VIBROSCREEN®
CIRCULAR VIBRATORY SCREENERS

For sifting, scalping, classifying, de-dusting and dewatering of powder and bulk solids
Sift, Scalp, De-dust, Dewater or Classify Virtually Any Bulk Solid or Slurry

Adjustable Flow Patterns
Flow patterns of material can be fine tuned for screening efficiency by repositioning the bottom eccentric weight relative to the top eccentric weight.

<table>
<thead>
<tr>
<th>Flow Pattern</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0° (In Phase)</td>
<td>From a central feed, material flows to screen periphery in a straight line.</td>
</tr>
<tr>
<td>30° Out of Phase</td>
<td>Material spirals slightly from the center to periphery, increasing retention time. Recommended for general purpose screening.</td>
</tr>
<tr>
<td>45° Out of Phase</td>
<td>Material flows from center in a distinct spiral pattern, further increasing retention time. Recommended for classification of particles and screening of wet material.</td>
</tr>
<tr>
<td>90° Out of Phase</td>
<td>Prevents oversize material from discharging.</td>
</tr>
</tbody>
</table>

Principle of Operation
The main screening assembly of a Kason screener is suspended on rugged springs that allow it to vibrate freely while minimizing power consumption and preventing vibration transmission to the floor. The assembly is equipped with one imbalanced-weight gyratory motor that creates multi-plane inertial vibration for the purpose of controlling the flow path of material on screen surfaces, and maximizing the rate at which material passes through the screen.

Material is fed onto the center of the screen, causing particles larger than screen apertures to travel across the screen surface in controlled pathways, and exit through a discharge spout located at the screen's periphery, while particles smaller than screen apertures pass through the screen onto a lower screen or exit through a lower discharge spout.

Single-deck screeners are generally utilized for "scalping" or "sifting" (removing a small percentage of oversize material through the upper discharge spout), for "de-dusting" (removing a small percentage of undersize material through the lower discharge spout), or for "dewatering" (removing liquid through the lower discharge spout).

Multi-deck screeners (two-deck shown) are generally utilized for "classifying" of particles in three to five predetermined sizes, or when equipped with integral KASCADE™ screening decks (see page 7), for increasing the capacity of a screener without increasing its diameter.

<table>
<thead>
<tr>
<th>Screen Type</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Single-Deck Screeners</td>
<td>Satisfy general screening requirements at low cost (see page 3)</td>
</tr>
<tr>
<td>Multi-Deck Classifiers</td>
<td>Sift, scalp and/or classify into precise fractions (see page 6)</td>
</tr>
<tr>
<td>High-Capacity Classifiers</td>
<td>Scalp and de-dust at ultra-high rates (see page 6)</td>
</tr>
<tr>
<td>High-Capacity Sifters</td>
<td>Boost capacity 60-160% within same footprint (see page 7)</td>
</tr>
<tr>
<td>Pneumatic Sifters</td>
<td>Scalp in-line with pneumatic conveying systems (see page 7)</td>
</tr>
<tr>
<td>Ultra-Sanitary Screeners</td>
<td>Meet cGMP, 3-A, USDA and FDA standards (see page 8)</td>
</tr>
</tbody>
</table>

Free literature
The Kason controls an processing equipment according materials parameters, the effect in flow rate temperature variety of offered. Like customer-held in strict can be done for custom the test.

VIBROSCREEN offers single and measuring classifiers dewatering both gravity pressurizing.

All models screeners are designs, all models interior components inspection changes a.

Genuine
Maximizer perform circular.
Kason reputation or exceed aftermarket other OEM's life and upgrade cost.

Exact-fit screen or model of the screener in screens at mount same diameters (460 to 254 from 2 in. down to 5 in). All are available center hole.
Broader Range Solves Specialized Problems

Kason VIBROSCREEN® circular vibratory screeners handle bulk chemicals, minerals, plastics, foods, dairy products, pharmaceuticals and other materials ranging from dry bulk solids to solids-laden slurries. They range in diameter from 18 to 100 in. (460 to 2540 mm) and are offered with single or multiple screening decks, separating particles in one to five predetermined sizes from 2 in. (50 mm) to 500 mesh (25 microns), at capacities from several pounds/kilograms to more than 70 tons per hour.

