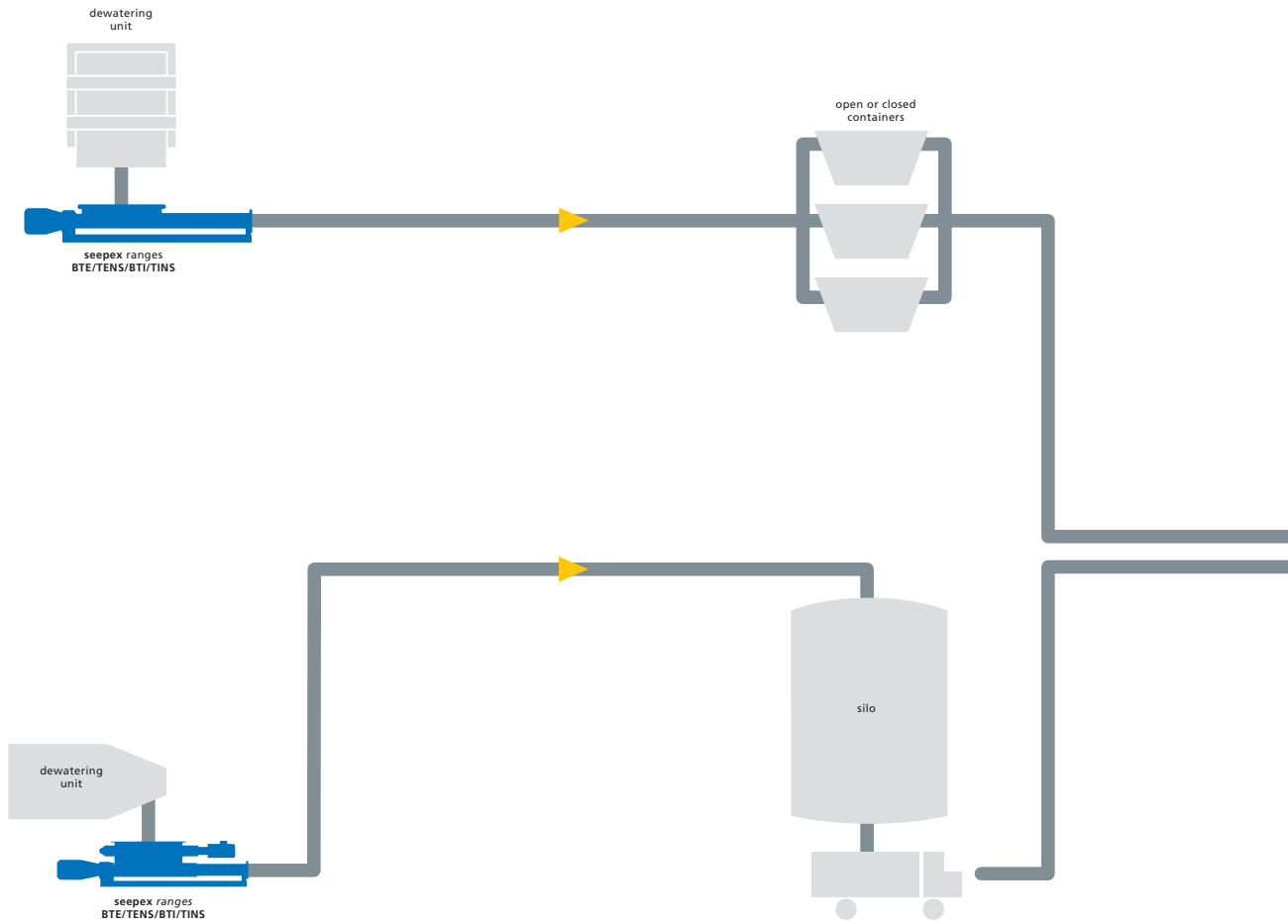


seepex.com
all things flow

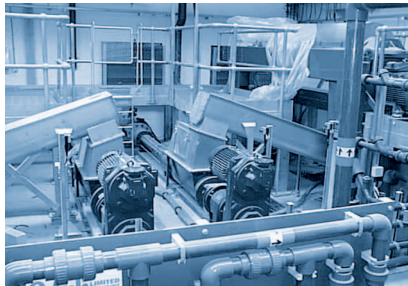
Pumps in Sludge Treatment Centers



Dewatering and Intermediate Storage



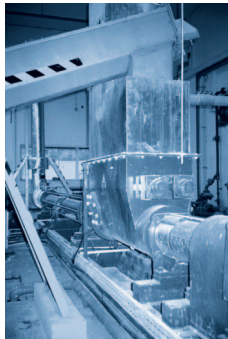
Two manually adjustable seepex pumps BTE 35-24 with ribbon auger feed screw, Product: dewatered sludge from centrifuges, 25% ds, Application data: 4.3 - 6.0 m³/h, 12 bar, discharge into container, Pressure pipe: 40 m horizontal, Ø 250 mm, Accessories: additional extension hopper, ultrasonic level control



