

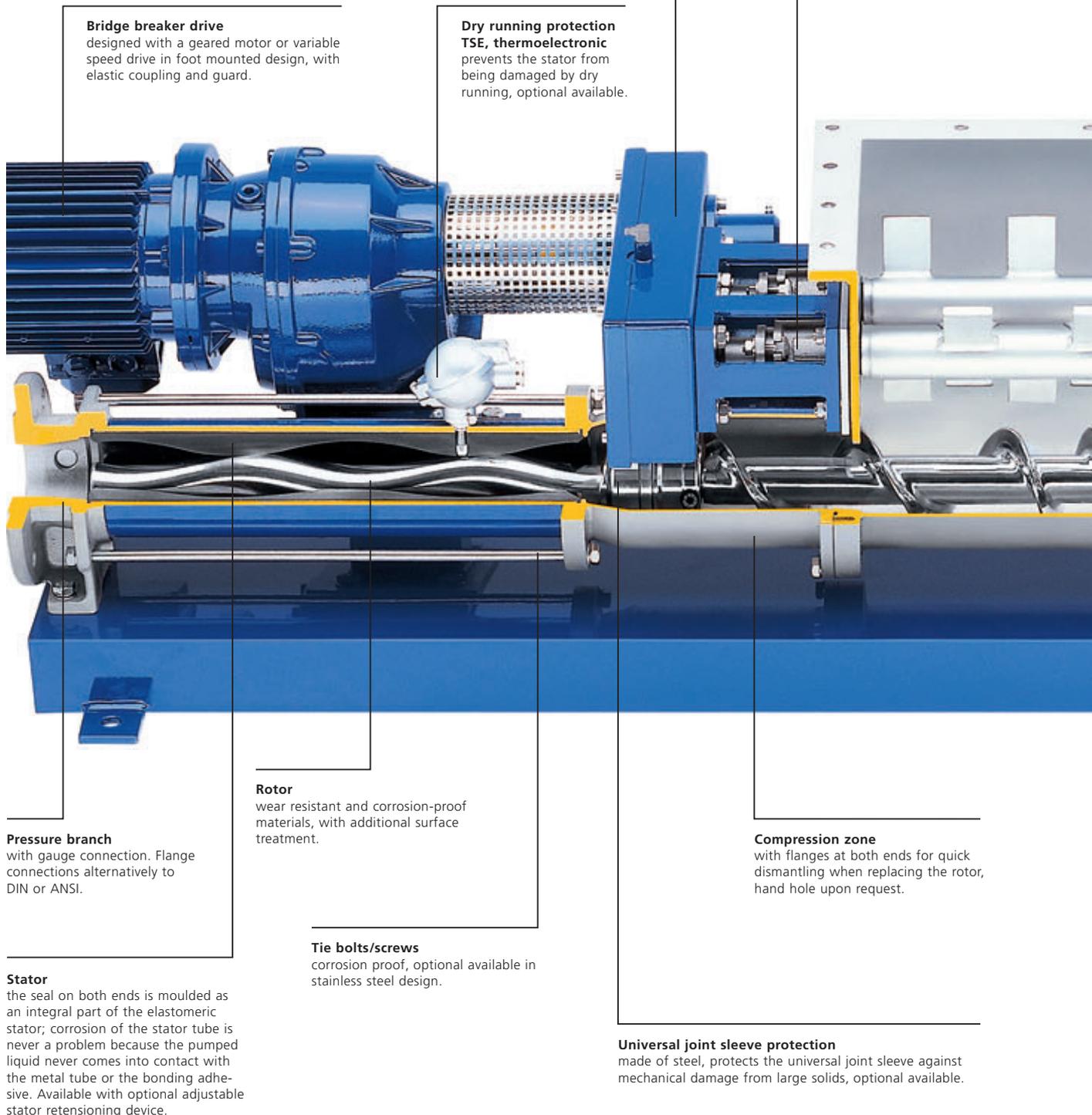
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all things flow

Here is your conveying solution:  
Product group T.