Kason screeners are offered in gravity-fed and in-line pneumatic configurations (see page 7), both of which are available as stationary and mobile systems equipped with numerous performance enhancements. All can operate on a batch or continuous basis and are available designed and constructed to industrial, food, dairy or pharmaceutical standards.

Available features include:
- Enclosed, dust-free operation
- Compliance with USDA, FDA, BISSC, 3A, ATEX, CE and other standards
- Rapid screen changes
- Easy clean out
- Heavy-duty construction for continuous operation
- Compact design
- Low power requirements
- Full range of enhancements to boost performance, automate cleaning, reduce maintenance and extend service life
- Ratings for positive pressures to 14.7 psig (101.4 kPa) or negative pressures to 14 in. (356 mm) mercury

Kason also offers custom-engineered screeners and complete screening/processing systems to solve the most difficult or unusual in-line separation problem.

Single-Deck Vibratory Screeners
Separate solids from dry solids or solids-laden slurries

Kason single-deck screeners separate solid particles ranging in size from 2 in. (50 mm) to 500 mesh (25 microns) from bulk solid materials or slurries containing solid particles. These screeners have become a world standard for small- to high-capacity, batch and continuous scalping, de-dusting and dewatering of countless bulk products handled in virtually every processing application. They have also solved numerous unusual and difficult manufacturing problems requiring highly custom configurations. Multi-plane inertial vibration maximizes throughput and gentle product handling. Offered in diameters from 18 to 100 in. (460 to 2540 mm), they are constructed of carbon steel, stainless steel and alloys 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.
Typical Applications

Separating Solids from Solids
(sifting, de-dusting and classifying)

Gravity-fed and in-line pneumatic models
Kason offers VIBROSCREEN® configurations for three types of solids-solids separation:
1. Sifting (also called "scalping" or "bolting"): Separating a small percentage of oversize solids from a large percentage of on-size solids
2. De-Dusting: Separating a small percentage of undersize solids from a large percentage of on-size solids
3. Classifying: Separating solids into two or more particle size fractions

These screeners operate on a batch or continuous basis at rates from several pounds/kilograms to 70 tons per hour, separating thousands of powder and bulk solid materials such as:

ABS RESINS
ABRASIVES
ACTIVATED CARBON
ACETIC ACID
ACAR
ALMONDS
ALUMINA ALUMINUM PRODUCTS
ANIMAL FEEDS
ASH
ASPHALT
BAGASSE
BAUXITE
BENTONITE
BLEACH
BORIC ACID
BREAD CRUMBS
BUILDING PRODUCTS
CALCIUM CARBONATE
CALCIUM STEARATE
CARBON BLACK
CAT LITTER
CELULOSE
CERAMIC POWDERS
CEREAL
CHEESE POWDER
CHLORIDES
COCOA POWDER
COFFEE (GROUND)
DIATOMACEOUS EARTH
DETERSANTS
EPoxy RESINS
FERRITES
FERTILIZERS
FISH MEAL
FLAVORINGS
FLOUR
FLY ASH
FOUNDRY SAND
FRAGRANCES
FUSED SILICA
GLASS (CRUSHED)
GLUTIN
GRAINS
GRAPHITE
GRIT/SHOT BEADS
GYPSUM
IRON OXIDE
LACTOSE
METAL POWDERS
MILK POWDERS
NITRATES
NON-DARY-CREAMER
NUTRITIONAL POWDERS
NUTS
PERLITE
PET COKE
PHARMACEUTICAL POWDERS
PIGMENTS
PLASTIC BEADS
PLASTIC COMPOUNDS
PLASTIC POWDERS
PLASTIC PELLETS
PLASTIC REGRIND

