 pieces
- ⊗ Max. hourly capacity per row: 800 units
- ⊗ No. of rows: 4, 5 or 6
- ⊗ Weight ranges: 1,06-2,82 oz., 1,41-3,18 oz. or 1,76-3,53 oz.

#### Optional

**Adjustable spreading belts**  
**Pendulum spreading belts**  
**Touch Screen control**  
**Turning table**  
**Mobile frame**  
**Row blocking**  
**Flour duster for spreading belt**



Mega-Star



### Mega-Star

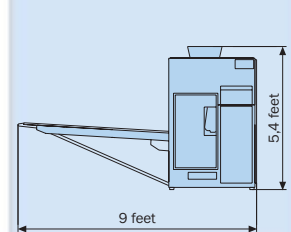
- ⊗ Max. hourly capacity: 10.200 pieces
- ⊗ Max. hourly capacity per row: 1.700 units
- ⊗ No. of rows: 4, 5 or 6
- ⊗ Weight range: 0,88-5,29 oz.

#### Optional

**Adjustable spreading belts**  
**Pendulum spreading belts**  
**Touch screen control**  
**Turning table**  
**Mobile frame**  
**Row blocking**  
**Flour duster for spreading belt**



Bavaria



### Bavaria

- ⊗ Max. hourly capacity: 24.000 pieces
- ⊗ Max. hourly capacity per row: 3.000 units
- ⊗ No. of rows: 4, 5, 6 or 8
- ⊗ Weight ranges: 1,06-2,82 oz., 1,41-4,23 oz., 1,94-5,64 oz., 5,64-9,7 oz.

#### Optional

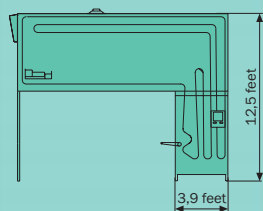
**Adjustable spreading belts**  
**Pendulum spreading belts**  
**Touch screen control**  
**Row blocking**  
**Flour duster for spreading belt**

# Resting cabinets • Forming units

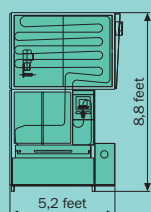
Proving times are variable and can be adjusted to the individual product.



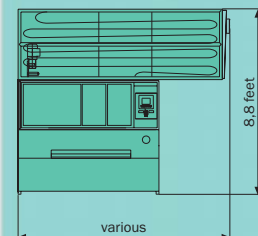
Resting cabinet



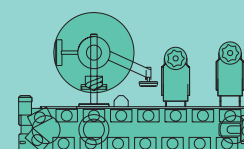
Vario-Star roll forming system



Vario-Star Duo



Forming unit inside the Vario-Star



## Resting cabinet

- ⊗ Variable proving time
- ⊗ Capacity: up to 25 cycles/ industrial up to 50 cycles

### Optional

**Air conditioning (automatic temperature and humidity control)**

**Bypass underneath the proving cabinet**

**Discharge conveyor belt**

**Gentle hand-over with controlled descent**

**Proving trays for heavier weights**

**RStainless**

## Vario-Star

Output depending on head machine, product and number of rows

- ⊗ Single cycle system – daily output of up to 20,000 units
- ⊗ With individual machines: automatic panning, tilting rake, pull-out drawer, tilt stop
- ⊗ Sliding window for good view
- ⊗ Touch Screen control
- ⊗ Thermostat temperature control
- ⊗ Sterilising device
- ⊗ Dehumidifying fan
- ⊗ Tray drying
- ⊗ Automatic machine stop before forming unit

## Vario-Star Duo

- ⊗ Two-cycle system (individual forming line) for higher daily output
- ⊗ Combined system for round and long goods possible
- ⊗ Automatic panning by means of a retracting belt with variable partitioning
- ⊗ With combined systems: long-moulding unit with adjustable pressure plate