# T – Open hopper pumps

There are 9 ranges of open hopper pumps. They are used for viscous media that have only little or no flowability. T pumps have a feed hopper and an auger feed screw to positively feed the product into the pumping elements.



**Bridge breaker drive**  
designed with a geared motor or variable speed drive in foot mounted design, with elastic coupling and guard.

**Dry running protection TSE, thermoelectronic**  
prevents the stator from being damaged by dry running, optional available.

**Power divider**  
for timing the paddle shafts, completely enclosed, with lubricating device.

**Shaft sealing**  
gland packing, alternatively with seal cage ring or grease chamber ring.

**Pressure branch**  
with gauge connection. Flange connections alternatively to DIN or ANSI.

**Rotor**  
wear resistant and corrosion-proof materials, with additional surface treatment.

**Compression zone**  
with flanges at both ends for quick dismantling when replacing the rotor, hand hole upon request.

**Tie bolts/screws**  
corrosion proof, optional available in stainless steel design.

**Stator**  
the seal on both ends is moulded as an integral part of the elastomeric stator; corrosion of the stator tube is never a problem because the pumped liquid never comes into contact with the metal tube or the bonding adhesive. Available with optional adjustable stator retensioning device.

**Universal joint sleeve protection**  
made of steel, protects the universal joint sleeve against mechanical damage from large solids, optional available.

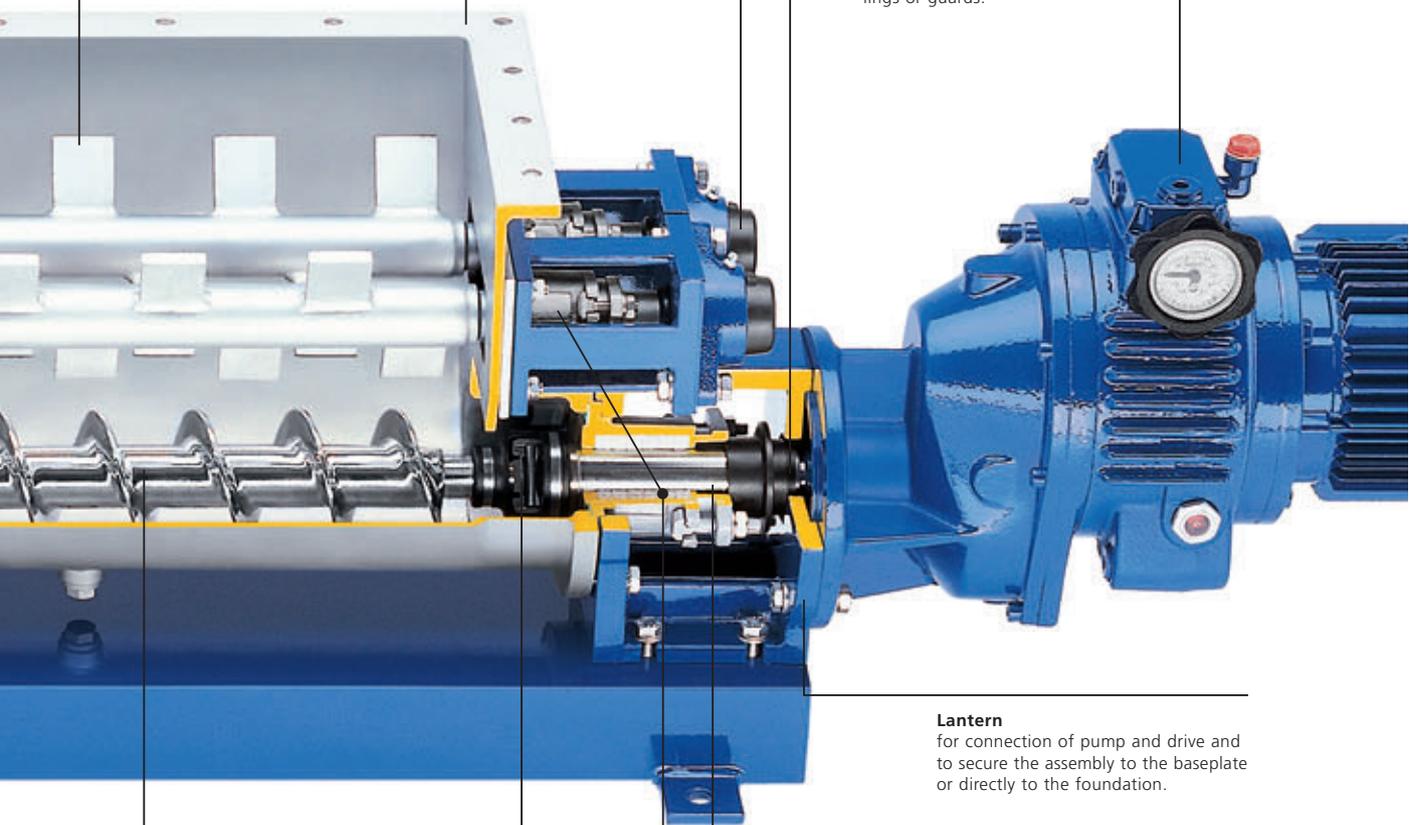
**Feed hopper**  
rectangular design, hopper length customised to meet special applications.