Separating Solids from Liquids
(dewatering, clarifying and liquid scalping)

Gravity-fed models only
VIBROSCREEN separators are engineered for three types of solids-liquids separation:
1. Dewatering: Separating a small to medium percentage of liquid from a large percentage of solids
2. Clarifying: Separating a small percentage of solids from a large percentage of liquids
3. Liquid scalping: Separating a small percentage of oversize solids from a large percentage of on-size solids in a slurry

These screeners operate on a batch or continuous basis at rates from one to 2000 gallons (9200 liters) per minute, separating solids from thousands of liquids such as:

APPLE CIDER
BLOOD
BREWERY WASTE WATER
BRINE
CANNERY WASTE WATER
CHOCOLATE LIQUOR
CLAY SLURRY
COAGULANTS
COOKING OIL
CORN MILKING
CRANBERRIES
CURD/WHEY
DRILLING MUD
FISH WASTER WATER
FRUIT JUICE
FRUIT WASHING
GLUE
GOld Mine SLURRY
HONEY
ICE CREAM
INDUSTRIAL WASTE
LACTOSE SLURRY
LATEX
LAUNDRY WASTE WATER
LIME SLURRY
LATEX
OIL PROCESSING
PAINT
PALM OIL
PAPER COATING
PLASTIC FINES AND RECYCLED WATER
PLASTIC PELLETS AND WATER
POULTRY WASTE WATER
PULP AND PAPER SOY SLURRY
SUGAR
SUPER ABSORBENT POLYMER (SAP)
TEA
PURIFIED TEREPTHALIC ACID (PTA)
TITANIUM DIOXIDE
TONER
TUNGSTEN CARBIDE
VITAMIN POWDERS
WATER
WEED SLURRY
WINE
WINE
YeAST SLURRY

Efficiency

Ball Transfer Device

The Kason KLEEN-SKIN device utilizes the "screwing" action of the screw and fluid from the screen to prevent particles from escaping. The screen and fluid screen set apart to allow fluid from the screen to pass through the screen. This creates a "cage" effect that prevents particles from escaping. The screen is removed to allow particles to be separated from the fluid. The Kason KLEEN-SKIN device is effective in preventing particles from escaping and maintaining efficiency.
Replacing Solidified Latex From Rinsewater

The rinsewater from daily cleaning of tank trucks hauling liquid latex contained 8% solidified latex, incuring high sewage disposal costs and concerning environmentalists. By installing a 48 in. (1220 mm) VIBROSCREEN® single-deck, circular vibratory separator with a 105 mesh screen, the hauler reduced solids content by 50% at the rate of 158 gal/min (594 l/min) saving $2000 to $3000 per month in sewage costs, and winning state and local ecological awards.

Classifying Pelletized HDPE

After a successful 10-year experience scalping and de-dusting high density polyethylene 24/7 with two 72 in. (1829 mm) diameter VIBROSCREEN® Pellet Classifiers, this major resin producer installed four more—this time to replace four competitive screeners that were breaking down at a second and third extrusion train. Each of the six Kason classifiers can scalp and de-dust 27.5 tons/h of pellets 0.125 in. (3.18 mm) in length and diameter. 100 in. (2540 mm) models can handle 70 tons/h.

Screening a Granular Chemical

The manufacturer of a proprietary chemical product pre-screens granular carrier using a 48 in. (1220 mm) diameter, two-deck VIBROSCREEN separator, then combines it with an active ingredient and a filter. Following a conversion process, the product is dried using a 48 in. (1220 mm) diameter circular fluid bed dryer, after which an integral 48 in. (1220 mm) diameter, two-deck VIBROSCREEN separator (see page 6) removes (oversize) agglomerates and undersizes at the rate of 2000 lb/h (907 kg/h).

