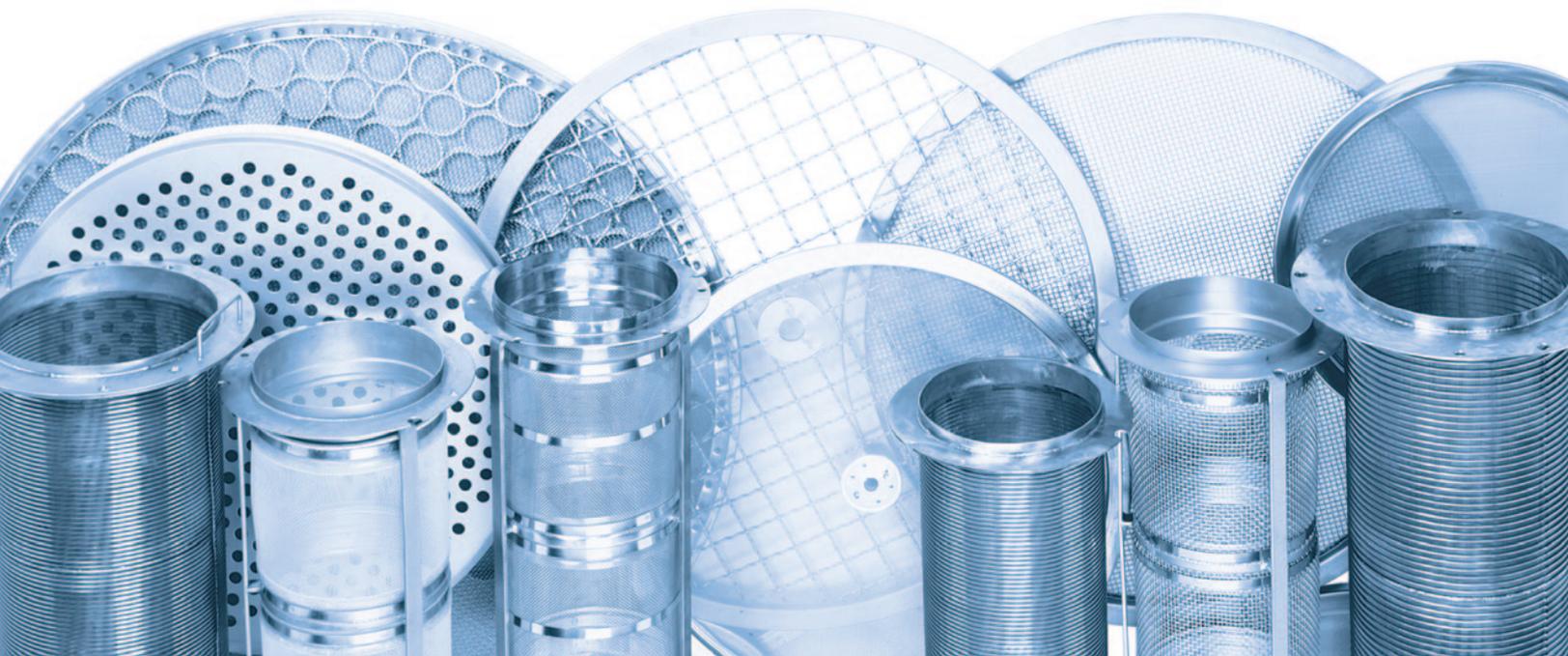




# SCREENING AND PROCESSING EQUIPMENT FOR BULK SOLID MATERIALS AND SLURRIES

OVERVIEW OF  
*Vibratory Screeners, Centrifugal Screeners,  
Fluid Bed Dryers/Coolers/Moisturizers  
and Static Sieves*



# VIBROSCREEN® Circular Vibratory Screeners



## Single-Deck Vibratory Screener

*Satisfies general screening requirements at low cost*

Kason single-deck screeners separate solid particles ranging from 5 cm to 25 microns in size from dry or moist bulk solid material or solids-laden slurries, on a batch or continuous basis. Multi-plane inertial vibration maximizes throughput and gentle product handling. Offered in diameters from 18 to 100 in. (460 to 2540 mm) and constructed to worldwide standards for industrial, food, dairy and pharmaceutical applications. Options are offered for rapid screen changes, in-place cleaning and fast, thorough wash down. Available for rapid shipment.