**Paddle shafts**  
counter rotating to prevent bridging over the auger feed screw and for the metered addition and mixing of additives.

**Paddle shaft bearing**  
in sealed design with lubricating device.

**Plug-in shaft connection**  
for quick disassembly or repair of pump and drive, for quick replacement of the rotating parts and shaft seals; with plug-in shaft pin and splash ring seal to secure the plug-in shaft connection and additionally protect the bearing from contamination/gland leakage.

**Pump drive**  
geared motors, variable speed drives or frequency controlled motors of all major manufacturers, directly flanged to the pump without additional couplings or guards.



**Coupling rod**  
with progressive pitch auger feed screw for power transmission and feeding of viscous products.

**Joint connection**  
consisting of just 5 components. Power transmission through wear resistant, hardened and replaceable joint parts: easily repaired.

**Universal joint sleeve with holding bands**  
protects the grease-filled joints from penetration of the liquid pumped, even in case of maximum vacuum or pressure loading; streamlined design to reduce turbulence and NPSHr.

**Shaft sealing**  
gland packing, alternatively with seal cage ring or grease chamber ring.

**Lantern**  
for connection of pump and drive and to secure the assembly to the baseplate or directly to the foundation.

**Plug-in shaft**  
connects the drive shaft to the joint; with gland packing the plug-in shaft is used as a shaft protection sleeve; upon request, it is available with wear resistant coating.

# Why open hopper pumps?

Because they are used in applications such as agriculture, brewing industry and distilleries, ceramics industry, confectionery industry, construction, dewatered sludge treatment, dough processing and bakeries, dyeing and varnishing industry, electroplating, fish industry, fruit and vegetable processing, pharmaceutical and cosmetics industry, poultry and meat processing, oil, gas and petrochemical industry, shipbuilding, sludge dewatering, stock preparation, textile industry, waste water and sludge treatment, wood processing and wine industry.

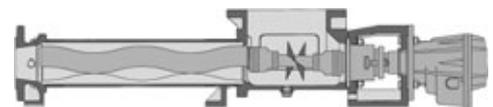
## Features

- These pumps incorporate an open hopper and auger feed screw which enables highly viscous products to be fed into the pumping elements
  - The pitch and diameter of the auger can be adjusted according to operating conditions for optimal product feed
  - The feed hopper can be designed to suit diverse application conditions
  - Pump hoppers can be fitted with integral bridge breakers
  - Range BTM pumps incorporate patented cutting knives for chopping and crushing the pumped product
- > Conveying capacity: 50 l/h–500 m<sup>3</sup>/h (0.22 GPM–2200 GPM),  
Pressure: up to 48 bar (720 psi)

## Overview of ranges

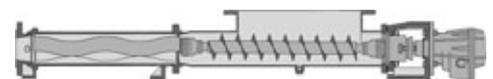
Pumps of the BTQ range are identical in length to the pumps of range BN and additionally feature a square feed cross-section and an auger feed screw for enhanced product feed. They are used for pumping medium to highly viscous products with a low degree of flowability.