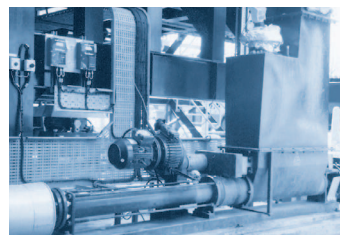
Pipe layout for discharge into closed containers



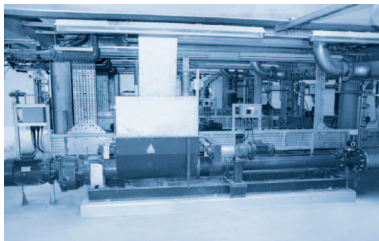
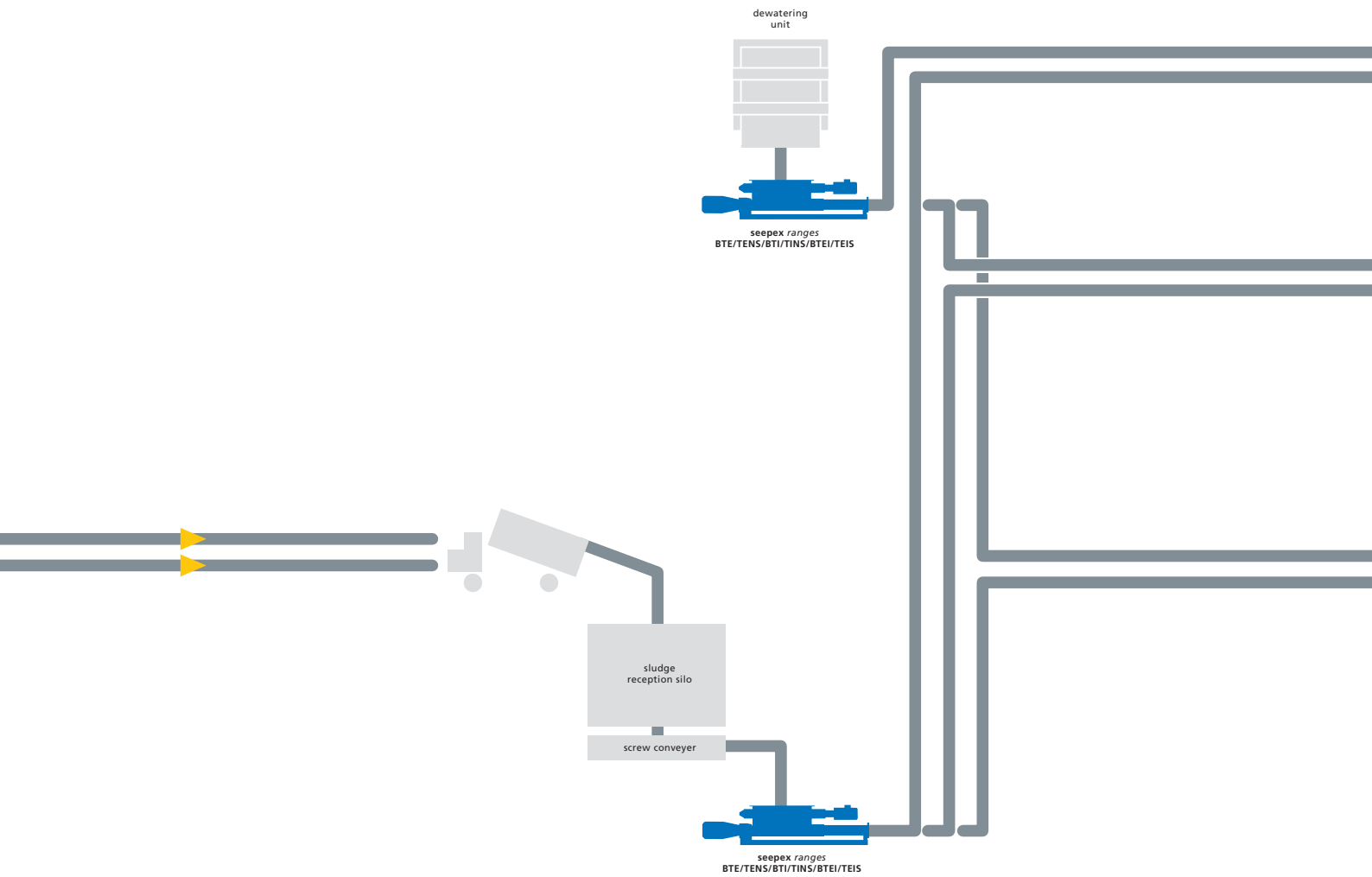
Frequency controlled seepex pump TINS 35-48 with bridge breaker, Product: dewatered primary sludge from a belt press, 30% ds, Application data: 2.5 - 8.6 m³/h, 36 bar, discharge into container, Pressure pipe: 78.5 m horizontal, Ø 250 mm, Accessories: additional extension hopper, ultrasonic level control, boundary layer injection



