HMA MATERIALS HANDLING

MOGENSEN SIZER

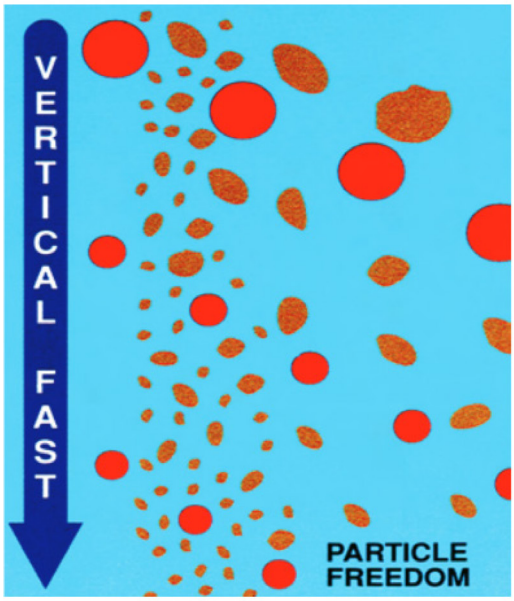
Mogensen Sizer

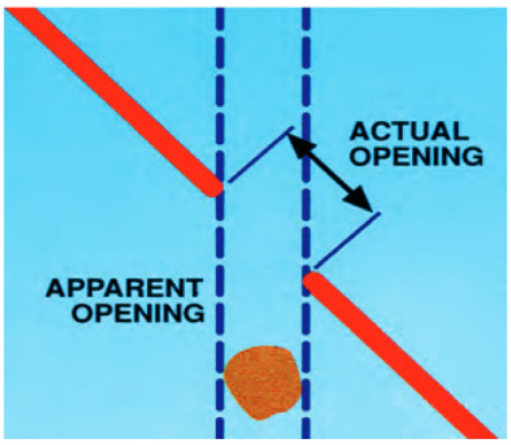
The Mogensen Sizer is a high-capacity screening unit, which has been proven in a wide variety of industries around the world. The patented screen uses a compact, multi-deck design, which can handle up to ten times more material than conventional screens occupying the same space. The Sizer is used for many different industrial applications including dry, moist and wet materials. Five standard widths are available and provide a range of capacities. Five-deck Sizers can make up to six products from a stream of feed material; three-deck Sizers achieve up to four. The machine is compact and simple and its power requirement low, so maintenance is minimal and its noise levels significantly lower than those of conventional screens.

UNIQUE METHOD OF OPERATION

Screen meshes of progressively smaller apertures are mounted in the compact, vibrating frame of the Sizer at increasingly steep angles. The apparent opening through which the particles fall vertically, is much smaller that the actual aperture, because of the slope of the screen, In other words the Mogensen Sizer makes a separation at a given size using a mesh aperture of greater size. The extraordinarily simple concept means that material flows freely, rapidly and vertically through the meshes, whereas in conventional screens bed congestion easily occurs, as process material is conveyed slowly and more or less horizontally along the screen deck.

The large apertures of the Sizer greatly reduce the risk of pegging and blinding; the rapid, vertical movement of most of the material gives our Sizer its large capacity in relation to machine size. The smallness of the machine means that it is easier to dust-proof. Its small size (compared with conventional screens of the same capacity) and the fact that it is not unnecessarily being used to convey process material, allow installed horse-power to be small. Energy is not wasted as gravity does most of the work. The operating principle improves process efficiency and capacity and extends the range of materials, which may be successfully handled; dry, moist, wet, hot, abrasive,awkwardly-shaped and sticky. Mesh replacement costs are reduced, as heavy, coarse materials do not come into contact with the finer meshes.