## FLO-THRU Low-Profile, High-Capacity Scalper

*Separates at high rates in low-headroom areas*

FLO-THRU VIBROSCREEN® separators employ two imbalanced-weight gyratory motors mounted on the exterior of the unit (instead of one motor positioned beneath the screening chamber), reducing minimum height requirements significantly. This enables the bottom outlet to be located directly below the top inlet, allowing material to fall vertically through the screen at high rates. Available in diameters from 18 to 84 in. (460 to 2135 mm). The external location of gyratory motors also makes Flo-Thru models suitable for high temperature applications.



## Single and Multi-Deck Vibratory Screener

*Sifts, scalps and/or classifies into precise segments*

Kason VIBROSCREEN® separators with single or multiple decks (shown) yield up to five precise particle classifications from 5 cm to 25 microns (500 mesh). Available with a variety of anti-blinding devices, they handle dry, moist, lumpy, stringy and otherwise difficult-to-handle bulk material on a batch or continuous basis. They are available constructed of stainless steel to industrial or sanitary standards, in diameters from 18 to 100 in. (460 to 2540 mm). Options available for rapid screen changes, in-place cleaning and fast, thorough wash down.



## Vibratory Screener with Clamshell Lid

*Allows rapid screen changes, easy wash down*

All VIBROSCREEN® vibratory screeners from 30 to 60 in. (760 to 1525 mm) in both single- and multi-deck configurations are available with Kason's exclusive "Clamshell" option. The hinged lid and/or frames are released via quick-disconnect clamps and held in an open position by gas pistons, allowing rapid screen changes, inspection and easy, thorough wash down of all interior surfaces. The Clamshell Lid accepts screens with or without center tensioning construction, and accommodates screen decks with or without anti-blinding devices.



## "Air-Lift" Quick Screen Change System

*Allows quick, easy cleaning, screen changes, inspection*

The Kason Air-Lift system allows one operator to gain rapid access to the interior of any circular vibratory screener for screen changing, cleaning or inspection. Two vertically-mounted air cylinders raise/lower the upper frame, which is secured with a safety lock-out. Eliminates potential worker injury, oil leakage, frame cocking and manual requirements associated with hydraulic systems that protrude from screener bases. Available for any make or model of circular vibratory screener from 40 to 100 in. (1016 to 2540 mm) in diameter.



## Ultra-Sanitary, Gap-Free Screener

*Meets cGMP, 3-A, USDA and FDA standards*

The VIBROSCREEN® Ultra-Sanitary Screener features gap-free screen frames, quick-release "U" clamps, radius corners, a domed lid, an Air-Lift device to raise the frames, continuous ground and polished welds, a crevice-free interior, and a washable underside. The external, interlocking flange configuration of the screen frame fully envelops the support ring of the screen, allowing the screen's wire mesh to extend to the interior walls of the frame. Eliminates the gap between the screen ring and frame wall of conventional screeners where material typically collects.



## Pharmaceutical/Sanitary CIP Sifter

*Sanitizes quickly, thoroughly, using CIP spray heads*

Kason's VIBROSCREEN® sifter for pharmaceutical/sanitary applications features all-stainless construction finished to cGMP, USDA, FDA, 3-A, and BISSC sanitary standards. Quick-disconnect clamps allow two-minute disassembly of all water supply hoses, clean-in-place (CIP) spray head fittings, and screen frame sections for inspection or screen changes. The screen frame's interlocking flange eliminates the gap between the screen ring and frame wall of conventional screeners where material would otherwise collect. Available in diameters from 18 to 60 in. (460 to 1525 mm).



## Ultra-Sanitary Low-Profile Batch Screener

*Meets cGMP, 3-A, USDA and FDA standards*

VIBROSCREEN® Low-Profile, Ultra-Sanitary Batch Sifters in diameters of 18, 24 and 30 in. (450, 610 and 760 mm) scalp oversize particles down to 38 microns (400 mesh) from bulk materials. They feature gap-free screen frames, quick-disconnect vertical clamps and all-stainless construction. The screen frame's interlocking flange fully envelops the support ring of the screen, allowing the wire mesh of the screen to extend to the interior walls of the frame, eliminating the gap between the screen ring and frame wall of conventional screeners where material would otherwise collect.