Scalping and De-dusting Compounds

The world’s largest independent producer of cellulosics gained 84 sq ft (7.8 sq m) of floor space by replacing six 2 ft x 7 ft (610 x 2134 mm) rectangular screeners, with two-deck 24 in. (610 mm) diameter VIBROSCREEN separators (see page 6). The upper deck screens oversize pellets, and stores larger cap-tures on-size pellets typically 0.125 in. (3 mm) in diameter and dust falls onto a sloping lower pan that discharges through a spout at rates to 2000 lb/h (907 kg/h).

Sifting Granular Flour

A dried pasta producer improved capacity and consistency by installing a VIBROSCREEN 48 in. (1220 mm) diameter screener in-line with a pneumatic conveying system (see page 7). Durum granular flour containing 1 to 4% of reground is metered by a rotary airlock valve into the screener at the rate of 2000 lb/h (907 kg/h) where it is sifted to 0.0059 to 0.0234 in. (0.150 to 0.595 mm). On-size material is discharged through a second rotary airlock valve into a pneumatic line that feeds storage tanks.

Screening Liquid Biological Fertilizer

A manufacturer of liquid biological fertilizer boosted throughout of a circular vibratory separator 230 to 300% by retrofitting it with a 360° discharge NACADE™ deck, eliminating a restrictive buildup of rope-like sludge at the screen’s periphery. The 60 in. (1524 mm) diameter separator now screens 9000 gal/day (34,000 l/day) versus 3000 to 4500 gal (11,350 to 17,000 l) previously, while saving 9 hours of labor per week formerly needed to remove, clean, and replace the screen deck.

Sifting Dental Lab Scraps

An innovative recycling plant turns glass containers into profitable products by sifting paper towel shreds, paper clips, plaster and plastics from dental laboratory waste containing particles of silver, gold, platinum and palladium. A 24 in. (610 mm) diameter VIBROSCREEN classifier now separates unusable pieces ≥10 mesh from 2 size fractions to be smelted: 10 to 40 mesh particles, and <40 mesh dust. Time to classify 50 to 100 lb (22.7 to 45.4 kg) batches dropped from 120 to 30 minutes, helping the foundry double business and pay for the equipment in 9 months.

Sifting Ground Coffee

A leading coffee producer installed 28 VIBROSCREEN separators to remove chaff and oversize particles from ground coffee prior to packaging. Each 40 in. (1016 mm) diameter screeners is equipped with an 8 mesh upper screen and a 10 mesh lower screen, and has a capacity of 3500 lbs/h (1588 kg/h), allowing the plant to screen and package coffee at a rate of 98,000 lbs/h (44,452 kg/h). The screeners meet sanitary requirements, and are equipped with quick-disconnect clamp ring assemblies.
Specialized Screeners

Multi-Deck Classifiers
Separate a feed stream into precise segments

Kason VIBROSCREEN® separators with multiple screening decks (three-deck shown) are generally utilized for classifying of particles in three to five precise particle sizes from 2 in. (5 cm) to 500 mesh (25 microns). 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 are available for rapid screen changes, in-place cleaning and fast, thorough wash down.

Options:
• AIR-LIFT™ quick screen change system (see page 8)
• "Clamshell" quick screen change system (see page 8)
• Clean-In-Place (C.I.P.) design, construction and finish (see page 8)
• Ball tray anti-blinding device (see page 9)
• KLEEN-SCREEN™ ring anti-blinding device (see page 9)
• Auto-lube automatic lubrication system for gyratory motors (see page 9)
• See-through dust cover

“A.D.” KASCADE™ High-Capacity Classifiers
Scalp and de-dust at ultra-high rates

VIBROSCREEN “A.D.” KASCADE High-Capacity Classifiers employ a coarse upper screen to scalp oversize particles that exit through a discharge spout. A fine-mesh lower KASCADE screen of smaller diameter allows on-size particles to cascade over the screen’s entire periphery into a 360° annular gap (instead of a single discharge spout), and drop freely onto a steeply sloping pan, exiting through a large discharge spout at rates to 70 tons/h. Dust passes through the KASCADE screen, through a center bypass, onto a domed base and through a discharge spout. Available from 60 to 100 in. (1530 to 2540 mm) in diameter.