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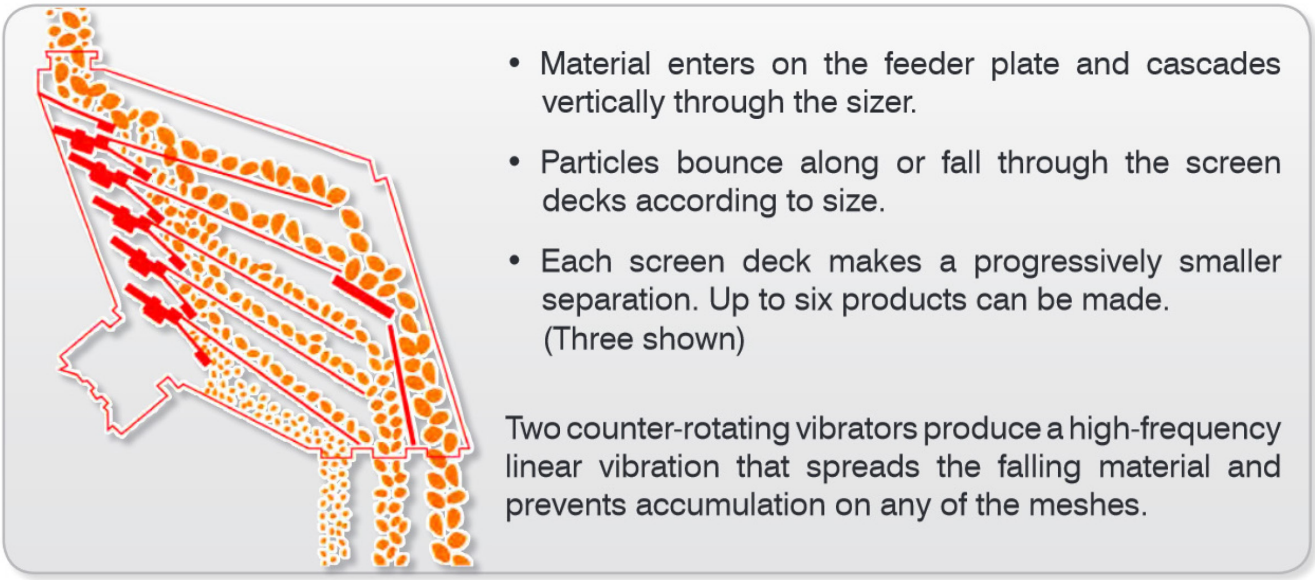
ADVANTAGE

- **Reliable, accurate separations -** The stratification of the process material means individual particle treatment thus making for accuracy and high efficiency.
- **High capacity in relation to size -** The results in considerable space saving. It can be up to 10 times the capacity of conventional screens in relation to floor area occupied.
- **Small, light and easy to install -** Simplifies the support structure needed, saving weight of steelwork and cost. Packaged design eliminates need for gearboxes and vee belt drives, etc. All normally removable parts can be handled by a single operator.
- **Low capital cost -** Because of the compact design of our machine, total installation and capital cost are low.
- **Maintenance is simplified -** Savings in maintenance are achieved by simple, but effective, method of fastening and tensioning the meshes. The need to clean 'pegged' meshes is eliminated in most cases by the unique principle of our machine. A mesh panel can be changed in 10-15 minutes.
- **Very versatile -** Machines are easily adaptable to different process requirements.
- **Low power requirements -** Energy savings result from the operating principle. There is no heavy bed of material on the meshes and the machines are small so vibrator power requirements are lower. Installed power ranges from 1.8-12.5kW.
- **Dust proof -** The design of covers and external chute connections make the machine totally dust proof. Covers are fixed by a simple wedge fastener.
- **Blockage free -** Our design virtually eliminates the pegged problems associated with conventional screening.

The ability of our sizer to handle moist and sticky materials is greater than that of conventional screens.



- Material enters on the feeder plate and cascades vertically through the sizer.
- Particles bounce along or fall through the screen decks according to size.
- Each screen deck makes a progressively smaller separation. Up to six products can be made. (Three shown)

Two counter-rotating vibrators produce a high-frequency linear vibration that spreads the falling material and prevents accumulation on any of the meshes.

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WIDE RANGE OF OPTIONS & ACCESSORIES

5 widths: 0.5, 1.0m, 1.5m, 2m, 3m, to match capacity requirements.

6 decks: for versatility and more products.

3 decks: for head-room savings.

Vibrators: of various sizes and 3 different frequencies (1450, 960 and 750 r.p.m.) to suit different screening problems.

Product chutes: wide variety of chute arrangements to match plant layout.