### High-Capacity Classifier

*Scalps and dedusts at ultra-high rates*

High-Capacity Classifiers employ a coarse upper screen to scalp, and a fine-mesh lower screen to dedust. On-size material is discharged at high rates through a 360° annular gap (instead of a discharge spout) into the unit's outer frame, eliminating a material choke point. Material drops freely onto a steeply sloping pan and exits through a large discharge spout at rates up to 70 tons/h (64 metric tons/h). Available in diameters from 60 to 100 in. (1525 to 2540 mm). Widely used for removing oversize particles and fines from plastic pellets, grains, sugar, salt, fertilizer and other materials at ultra-high rates.



### "KASCADE" Internal Recycle High-Capacity Screener

*Boosts capacity 60 to 160%*

"KASCADE" Internal Recycle screening decks increase capacity 60 to 160% over screeners of equivalent diameter. Required as new when floor space is limited, or as retrofits to undercut cost of new equipment, each KASCADE deck features a 360° annular gap at its periphery and contains a screen whose mesh equals that of the conventional screen below. Excess material cascades over the periphery of the upper screen, into a bowl shaped tray that redirects it into the center of the lower screen for final separation. Up to three conventional screens can be fitted with KASCADE Internal Recycle decks, achieving rates to 100 tons/h (91 metric tons/h).



### PNEUMATI-SIFTER High-Capacity Screener

*Scalps in-line with pneumatic conveying systems gently, at high rates*

PNEUMATI-SIFTER VIBROSCREEN® separators scalp dry materials in-line with dilute-phase pneumatic conveying systems at high rates, removing oversize particles and foreign materials from plastic resin, flour, starch, sugar, and numerous food and chemical products. These pressurized systems are ideal for loading/unloading of trucks or rail cars, or conveying materials between process or storage areas. Available in diameters from 24 to 60 in. (610 to 1525 mm) to handle up to 30,000 lbs/h (13,600 kg/h).



### PNEUMATI-SIFTER/FLO-THRU Dual-Screen Ultra-High-Capacity Separator

*Scalps in-line with pneumatic conveying systems gently, at ultra-high rates*

Material enters the central chamber through a tangential side inlet, avoiding 90° impact and breakage of particles. Air flow propels material upward through a top screen and downward through a bottom screen at rates to 60,000 lbs/h (27,200 kg/h). On-size material above the top screen is pneumatically conveyed through an internal bypass to the discharge outlet. Oversize material ejects at the lower screen's periphery. Available in 48 and 60 in. (1220 and 1525 mm) diameters.



### Portable Batch Sifter

*Scalps material loaded into containers, process equipment and storage vessels*

This lightweight Batch Sifter variant of Kason's FLO-THRU VIBROSCREEN® separator line scalps oversize particles from small batches of bulk material being loaded into drums, blenders, other process equipment and storage vessels. Offered in diameters of 18, 24 and 30 in. (450, 610 and 760 mm), with a single imbalanced-weight gyratory motor of ample capacity for typical batch requirements. Constructed of stainless steel finished to worldwide standards for industrial, food, dairy or pharmaceutical applications. Available as portable units or as mobile units on caster-mounted stands.



### VIBRO-AIR™ Size/Density Separator

*Removes undersize and low bulk density materials*

Vibratory screening removes fines, while air flow removes low bulk density materials such as: chaff from grain, wood fibers/flour from chips, and strands/angel hair from plastic pellets/regrind. On-size material flows through a discharge spout at the screen's periphery as heavier fines pass through the screen and a lower spout. Air drawn into the base of the chamber flows upward, drawing low density materials into an airstream vented to a cyclone and/or dust collector. Available in 24 to 100 in. (610 to 2540 mm) diameters. Optional scalping deck.