### Optional

**Vario-Star/Vario-Star Duo**

**Discharge conveyor belt**

**Mobile frame**

**Final turning device**

**Evaporator**

**Cutting system (Duo)**

## Forming unit

- ⊗ Turnable turret shaping head
- ⊗ Mounting of up to four different forming tools possible (other tools on exchangeable plate)
- ⊗ Standard forming weight: up to 2,47 oz.
- ⊗ Adjustable pre-pressing device
- ⊗ Flour duster with economy function and automatic dusting system

### Optional

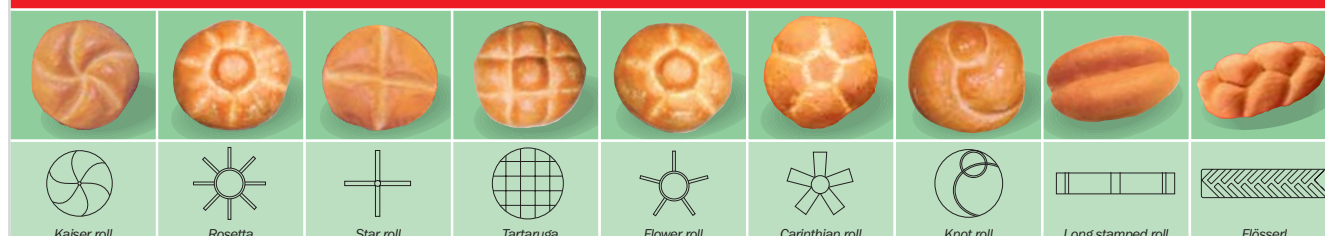
**Post-moulding unit for Rosenbrötchen/Wachauer**

**Forming tool for long products**

**Turning trays**

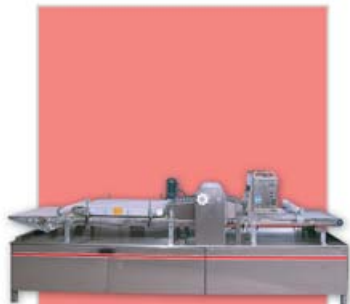
**Special forming weight of more than 2,47 oz.**

## Forming tools

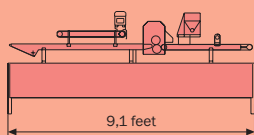


# Long-moulding units • Cutting units

The demands placed on long-moulded products vary from country to country. This is why Back-Tech offers the most diverse options to cater for individual demands.



Curling unit



## Sheeding head with two rollers

This system consists of two height-adjustable rollers arranged on top of each other. The round dough pieces are drawn in by the rollers and – depending on the setting – formed and flattened into oval or round shapes.

## Sheeding head with four rollers

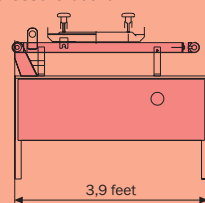
If the round dough pieces weigh more than 3,53 oz. and if they are to be curled, the flat pieces must be very thin. In this case, the dough piece is flattened by means of two rollers arranged one behind the other. Then the flattened units are rolled out even thinner in the two-roller sheeding head.

After the sheeding head, either a curling unit, curling flaps, curling pressure board or curling chain can be mounted.

When a long-moulding system is used, it is not always necessary to use a sheeding head.



Sheeding head  
Long-moulding unit with fixed pressure board:



## Long-moulding device with fixed pressure board

The dough pieces are simply rolled out by means of an adjustable pressure plate.

### Channel board

If you want to produce cylindrical dough pieces of exactly the same length, channels are mounted on the bottom side of the pressure plate; the stops are adjusted to the length of the product and the number of rows. The most essential parameter is the length of the product before final proving.

## Optional For long-moulding units

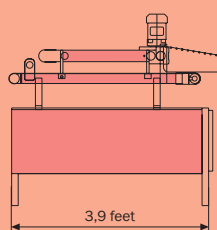
**Alignment station ahead of long moulding station**

**Alignment station with rollers rotating in opposite directions:**

Alignment station with roller, cycle belt, cycle roller



Long-moulding unit with movable top belt

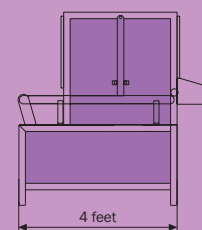


## Long-moulding device with movable top belt

The upper part of this model is equipped with a continuous belt with infinitely adjustable speed that can run backwards and forwards. This ensures a gentler rolling of the dough thanks to speed adjustment, and the dough can also be moulded longer thanks to the opposite direction of movement of the upper belt. If upper and lower belt run at the same speed, and if the upper part is set at an angle, flat round dough pieces can be produced (Hamburger roll).



