

# Centrifugal Sifters





Kek<sup>®</sup> K300C Centrifugal Sifter

# Easy Clean Cantilever Sifter

The Cantilever design Kek® Centrifugal Sifter is based on the tried and tested Kek® Centrifugal Sifter range. The New Cantilever design offers users unprecedented high standards of hygiene and ease of operation.

This concept has proved so successful that virtually the whole range is now to this design.

#### **Product Range**

oversize end

Model Size	Screen Area Sq. Ft.	Motor hp
Lab Sifter	0.47	0.5
Mini Sifter	0.47	0.5
K300C	0.9	0.75
K650C	3.57	3
K800C	6.2	5
K1150C	11.8	10
K1350C	14.18	10

• No leakage or contamination at the

 360° in-place rotation of sifting screen for inspection of the complete screen without removal from the machine.

#### **How It Works**

- Material is fed into the sifter inlet and accelerated by an auger.
- The auger moves the material into the cylindrical sifting chamber where it is picked up by the rotating paddle/blade assembly and propelled against the sieve screen.
- The blades on the paddle assembly are set in a helical configuration to move the material along the entire length of the sieve screen at the optimum sieving rate for any respective applications.
- The fine material passes through the screen and is collected at the main sifter outlet.
- The oversized and/or foreign material is moved to the end of the sifter chamber and, after passing around the end baffle, is discharged via a separate smaller outlet.

30 Second Screen Change















Kek<sup>®</sup> K650C Centrifugal Sifter

# **Applications**

#### **Principle Processes**

## **Feedstock policing**

Check sifting of both, bulk product and minor ingredients to remove unwanted materials such as strings, packagings, insects, bolts, etc., and to remove deagglomerated hard lumps of product typically at the point of discharge from storage silos or supersacks etc.

#### Scalping

Protecting processing or packaging equipment by removing the small percentage of product exceeding the maximum feedstock specification.

### Classification

One or more sifters divide product into the various grades required for further processing or packaging.

# **De-Dusting**

Removal of fines that have been generated during processing and handling which will otherwise spoil the appearance of a packed product or cause a problem during subsequent processing.

### Conditioning

Centrifugal sifters are an excellent means to invigorate stored product to give it a more uniform density and to make it flow easier.

#### **De-agglomerating**

The positive action of centrifugal sifters ensures that all but the hardest agglomerates of the otherwise perfectly good product are recovered.

# Special Applications

#### **De-watering**

Centrifugal sifters are equally suitable for the removal of excess liquid from certain slurries, pastes and solids in suspension.

# **De-packeting**

Fitted with a special inlet scroll which cuts open packing material, centrifugal sifters are ideal for the recovery of product from sachets, bags, pouches and other wrapping where the finished product is under-weight, substandard or damaged in some way.

# Fruit de-lumping

By installing an adapted screw feeder at the sifter inlet, blocks of dried fruit can be broken up into individual pieces without damage.

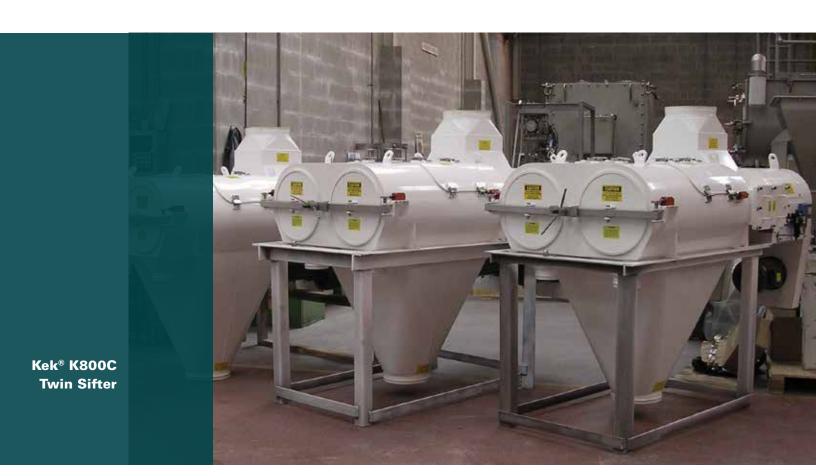
#### In-line sieving

Fitting a centrifugal sifter directly into pneumatic conveying systems for check sieving of powders between storage and usage.