### EXTERNAL "KASCADE" HIGH CAPACITY SCREENER

*Discharges oversize particles 360° around screen's periphery*

"EXTERNAL KASCADE" models screen wet or dry bulk materials containing a large percentage of oversize fractions at high rates. On-size particles pass through the screen to a lower discharge chute, while oversize particles flow outward in a spiral pattern, cascading at any point over the screen's periphery into a trough to a high capacity discharge spout. Eliminates overs build up around screen circumference and restricted discharge through conventional 15° to 25° spout openings. Available on new 40 to 72 in. (1016 to 1829 mm) diameter screeners, and as retrofit kit.



### Bag Dump Screener

*Scalps bulk material while collecting dust*

VIBROSCREEN® Circular Vibratory Bag Dump Screeners scalp bag scraps and other oversize materials from manually dumped bulk materials while protecting the operator and plant environment against dust contamination. Ambient air and dust from dumping activities is drawn through dual cartridge filters that derive vacuum from a top-mounted exhaust fan. Dust accumulated on the filters' exterior surfaces is dislodged by pulse jet nozzles that alternately release short blasts of air on a timed cycle. Available in 24, 30, 40 and 48 in. (610, 760, 1015 and 1220 mm) diameters, to 3A, FDA, BISSC and other standards.

# CENTRI-SIFTER™ Centrifugal Screeners



## Original CENTRI-SIFTER™ Centrifugal Screener

*Sifts, scalps, de-lumps, dewater at high rates*

CENTRI-SIFTER™ centrifugal screeners separate solids from solids or slurries at high rates. Rotating helical paddles accelerate the flow of on-size particles or liquids through a cylinder of woven nylon monofilament or stainless wedge-gewire screen, while breaking up soft agglomerates and screening difficult-to-handle materials. Offered with numerous anti-blinding devices. Access door allows rapid inspection, wash down and screen changes. Belt-driven and direct-driven units available to industrial, 3A, FDA and BISSC sanitary standards, and in low-profile and twin configurations. Thousands in operation worldwide.



## QUICK-CLEAN Screener with 2-Bearing Cantilevered Shaft

*Allows rapid removal of components*

QUICK-CLEAN CENTRI-SIFTER™ centrifugal screeners feature cantilevered shafts that allow quick, tool-free removal of the cylindrical screen and the paddle assembly through a hinged end cover for cleaning, screen changes and inspection. Two-bearing models (shown) have one motor-end bearing, and one inboard bearing adjacent to the material infeed chute (no bearing on the end cover). A large diameter shaft and wide spacing between bearings allow high-speed, vibration-free operation. This high-capacity model is available to industrial, 3A, FDA and BISSC sanitary standards for applications requiring frequent screen changes or runs of multiple materials.



## QUICK-CLEAN Sanitary Screener with 2-Bearing Cantilevered Shaft

*Screens contamination-sensitive materials*

Mid-capacity QUICK-CLEAN CENTRI-SIFTER™ centrifugal separators screen pharmaceutical, nutraceutical food and dairy products, as well as industrial solids requiring frequent screen changes or runs of multiple materials. The two-bearing cantilevered shaft has one motor-end bearing, and one inboard bearing adjacent to the material infeed chute (no bearing on the end cover) allowing quick, tool-free removal of the cylindrical screen and the paddle assembly through a hinged end cover for cleaning, screen changes and inspection. Available to industrial, 3A, FDA and BISSC sanitary standards.



## QUICK-CLEAN Screener with 3-Bearing Cantilevered Shaft

*Supports shaft ends, handles heaviest loads*

In addition to a motor-end bearing and an inboard bearing, three-bearing QUICK-CLEAN CENTRI-SIFTER™ centrifugal screeners (shown) position a bearing on the exterior side of the hinged end cover. When the end cover is opened, the bearing slides off of the shaft, which cantilevers on the inboard bearing, allowing rapid removal of the screen and paddle assembly. During operation, the shaft rides on both end bearings, providing vibration-free performance, at the highest speeds under the heaviest, imbalanced loads. Ideal for high capacity sifting, scalping, de-lumping and dewatering. Available to industrial, 3A, FDA and BISSC sanitary standards.