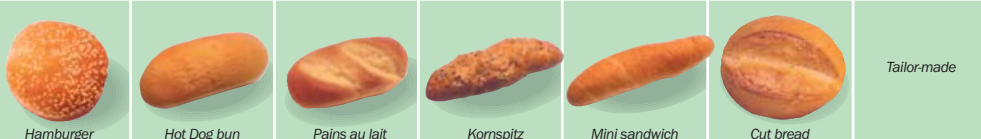
Cutting system



## Cutting system

The cutting unit is used for producing cut bread, Kornspitz, baguettes, etc. The BACK-TECH system works pneumatically. The basic structure is such that both a cutting bar for straight cutting as well as for inclined cuts (2 or 3 per product) can be used: Before cutting, the dough mounds are aligned, transported to the cutting unit and cut. During cutting the dough pieces are secured.

## Long moulded and flattened products



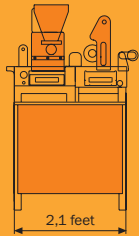
# Wetter-seeder

## Panning units • Automatic tray loading

There are several components to further increase the economic efficiency of the element systems.



Dekor-Star



### Dekor-Star

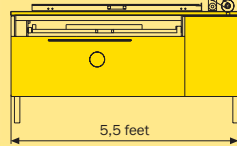
With the automatic wetter-seeder, dough pieces can be topped with various toppings. On a grid belt, the dough pieces are moved underneath a roller and the surface of the dough is moistened. Then the dough is moved under the seeding unit on another grid belt. The seeding intensity is adjustable; any excess toppings are collected and can be reused. There are various hoppers available for the various toppings (sesame, poppy seed, oat flakes, etc.). After applying the toppings, the seeds are slightly pressed into the dough by means of a height-adjustable roller.

### Industrial wetter-seeder

Retractable, with automatic topping material back feed, available upon request



Mono-Star



### Panning unit

The essential aspect of every automatic system is that the dough pieces are placed on the baking tray after forming. With flexible and freely programmable panning systems, you can choose any panning pattern:

With the head machine and the adjustable spreading belts, you determine the number of rows and the horizontal distance between the products.

With the adjustable speed of the retracting belt, the distance between the dough pieces can be freely selected.

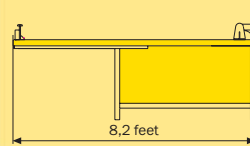
### Mono-Star

Mono-Star is a panning system with a capacity of up to 25 strokes / min.

It is a very compact design.



Grubelnik panning system

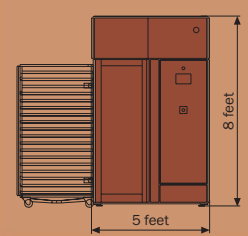


### Grubelnik panning system

Depending on customer requirements, trays can be taken out in the front or on the side of the industrial panning system with open table. Underneath the placing system, transport belts for automatic tray loading systems can be placed.



Robo-Star



### Automatic tray loading

Tray loading systems increase the economic efficiency of small bakery products considerably.

### Robo-Star

With the space-saving Robo-Star system, the trays are taken out from the transport rack, placed underneath the panning device and reloaded into the transport rack after loading before the next tray is put in in the same manner (up to 180 trays/hour).

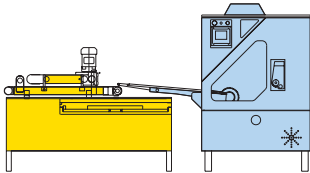
### Industrial loading system

With this system, the trays are taken out from the transport rack and put into an intermediate buffer, from where they are individually moved on to a belt. On the conveyor belt, the tins are moved underneath the panning unit (up to 400 trays/hour). Several transport racks can dock on to the system to ensure continuous operation.

