Kemutec KEK K650CP
Centrifugal Sifter

- Hinged oversized door for easy cleaning and operation
- Quiet vibration free operation
- Fully rotatable screen for inspection and cleaning
- Bolted flanges for dust tight operation
- Tool free removal of sifting screen, screen retainer and paddle/blade assembly
- Flexible design reduces floor space and meets every processing requirement
- No oversize end bearing or seals for fewer moving parts to wear or replace
- Hygienic design
- Screen changes in less than 30 seconds

Features

Cantilever designed Kemutec KEK Centrifugal Sifter comes from a long line of proven sifting equipment. The easy to clean and tool free design allows for maximum output and uptime. Its oversize hinged door provides quick access to the hygienically designed sifting screens. The Kemutec KEK Centrifugal Sifter is ideal for the Food, Pharmaceutical, and Chemical Industries.

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Process
- Scalping to remove oversize particles
- Policing to remove foreign particles and objects
- Size classification
- De-lumping and de-agglomeration
- Liquid straining

Equipment
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Material of construction
Stainless steel, carbon steel

Design
Gravity inline pneumatic conveying

Options
- Drive arrangement
- ATEX compliant execution available
- Pressure rated design
- Gas inerting
- CIP capability
- Screen protection or trash traps
- High containment machines
- Dust-tight connections

Body type: One piece strengthened body complete with fines outlet and integral oversize end. A bolted inspection door fitted to right hand side of body. Grounding connections fitted at inlet and outlet for continuity.

Pressure / vacuum relief: The body is fitted with a plain flange for attachment of a pressure / vacuum relief valve. A safety valve of this type must be fitted to the sifter. Kemutec offers a suitable valve as an optional supply.

Inlet/outlet connections: 4" O.D. (102 mm) plain pipe stub connections on the inlet and outlet – see drawing for details.

Oversize end connection: 6" (152 mm) tri-clover type ferrule and safety grid. Note the oversize end must be sealed against air leakage by use of a suitable isolation valve or canister. Please ask for details.

Oversize end door: Fitted with a hinged and interlocked door.

Motor specification: 3.0 hp metric frame, 3 phase, 4 pole 1700 rpm (60 Hz) TEFC motor non hazardous area.

Sifter shaft speed: Via Belt Drive – 700 rpm. Shaft rotation – counter clockwise viewed from oversize end.

Shaft / bearing type: Cantilever shaft supported at inlet end only by a pair of heavy duty sealed for life flanged ball bearing units fixed to drive support housing/bracket.

Shaft seal: At inlet end only. Twin nitrile rubber lip seals mounted in a bolted seal housing complete with air purge connection between seals. Air-purge is pre-piped from seal to a bulkhead fitting on the housing to accept ¼" O.D. (6 mm) nylon tube.

Air/gas purge requirement: The air purge facility requires compressed air/gas from a clean dry supply, regulated between 0.35 - 1.0 barg (5 to 14.5 psig). Note: Pressure must be set higher than the conveying pressure to ensure the purge remains effective. Usage rate is approx. 7 ft^3/min at 0.5 barg / 7.5 psig.

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Gasket: All gaskets are FDA approved white food quality rubber.

Infeed scroll type: Standard AL type requires controlled feed of product.

Shaft paddle: 4 blade all welded with 4.5 degree forward pitch. Fitted with intra-baffle.

Paddle wiper/brushes: 8-off adjustable bolted wiper blades fitted to paddle blades.

Sieve basket retainer & oversize baffle: A combined sieve basket retainer with screw adjustable baffle plate to allow adjustment to material flow to oversize.

Sieve mesh area: 3.92 ft² = 0.032 m² (K650C) and 2.75 ft² = 0.24 m² (K650CS).

Sieve basket: To suit CE/2 nylon or woven wire mesh types as standard.

Sieve meshes: Woven nylon or wire mesh as standard. Options of wedge wire and perforated plate are offered.

Safety interlocks: Fitted to oversize end as standard: Allen Bradley plunger limit switch, IP65, 1 pair NO + 1 pair NC contacts, M20 conduit thread entry.

Inline pressure / vacuum conveying parameters (based on maximum 4" (102 mm) conveying line):

Maximum operating pressure 10 psi

Maximum operating vacuum -10 psi

Maximum air velocity 80 ft/second

Maximum temperatures:

Nylon meshes	+176 °F	+80 °C
Silicone gasket	+392 °F	+200 °C
Nitrile shaft seal	+176 °F	+80 °C
PTFE shaft seals	+392 °F	+200 °C
Flanged bearing units	+212 °F	+100 °C

Altitude: Maximum 1000m above sea level (due to motor cooling).