### Range BTQ



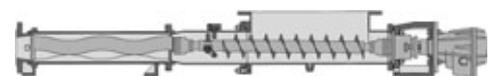
Pumps of the BT range feature a rectangular feed hopper with compression zone and auger feed screw. The length of the hopper opening is variable to suit the application conditions. They are used for pumping highly viscous media with a low degree of intrinsic flowability.

### Range BT



A special characteristic of the BTM range is the patented macerator integrated into the compression zone. The knives on the rotating conveying screw macerate the fed products in combination with the cutting tools fastened in the compression housing. Integrated into a closed system the pump permits macerating of fruit/vegetables with direct conveying in the following.

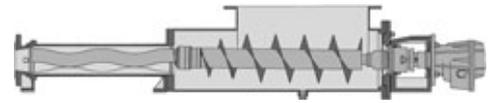
### Range BTM



# Overview of ranges

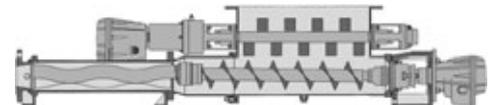
Pumps of the BTE range feature a rectangular feed hopper and a compression zone with an enlarged cross-section as well as an auger feed screw with a longer pitch and enlarged diameter. The length of the hopper opening is variable to suit the application conditions. Pumps of this range are used for pumping highly viscous to airtight products that do not tend to bridging.

**Range BTE**



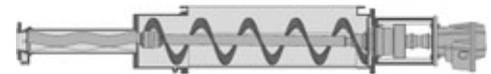
Pumps of the BTI range feature a rectangular feed hopper with integrated bridge breaker. The compression housing is dismountable for service work. The length of the hopper opening is variable to suit the application conditions. Pumps of this range are used for pumping highly viscous to airtight products that tend to form bridges above the auger feed screw.

**Range BTI**



The BTH range combines the various advantages of product group T. It is characterized by a separately driven, concentrically rotating ribbon screw with a maximized diameter and a long pitch. Through separate control of the conveying screw speed, the BTH pump can be used for almost any conveying media. The variable speed auger screw permits optimum filling of the conveying elements rotor and stator without causing excess capacity in the stuffing box. Even media that tend to form bridges can be handled with ease due to the large screw diameter of the BTH pump. The BTH range is the technical optimum solution for shear sensitive conveying media.

**Range BTH**



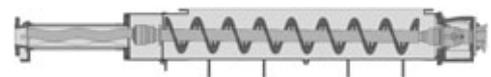
Pumps of the BTHE range feature a feed hopper with vertical hopper walls and a ribbon screw rotating centrally and on the edges. This guarantees optimum emptying of the feed hopper and optimised feed of the medium into the conveying elements of the pump. The length of the hopper opening is variable to suit the respective application conditions.

**Range BTHE**



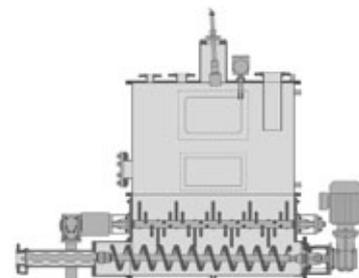
The BTES range is equipped with a shut-off system and ensures replacement of the conveying elements with the silo filled.

**Range BTES**



The BTEI range is a further development of the proven BTI and BTE ranges. In addition to a bridge breaker/mixing device, it features a supply tank that can be adapted to the application conditions on site. This supply tank replaces a separate storage tank and thus saves space within the system.

**Range BTEI**



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