## Combination for your products

### Example 1:

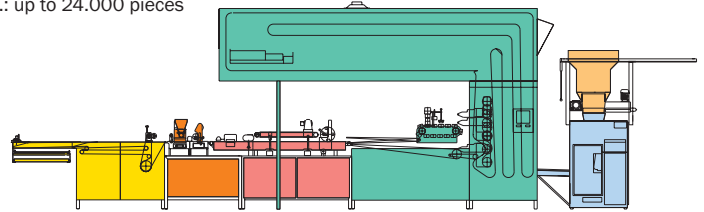
Mega-Star, Roll-Star  
 Capacity: 28 cycles / min.  
 Hourly production: up to 1.700 pieces / row  
 Hourly production max.: up to 10.200 pieces



**Products:**  
 Round dough piece, hamburger, long moulded dough piece (hot dog)

### Example 2:

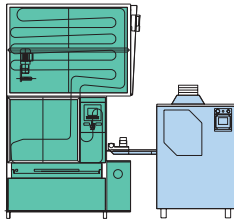
Automatic dough feeder, Bavaria, industrial resting cabinet, forming station, long moulding device with continuous belt, Dekor-Star, Grubelnik panning system  
 Capacity: 50 cycles / min.  
 Hourly production: up to 3.000 pieces / row  
 Hourly production max.: up to 24.000 pieces



**Products:**  
 Round dough piece, stamped dough piece, hamburger, long moulded dough piece (hot dog), all products can be seeded

### Example 3:

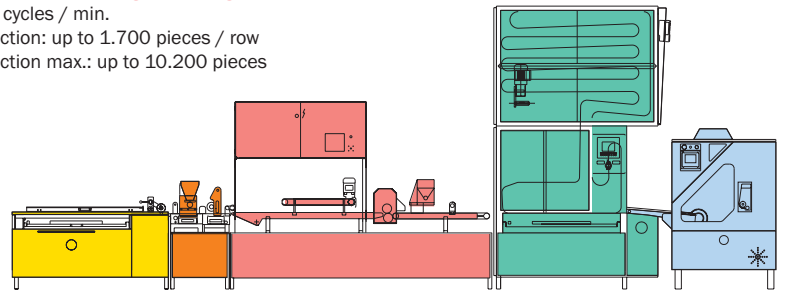
Primo-Star, Vario-Star  
 Capacity: 14 cycles / min.  
 Hourly production: up to 800 pieces / row  
 Hourly production max.: up to 4.800 pieces



**Products:**  
 Round dough piece, stamped dough piece

### Example 4:

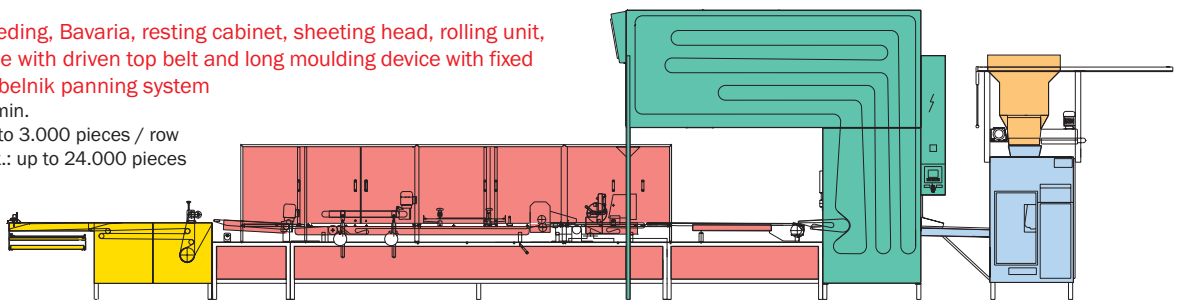
Mega-Star, Vario-Star, long moulding device, Dekor-Star, Mono-Star  
 Capacity: 28 cycles / min.  
 Hourly production: up to 1.700 pieces / row  
 Hourly production max.: up to 10.200 pieces



