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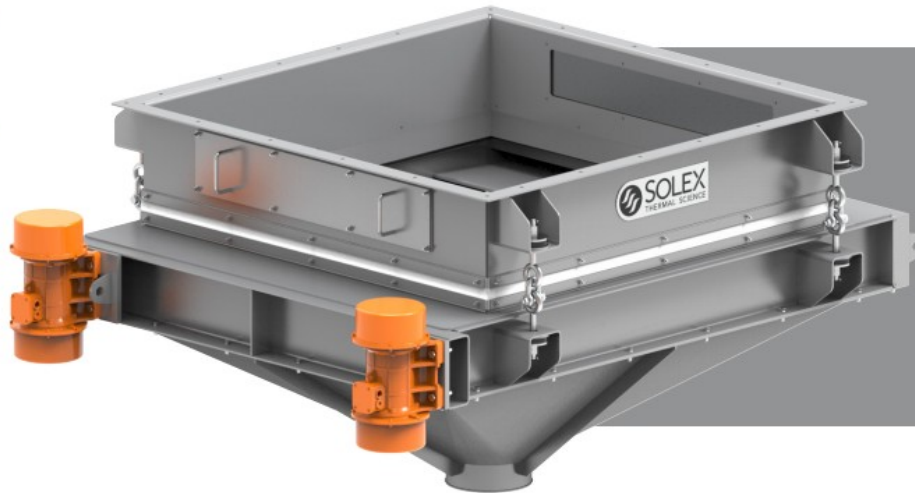
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The vibrating louver feeder is one of three new discharge devices released by Canadian-based Solex Thermal Science for applications such as sand, sugar, seeds, minerals and fertilizers.

SOLEX EXPANDS TO BULK MATERIAL HANDLING MARKET

Expertise in the mass flow of bulk solids leads to new lineup of standalone feeders

Solex Thermal Science is expanding its presence in the bulk solids market with a new lineup of discharge feeders for the burgeoning bulk material handling market.

The Canadian-based technology provider, a recognized global leader in bulk solids thermal exchange for more than 30 years, has announced the initial rollout of three uniquely designed and in-house fabricated discharge feeders for different applications such as sand, sugar, seeds, minerals and fertilizers.

“Reliable, uninterrupted mass flow of bulk solids plays an important role in the efficiency of material-handling systems as well as in maintaining product quality,” says Solex Thermal Science CEO Lowy Gunnewiek.

“Through our expertise in designing and fabricating moving bed heat exchangers, Solex Thermal Science has decades of experience in designing discharge devices that have been proven to achieve desired flow behaviours. Our world-tested equipment can be tailored to different material flow properties, while providing operators with maximum control and a guaranteed first-in-first-out flow sequence.”

Solex’s discharge feeder lineup includes:

Vibrating louvers

Best suited for lighter material applications such as sand, sugar or plastics, Solex’s vibratory discharge uses a series of partially overlapping louvers carefully positioned within a self-supported frame that vibrates

linearly to offer a full live-bottom system.

The system is designed to ensure mass flow by allowing product to flow along the multiple overlapping shallow louvers into a series of slot openings. The selection of the angles and openings size are skillfully selected to promote movement when the motors are activated while safeguarding against run-ons during interruptions.

Vibrating motors are mounted to the frame and deliver the linear motion and regulate the rate of product discharge.

Sliding frame

Best suited for medium-duty applications such as seeds, beans or delicate granules, the feeder is comprised of a fixed part made up of a series of small mass flow hoppers that feed the material toward the sliding frame. As the sliding frame moves horizontally back and forth, the solids are subsequently discharged from the hoppers.

The ladder is powered by a pneumatic actuator that controls both the speed and amplitude of the oscillations. The sliding frame feeder is advantageous when there are height limitations.

Oscillating gate

Solex’s oscillating gate feeder is best suited for heavy-duty applications such as minerals, fertilizer and other high-density granular solids. In the feeder, product splits into the two symmetrical mass flow funnels, created by the fixed outer walls and the moving inner walls at the centre that form a pair of slotted shaped openings that the material

flows through. An actuator-positioner regulates the width of the openings in the oscillating gate for feed rate control.

Solex introduced the oscillating gate more than 20 years ago, and it has since become a favourite in high throughput operations for its simplicity and reliability.

“With all our discharge feeders, our scientific design approach combined with practical engineering ensures we carefully account for the transition between the silo or bin to the discharge, a critical aspect in achieving the desired flow characteristics,” says Solex Thermal Science Global Sales Director Pedro Moran.

“In addition, we consider the spatial constraints and equipment used to convey the bulk solids after passing through the unit. In all cases, our experienced staff work to ensure the right feeder is customized correctly for full-scale implementation.”

Solex is a global leader in high-efficiency, indirect heat exchange technology for the heating, cooling and drying/conditioning of free-flowing granular materials such as solid granules, pellets, beans, seeds and particles.

Over the past 30 years, the company has installed more than 800 heat exchangers in more than 50 countries worldwide with applications such as fertilizer, oilseeds, sugar and industrial materials.

For more information, visit www.solexthermal.com.