Additional options available upon request:

- Removable and interlocked inlet section cleanout door – see standard drawing
- Quick release shaft assembly via interlocked flip down drive guard cover
- Stainless steel drive support and guard instead of painted carbon steel items
- Left hand body inspection door instead of standard right hand version
- PTFE shaft lip seals
- Hazardous area drive motor and door interlocks
- Zero or reverse pitch paddle assemblies
- Oversize collection canisters
- Pressure / vacuum relief valve
- Polyester / PFK / anti-static polymer meshes
- All welded one piece shaft / scroll / paddle assembly
- Mobile support stand

Alternative machine types:

- Cut-off Fines Outlet – request drawing DS487
- Air Relief Filter Socks – request drawing DS482
- Reverse Jet Air Relief – request drawing DS506
- Depack Sifter – request drawing DS498
- Standard Gravity Feed – request drawing DS529

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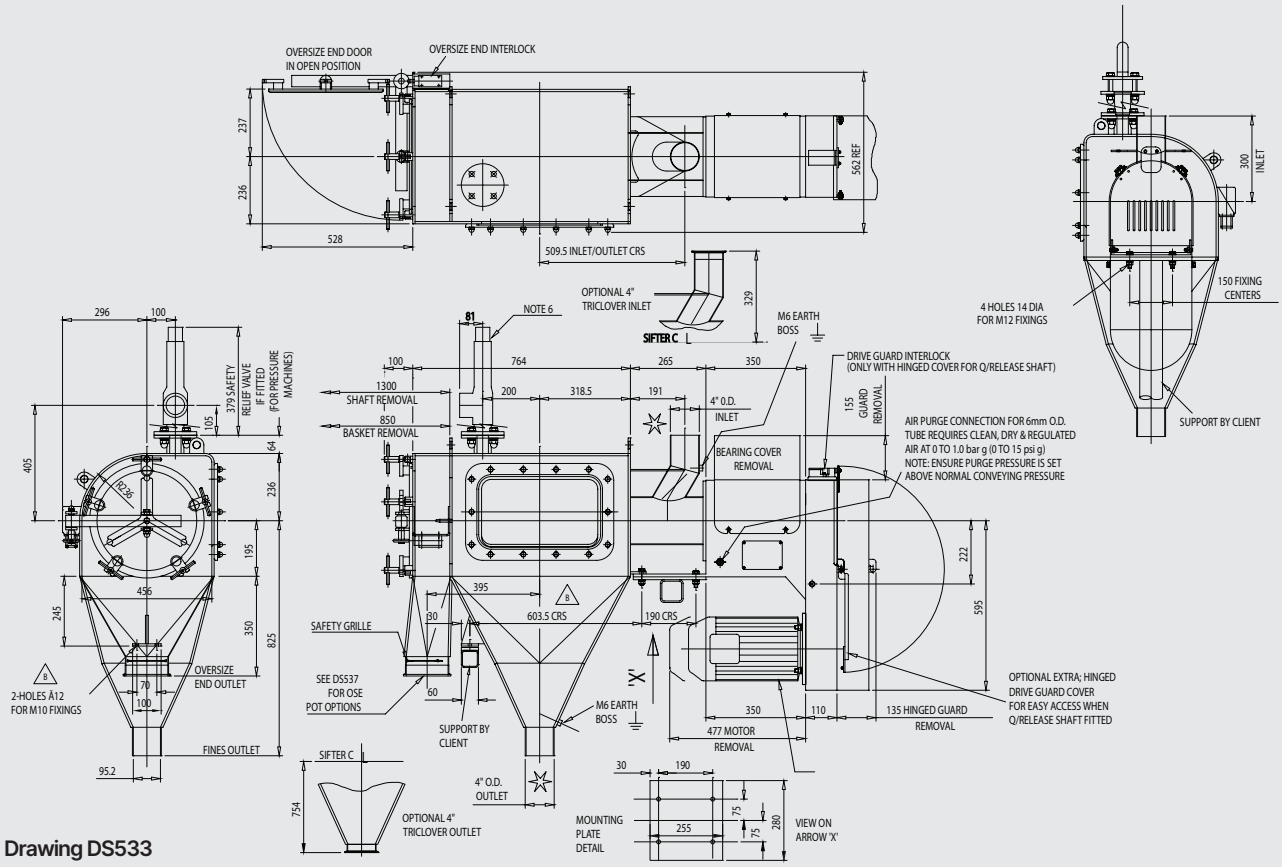

Drawing DS533

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