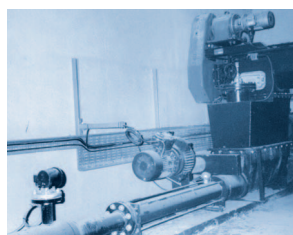
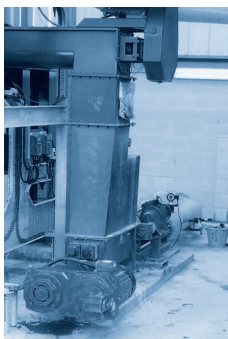
Manually adjustable seepex pump BTI 17-24 with bridge breaker, Product: dewatered primary sludge from a centrifuge, 20 - 30% ds, Application data: 1.0 - 4.0 m³/h, 12 bar, discharge into silo, Pressure pipe: 25 m horizontal, 12 m vertical, Ø 250 mm, Accessories: additional extension hopper



Dewatering and Imported Sludge Reception



Three frequency controlled seepex pumps BTI 35-24 with bridge breaker,
 Product: dewatered sludge from centrifuges,
 20 - 25% ds,
 Application data:
 1.4 - 7.2 m³/h, 20 bar,
 discharge into silo,
 Pressure pipe:
 15 m horizontal,
 30 m vertical,
 Ø 200 mm,
 Accessories:
 additional extension
 hopper in stainless
 steel