#### Other special applications include:

- Gas purging of the unit ideal for inerting applications
- High-pressure sifters for explosion containment
- Twin / Tandem sifters for multiple separation

Special application data sheets providing detailed information on the above are available upon request.





# Range

# Cantilever shaft design

**Laboratory Sifter** – Built for rapid and easy disassembly for thorough cleaning. Ensures total recovery of product after each sifting operation.

**Mini-Sifter** – Ideal for pilot and small production processes. Throughput range from a few grams per minute to 330 lbs/hr.

**K300C** – Designed for throughputs of 3 to 5 tons an hour dependent upon the product and screen size. Mirror polished machines are well suited for high hygienic requirements in the pharmaceutical industry.

**K650C** – The workhorse of the Kek Centrifugal Sifter range, capable of sifting rates of up to 20 tons per hour.

**K800C** – Built for high capacity sieving at rates of up to 40 tons per hour, the K800C has a generous clearance around the sieve screen enabling it to maintain production rates with sticky products.

**K1150C** – Our largest cantilevered sifter with capacities of up to 80 tons per hour

# Non-cantilevered shaft design

**K1350** – Shaft bearings both end. This machine is designed for throughputs of up to 100 tons per hour. Because of its size, it is the only sifter that is not offered in cantilevered design. It does feature a unique forward and lift access door for easy inspection, cleaning and maintenance as well as a hinged oversize end door.

#### **Sifting Screens**

Standard screens are manufactured in white nylon but for special applications, we offer the following:

- Anti-static screens using carbon filaments and other specialized materials
- Stainless steel woven wire screens
- Wedge wire screens for the most arduous, heavy duty applications or where access for maintenance is severely limited, as in radioactive processes
- Screen protectors eject incoming material or foreign objects to protect the screen.

Sifters are readily custom built to further aid easy clean, hygienic operation and can be provided with extras such as:

- CIP spray option
- Inlet section access door
- Additional inspection doors on sifter body

Custom models can be designed and manufactured to be built into other pieces of proprietary equipment.

#### **Testing and Toll Processing Facilities**

Sifting is not a precise science and occasionally some degree of empirical testing is required to achieve customers' requirements. Our comprehensive Test Center is at the disposal of customers for products trials and analyses.

Rental equipment is available, where circumstances dictate that trials are best done at the customer's premises.

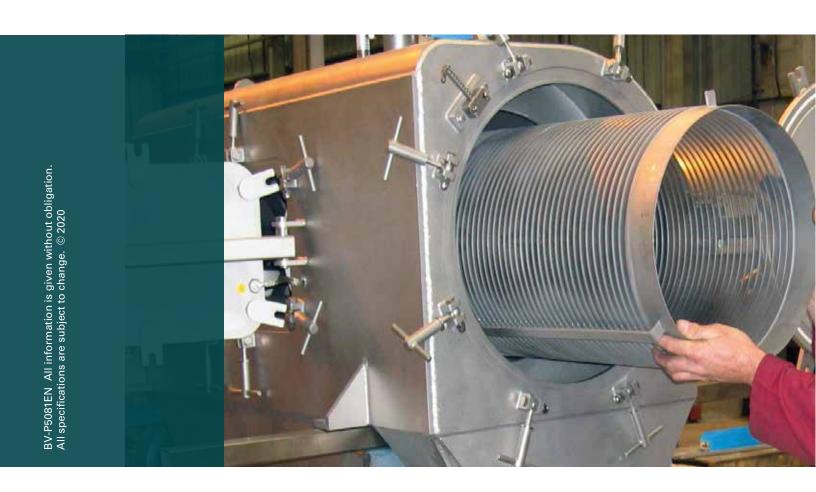
#### After-sales service

We stock a comprehensive range of standard nylon screens and offer a 24-hour emergency service for many other parts. In addition, we carry a large inventory of screen frames, bearings, seals, etc.

Spare parts supplied by Kemutec will ensure that your sifting equipment provides the best possible performance and most reliable service.



Kek<sup>®</sup> Sifter Screens





Kemutec - Part of the Schenck Process Group 130 Wharton Road

Bristol, PA 19007 Tel: 215 -788-8013 Fax: 215 785-5113

Web: www.kemutecusa.com

Email: sales.kemutec@schenckprocess.com