**Products:**  
 Round dough piece, stamped dough piece, hamburger, long moulded dough piece (hot dog), all products can be seeded

### Example 5:

Automatic dough feeding, Bavaria, resting cabinet, sheeting head, rolling unit, long moulding device with driven top belt and long moulding device with fixed pressure board, Grubelnik panning system  
 Capacity: 50 cycles / min.  
 Hourly production: up to 3.000 pieces / row  
 Hourly production max.: up to 24.000 pieces



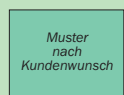
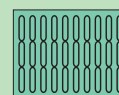
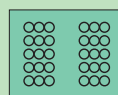
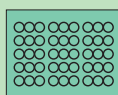
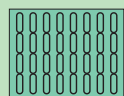
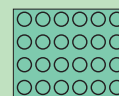
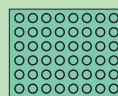
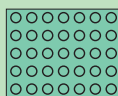
**Products:**  
 Round dough piece, hamburger, long moulded dough piece (hot dog), sheeted curled in to a long shape (mini baguette)

### Possible panning patterns:

Depending on the element combination and the panning pattern selected, a great variety of baker's preparations in various shapes can be put on the baking tray.

- 🌀 **Rounded**
- 🌀 **Long-moulded**
- 🌀 **Long-moulded and cut**
- 🌀 **Combined**

### Tailored pattern



Muster nach Kundenwunsch



# Element systems

## Flexibility creates advantages:



## **BACKTECH** AUSTRIA

### **Element systems – the concept for flexible solutions**

With BACK-TECH element systems you can tailor your baking system to your individual requirements. All BACK-TECH components meet the highest quality demands, provide unrivalled flexibility and are unbeaten in output rates.

## **A great variety of products for your market advantage!**

#### **Example 1:**

Primo-Star, Roll-Star

Capacity: up to 14 cycles / min.

Hourly production: up to 800 pieces / row

Hourly production max.: up to 4.800 pieces

#### **Products:**

Round dough pieces, hamburger, long moulded dough pieces (hot dog)



#### **Example 2:**

Primo-Star or Mega-Star, Vario-Star, long-moulding device, Dekor-Star, Mono-Star

Capacity: up to 28 cycles / min.

Hourly production: up to 1.700 pieces / row

Hourly production max.: up to 10.200 pieces

#### **Products:**

Round dough pieces, stamped dough pieces, hamburger, long moulded dough pieces (hot dog), all products can be seeded



#### **Example 3:**

Automatic dough feeder, Bavaria, industrial resting cabinet, forming station, long-moulding device, Dekor-Star, Grubelnik panning system

Capacity: up to 50 cycles / min.

Hourly production: up to 3.000 pieces / row

Hourly production max.: up to 24.000 pieces

#### **Products:**

Round dough pieces, stamped dough pieces, hamburger, long moulded dough pieces (hot dog), all products can be seeded



#### **Example 4:**

Bavaria, industrial resting cabinet, sheeding head, long moulding device with driven top belt and long moulding device with fixed pressure board, Grubelnik panning system

Capacity: up to 50 cycles / min.

Hourly production: up to 3.000 pieces / row

Hourly production max.: up to 24.000 pieces

#### **Products:**

Round dough pieces, hamburger, long moulded dough pieces (hot dog), sheeted curled in to a long shape (mini-baguette)





[www.back-tech.com](http://www.back-tech.com)



## ***The roll plant specialists***



***Dough dividers and moulding systems***



***Moulding stations***



***Proving systems***



***Element systems***



***Compact systems***



***Multi-purpose systems***



***Grubelnik-industrial systems***

***BACK-TECH***  
***Maschinenbau- und Handelsges.mbH.***



A-8181 St.Ruprecht/Raab  
Dietmannsdorferstraße 289  
Phone: +43 (0) 31 78 / 32 44 -0  
Fax: +43 (0) 31 78 / 32 44 -90  
E-Mail: [office@back-tech.com](mailto:office@back-tech.com)  
Home: [www.back-tech.com](http://www.back-tech.com)