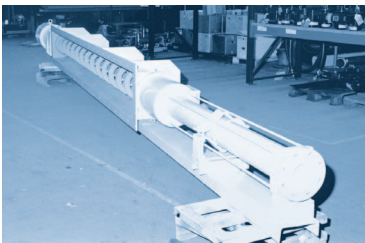
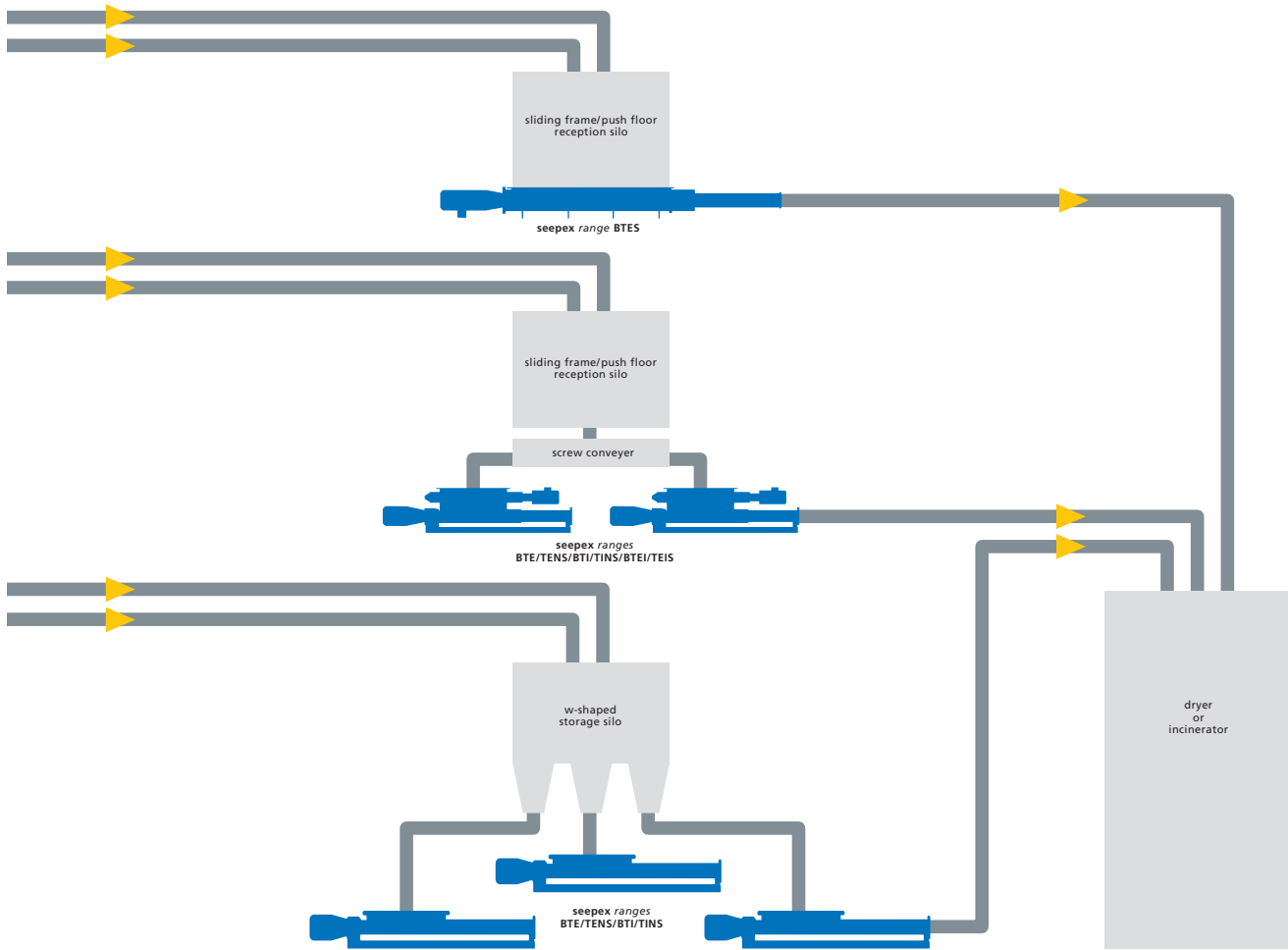


Two manually adjustable seepex pumps BTI 17-24 with bridge breaker,
 Product: imported dewatered raw primary sludges,
 20 - 30% ds,

Application data:
 1.0 - 3.8 m³/h, 12 bar,
 discharge into silo,
 Pressure pipe:
 30 m horizontal,
 9 m vertical,
 Ø 200 mm,
 Accessories:
 additional extension
 hopper, ultrasonic
 level control



**Intermediate Storage,
Drying and Incineration**

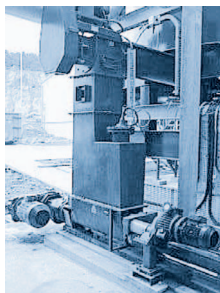


Frequency controlled seepex pumps BTES 35-24 in silo design with easy rotor dismantling device, Product: dewatered sludges, 20 - 35% ds, Application data: 5.0 - 10.0 m³/h, 24 bar, Pressure pipe: 35 m horizontal, Ø 250 mm