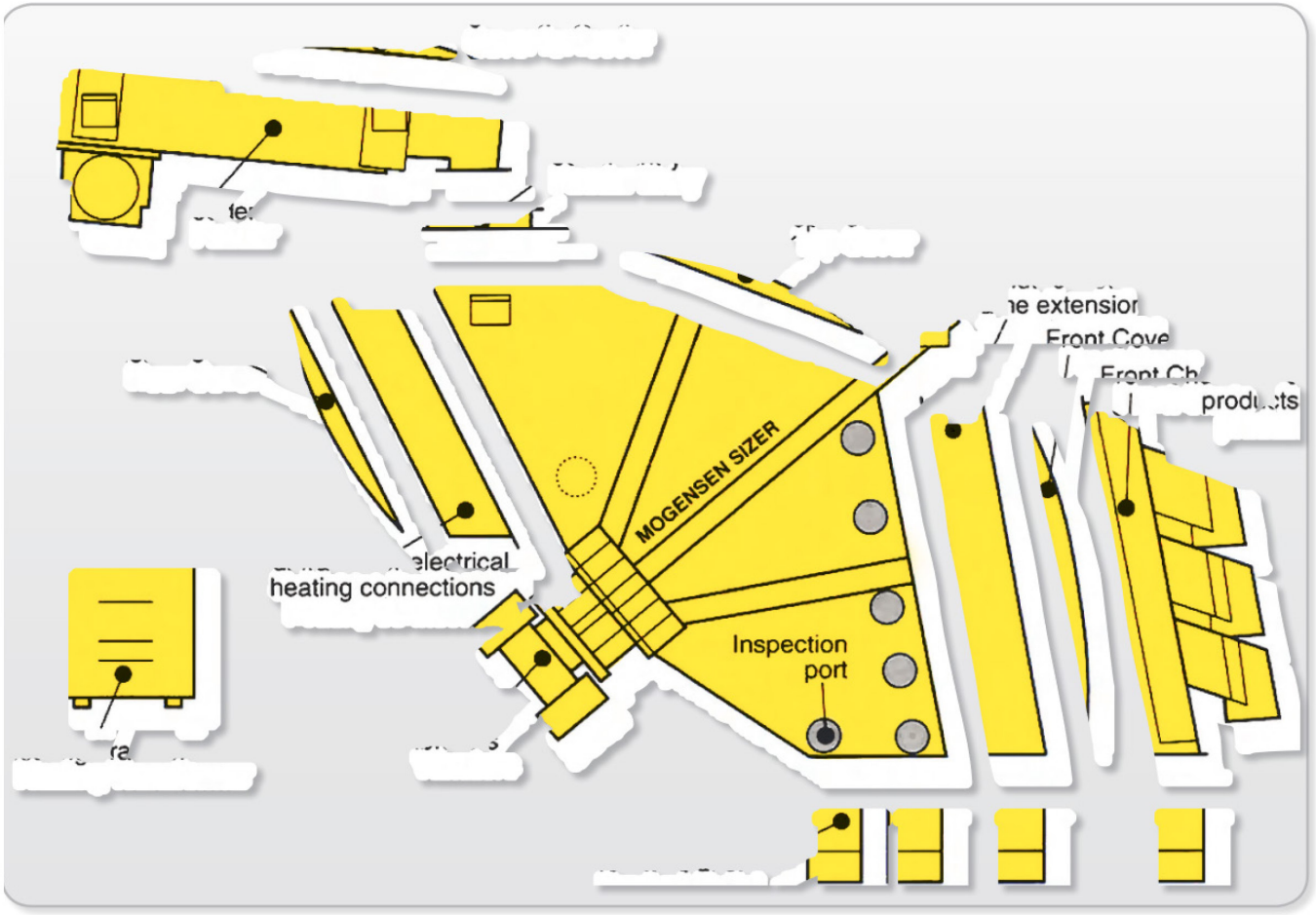
Springs: compression or tension isolation springs.

Special materials: Stainless steel construction; rubber linings; wear-resistant steel linings; epoxy and chlorinated rubber paints.

Electric Deck Heating: for moist, sticky materials. Our own designed and manufactured system is fully integrated with the sizer.

Pneumatic Mesh Cleaning: a new Mogensen development for keeping meshes clean (patents applied for) - suitable for fertilizers, chemicals, damp sand etc.

Feeders: dust-proof feeders and conveyors to match the sizers.



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