## QUICK-CLEAN Small Batch Pharmaceutical Sifter

*Disassembles rapidly for sanitizing manually or in an autoclave*

Ultra Sanitary Mini CENTRI-SIFTER™ centrifugal sifters disassemble rapidly for sanitizing manually or in an autoclave. In less than three minutes, the unit's cylindrical screen/spout assembly and feed screw/paddle assembly can be removed with three hand knobs, and the screening chamber with one bolt, providing access to sanitize all material contact surfaces. Cylindrical screens are offered in woven nylon, monofilament, wire mesh stainless steel, perforated plate and stainless steel wedge wire, to accommodate a wide range of pharmaceutical products. Finished to FDA, 3A and other sanitary standards.



## PNEUMATI-SIFTER Centrifugal Screener

*Screens in-line with pneumatic conveying systems at high rates*

CENTRI-SIFTER™ PNEUMATI-SIFTER centrifugal separators de-lump and screen materials in-line with dilute-phase pneumatic conveying systems, eliminating the need for cyclone separators and rotary air locks. Rated for positive pressures to 14.7 psig (1 barg) or negative pressures to 14 in. (356 mm) Hg. Rotating helical paddles continuously propel on-size material through apertures in a horizontally-oriented cylindrical screen. Oversize particles are ejected from the end of the screen cylinder, through a manual or automatic valve into a sealed, quick-release receptacle.



## Centrifugal Screener with Bag Dump Station

*Scalps materials dumped manually while containing dust*

Kason CENTRI-SIFTER™ centrifugal screeners are available with an integral bag dump station and dust collector to remove bag scraps and other oversize contaminants from manually dumped bulk materials while protecting the operator and plant environment against dust contamination. Configured for installation on a mezzanine, the system gravity-discharges into process equipment below. Dust is drawn onto cartridge filters that derive vacuum from a top-mounted exhaust fan, while pulse jet nozzles cause accumulated dust to fall into the screener.



## Centrifugal Dewatering Screener

*Extracts more moisture than conventional screeners*

Adjustable, inclined CENTRI-SIFTER™ centrifugal dewatering screeners feature a low-pitched internal feed auger that moves high loadings of material into and through the inclined screen cylinder. This allows the unit to be inclined up to 40° as rotating paddles impart centrifugal force, moving the material in a spiral path through the cylinder. The incline increases dwell time of material within the chamber and the drainage rate of free liquid, while causing moisture to remain near the downhill inlet, resulting in greater dryness of discharged solids.

# Circular Fluid Bed Dryers, Coolers, Moisturizers



## Circular Vibratory Fluid Bed Processor

*Dries, cools, moisturizes with greater efficiency at lower cost*

This award-winning design increases efficiency, cuts cleaning time and reduces cost, compared with rectangular fluid bed dryers, coolers and moisturizers. The circular shape with quick-disconnect housing requires only one air inlet and outlet, and is inherently rigid, allowing materials of construction to be down-gauged, vibratory motors to be down-sized, and associated components to be eliminated. Reductions in material, required welding, and labor, decrease cost especially when finished to sanitary standards. Models from 18 to 84 in. (460 to 2135 mm) in diameter.



## High Temperature Fluid Bed Batch Dryer

*Dries small batches of bulk materials at temperatures to 600°F (315°C)*

Kason's Fluid Bed Processing System is offered with an accessory package for batch drying at temperatures to 600°F (315°C). The self-contained system comes complete with a fluid bed processor, heater, blower, cyclone separator and controls on a caster-mounted frame, ready for connection to a material inlet/outlet and power source. The 18 in. (460 mm) diameter laboratory/pilot plant model shown dries up to one cu. ft. (28 liters) per cycle, after which a valve at the spout automatically opens to evacuate the material.



## Fluid Bed Batch Systems for Labs and Pilot Plants

*Dries, cools or moisturizes small volumes of bulk material efficiently, economically*

Kason Circular Fluid Bed Processors in 18, 24 and 30 in. (460, 610 and 760 mm) diameters dry, cool or moisturize bulk foods, pharmaceuticals and chemicals in batch sizes typical of lab and pilot plant applications. Available for purchase or rental, they offer the same performance advantages as larger diameter models, allowing accurate projections of production-scale efficiencies from test results. All components of the system can be consolidated on a compact, caster-mounted frame, ready to plug in and run.



