ABOUT US

ESTABLISHED IN 1986 | MARYLAND, USA

MILLING & FOOD PROCESSING INDUSTRIES

OUR MISSION

REPRESENTATION & PARTNERS
KEY POINTS

FLUIDIZING
- OPTIONS
- DESCRIPTION

THE FCX SYSTEM
- FCX COMPONENTS

OPERATION
- SYSTEM FUNCTIONS

SPECS & BENEFITS
- SIZING
- OPTIONS
OPTIONS AMONG THE INDUSTRY

<table>
<thead>
<tr>
<th>Mechanical</th>
<th>Hybrid</th>
<th>Additional Drawbacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Vibratory motor</td>
<td>• Vibratory motor &amp; fluidizing nozzles</td>
<td>• Money</td>
</tr>
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<td>• Discharge challenges</td>
<td>• Maintenance</td>
<td>• Time</td>
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<td>• Timely</td>
<td>• Sanitation</td>
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<td>• Energy</td>
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"(v) to suspend (particles) in a rapidly moving stream of gas or vapor to induce flowing motion of the whole." - Merriam-Webster
APPLICATIONS & USES

Common Applications
- Bulk powders
- Chemicals
- Ash
- Cement
- Other

Uses
- Bulk loadout
  - Trailers
  - Railcars
  - Other
FCX SYSTEM

AIR SUPPLY

CONE

CONTROLS

AIR DISPLACEMENT
AIR SUPPLY

- 5.5 Kw rotary motor
- Belt-driven
- Pressure regulator (7.5 psi)
- Pneumatic lines
- 1 to 2 air distribution rings (dependent on product type and/or bin capacity)
- Suitable for up to 4-bins
FCX CONE DESIGN

- Air distribution ring (4-6 inlet nozzles)
- Mesh support liner
- 5-micron porous liner
  - Replaceable
- Stainless Steel | Carbon Steel
- No moving parts
CONE DESIGN

- The FCX fluidizing cone has a 1250 mm internal ID, and 300 mm discharge diameter.
- For bins up to 1750 mm diameter, we use no additional fluidizing means.
- For bins up to 3000 mm diameter, we add 4 sintered bronze fluidizing nozzles to ensure the outer boundary of the bin is fluidized.
- For bins up to 4000 mm diameter, we add two rings of 4 sintered bronze fluidizing nozzles (8 total).
- All are fed off the same single blower air feed.
CONTROLS

- PLC – Programmable Logic Controller
- Capacitive Sensors
AIR DISPLACEMENT

INDUSTRIAL EXHAUST FAN

DUCTING

FILTRATION
AIR DISPLACEMENT

- FCX: 4000mm diameter bin.
- 25-ton tanker: Under 2-3 minutes
  - High flour-volume: important to remove the displaced air.
  - Fluidized flour: 2-minute fill time for 25 tons. Remove
  - 30 m³/min. of displaced air.
  - Suitably sized fan & filter connected directly to a telescopic spout.
OPERATION

PLC

RETENTION
(1.5 min)

SLIDEGATE

SHUTDOWN
SIZING & OPTIONS

Sizing
- One-size fits all
- Adapter (If required)

Material
- Stainless Steel
- Carbon Steel

Air
- Blower 5.5 Kw (Rotary Lobe Compressor)
- Air Compressor w/ pressure regulator (7.5psi)
SERVICES

Consulting & Drafting
CETEC specializes in bringing your vision to life and our dedicated drafting engineers are extremely detailed oriented in making sure every specification meets our customers’ demands.

Fabrication & Machining
Our expert techs can design and manufacture whatever fabrication needs you may instore. Our staff works hand-in-hand with our draft engineering team to make sure your specifications and design meets your standards.

Retrofit & Reconditioning
CETEC offers complete overhaul and restoration services to meet your equipment needs. We also offer a variety of software upgrades and additional component functionalities.

Spare Parts
Our well-maintained stock levels include both mechanical and electronic components. With advanced and efficient shipping logistics, we guarantee a fast turn-around.

Maintenance
CETEC is an advanced maintenance provider that can assist in a wide spectrum of service options. Get the best out of your machinery and equipment by allowing our experts to assist you today.

Testing
Our testing facility allows us to assess and analyze your product on a wide range of CETEC units. For more information, please visit our website.
THANK YOU

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