Two manually adjustable seepex pumps BTI 10-24 with bridge breaker, Product: dewatered primary sludges from belt presses, 25% ds, Application data: 1.0 - 2.0 m³/h, 24 bar, discharge into dryer, Pressure pipe: 6 m horizontal, 9 m vertical, Ø 200 mm, Accessories: additional extension hopper



Manually adjustable seepex pump BTI 17-24 with bridge breaker, Product: dewatered primary sludges from silos, 20 - 30% ds, Application data: 1.0 - 4.0 m³/h, 12 bar, discharge into dryer, Pressure pipe: 30 m horizontal, 9 m vertical, Ø 200 mm, Accessories: additional extension hopper, ultrasonic level control



Three frequency controlled seepex pumps BTE 10-24 without bridge breaker and BTI 2-24 with bridge breaker, Product: dewatered surplus sludge from a silo, 14% ds,

Application data: 1.0 - 1.8 m³/h and 0.2 - 0.7 m³/h, 10 bar, discharge into dryer, Pressure pipe: 10.5 m horizontal, 9.5 m vertical, Ø 250 mm



seepex Progressive Cavity Pumps in Sludge Treatment Centers

Worldwide, the disposal of dewatered sludge is subject to significant changes. Beginning with the year 2005, Germany will only allow waste with an organic content of less than 10% to be deposited on landfills. Consequently this method of disposal for dewatered sludges cannot be used in future.

The agricultural use of dewatered sludge is also increasingly questioned. This leaves only a limited number of disposal routes available – examples of which are, thermal drying and incineration.

The incineration of dewatered sludge

An economical system for the incineration of dewatered sludge should be autarkic without the need of any auxiliary fuel. Measures must be taken to increase the thermal value of the sludge. A crucial factor is the reduction of the moisture content by means of mechanical dewatering and drying.

The success of mechanical dewatering depends on the dewatering equipment itself, possible conditioning and type as well as consistency of the sludge.

After the extraction of water and the reduction of volume during the thermal drying process, dewatered sludge is pressed into pallets which are used as fertilizer or burned in incinerators or power stations.

In all steps of the waste water treatment processes **seepex** progressive cavity pumps are used for safe and economical transport in closed systems.

Applications of seepex pumps in sludge treatment centers

1 Dewatering and Intermediate Storage

- ~ dewatered sludges from centrifuges and belt presses
- ~ dry solids content 25-35%
- ~ discharge into open and closed containers
- ~ discharge into silos for intermediate storage
- ~ **seepex** pumps ranges **BTE, TENS, BTI, TINS**

2 Dewatering and Imported Sludge Reception

- ~ dewatered sludges from centrifuges and belt presses or imported sludges from satellite treatment works

~ dry solids content 25-45%

~ discharge into silos for intermediate storage

~ **seepex** pumps ranges **BTE, TENS, BTI, TINS, BTEI, TEIS**

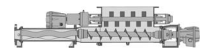
3 Intermediate Storage, Drying and Incineration

~ dewatered sludges from silos

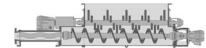
~ dry solids content 25-45%

~ discharge into dryer or incinerator with metering accuracy

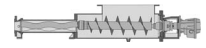
~ **seepex** pumps adapted to the different storage silo systems, ranges **BTE, TENS, BTI, TINS, BTES, BTEI, TEIS**



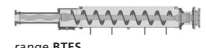
range BTI



range BTEI



range BTE



range BTES



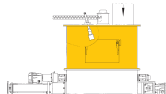
ranges TENS, TINS, TEIS

Accessories

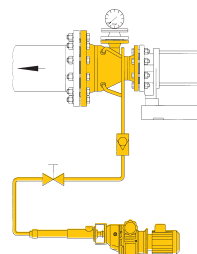
~ **Ultrasonic level measurement** dependable level measurement in additional extension hopper



~ **Additional extension hopper** as sludge buffer vessel and for installation of the ultrasonic sensor for level measurement



~ **Boundary layer injection system** for the reduction of friction losses between sludge and pipe work



seepex.com

all things flow

And what can we get flowing for you? Your nearest contact:

Or visit www.seepex.com

ST 3.06E