## Medium Capacity Fluid Bed Processing System

*Dries, cools or moisturizes bulk material on a batch or continuous basis*

Kason's 40 in. (1016 mm) diameter Circular Fluid Bed Dryer satisfies a range of medium volume production applications not satisfied by rectangular systems, and does so with high operating efficiency at low capital cost. Because the circular design is inherently more rigid, lighter materials and smaller motors can be used, and cross braces eliminated, reducing material and fabrication costs significantly—particularly when contact surfaces are finished to sanitary standards. Complete systems can be consolidated on caster-mounted frames.



## Medium/High Capacity Fluid Bed Processing System

*Outperforms rectangular systems of equivalent area*

Kason's Circular Fluid Bed Processing systems in diameters of 48, 60, 72 and 84 in. (1220, 1525, 1830 and 2135 mm) dry, cool or moisturize up to 10 tons/h of bulk material, with higher operating efficiency and at lower capital cost than possible with rectangular systems. Inherently rigid, Kason's circular design utilizes lighter materials of construction and smaller motors. It also eliminates the need for cross braces and multiple air inlets/outlets, significantly reducing material and fabrication costs—especially when systems are finished to sanitary standards.



## Double Deck Fluid Bed Processor

*Reduces capital cost, energy usage and floor space*

Kason's patented Double-Deck, Circular Vibratory Fluid Bed Processor offers unprecedented reductions in capital cost, energy usage and floor space per pound of product being dried or cooled. The addition of an upper deck makes use of heated or cooled air that would otherwise be exhausted after passing through the lower deck, and requires little to no increase in the size or energy consumption of imbalanced-weight motors, heat exchangers or blower fans, nearly doubling capacity and efficiency with little to no increase in operating cost or floor space.

# CROSS-FLO Static Sieves



## CROSS-FLO Static Scalping Sieve

*Scalps coarse, free-flowing dry solids at ultra-high rates*

The CROSS-FLO static sieve continuously removes oversize particles from coarse, free-flowing, dry bulk solids at rates to 100 tons/h (91 metric tons/h). The fixed-slope, heavy-duty, permanent bar screen is offered with apertures from .25 to 3 in. (6 to 76 mm). Because the sieve requires no electrical drive or screen changes, initial cost and operational cost are low. Standard units are available in widths from 2 to 6 ft. (610 to 1830 mm) in 1 ft. (305 mm) increments, with larger sizes available on a custom basis.



## CROSS-FLO Static Dewatering Sieve

*Removes solids from waste streams at ultra-high rates*

The CROSS-FLO static dewatering sieve continuously clarifies high volumes of industrial or municipal wastewater at low cost. The screening deck is fitted with stainless steel profile wire screen having slots oriented perpendicular to the flow of material, accelerating fluid through the screen in accordance with the "Coanda" effect. The deck is adjustable to maximize dewatering rates and is offered in widths from 2 to 6 ft. (610 to 1830 mm) in 1 ft. (305 mm) increments. Two-deck models are available to separate two sizes of solids.

# Replacement Parts



## VIBROSCREEN® Original Equipment Replacement Parts

*Maximize the performance of any circular vibratory screener*

Exact-fit screens for any make or model of circular vibratory screener include weld-mount screens and food-grade epoxy-mount sanitary screens in diameters from 18 to 54' 100 in. (460 to 2540 mm) in meshes from 2 in. (50 mm) clear opening down to 500 mesh (25 microns). All are available with optional center holes, radial arm braces or back-up screens and anti-blinding devices. Other replacement parts include motors, auto-lubrication systems, gaskets, flexible connectors, clamp ring assemblies, circular bases, frames, dust covers and springs.



## CENTRI-SIFTER™ Original Equipment Replacement Parts

*Maximize the performance of any centrifugal screener*

Choose from an extensive inventory of standard parts including gravity-fed, in-line pneumatic, direct-driven and belt-driven configurations. Separating media include nylon and other monofilament cloth, woven wire in selected metals, perforated plate screen, and wedgewire (ideal for heavy loads and/or materials, and for in-line pneumatic applications). Also available for rapid shipment are motors, bearings, seal rings, gaskets and anti-blinding devices such as rubber wiper blades and brushes—all genuine Kason original equipment for unsurpassed performance.

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