Options:
• AIR-LIFT™ quick screen change system (see page 8)
• “Clamshell” quick screen change system (see page 8)
• Clean-In-Place (C.I.P.) design, construction and finish (see page 8)
• Ball tray anti-blinding device (see page 9)
• KLEEN-SCREEN™ ring anti-blinding device (see page 9)
• Auto-lube automatic lubrication system for gyratory motors (see page 9)
• See-through dust cover

“B.M.C.” KASCADE™ High-Capacity Classifiers
Boost capacity to a conventional level

VIBROSCREEN “B.M.C.” KASCADE High-Capacity Classifiers employ a coarse upper screen to scalp oversize particles that exit through a discharge spout. A fine-mesh lower KASCADE screen of smaller diameter allows on-size particles to cascade over the screen’s entire periphery into a 360° annular gap (instead of a single discharge spout), and drop freely onto a steeply sloping pan, exiting through a large discharge spout at rates to 70 tons/h. Dust passes through the KASCADE screen, through a center bypass, onto a domed base and through a discharge spout. Available from 60 to 100 in. (1530 to 2540 mm) in diameter.

Options:
• AIR-LIFT™ quick screen change system (see page 8)
• “Clamshell” quick screen change system (see page 8)
• Clean-In-Place (C.I.P.) design, construction and finish (see page 8)
• Ball tray anti-blinding device (see page 9)
• KLEEN-SCREEN™ ring anti-blinding device (see page 9)
• Auto-lube automatic lubrication system for gyratory motors (see page 9)
• See-through dust cover
VIBROSCREEN® “I.R.C.” KASCADE Sifters offer 60 to 160% higher capacity than single-deck sifters of equal 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 it. Excess material cascades over the periphery of the upper screen, into the center of the lower screen for final separation. Up to three “I.R.C.” KASCADE decks can be fitted to a conventional sifter, achieving rates in excess of 150 tons/h. Available from 48 to 100 in. (1200 to 2540 mm) in diameter.

Options:
- AIR-LIFT™ quick screen change system (see page 8)
- “Clamshell” quick screen change system (see page 8)
- Clean-In-Place (C.I.P.) design, construction and finish (see page 8)
- Ball tray anti-blinding device (see page 9)
- KLEEN-SCREEN™ ring anti-blinding device (see page 9)
- KASONIC® Ultrasonic anti-blinding device for fine powders (see page 9)
- Design, construction and finish to FDA, 3-A, BISSC, CE and other sanitary standards (see page 8)
- See-through dust cover

PNEUMATI-SIFTER™
Scalp in-line with pneumatic conveying systems gently, at high rates

PNEUMATI-SIFTER 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 eliminate the need for rotary air locks, and are ideal for loading/unloading of trucks or rail cars, or conveying materials between process or storage areas. They are 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 models handle up to 60,000 lbs/h (27,200 kg/h).

Options:
- AIR-LIFT quick screen change system (see page 8)
- “Clamshell” quick screen change system (see page 8)
- Clean-In-Place (C.I.P.) design, construction and finish (see page 8)
- Design, construction and finish to pharmaceutical specifications (see page 8)
- Ball tray anti-blinding device (see page 9)
- Auto-lube automatic lubrication system for gyratory motors (see page 9)
- Design, construction and finish to FDA, 3-A, BISSC, CE and other sanitary standards (see page 8)
Designs for Quick Screen Changes, Inspection

Kason offers two innovative ways to separate the frame sections of any circular vibratory screener, allowing screen changes, interior cleaning and inspection in less time and with greater convenience than possible with competitive systems.

One entire raise/lower cycle including disconnection and reconnection of the frames, requires only several minutes, reducing downtime and allowing one operator to perform what was previously a two-person task, depending on screen diameter.

Both systems can be used on screeners having single- or multiple-deck screens with or without center holes and/or anti-blinding devices.

**AIR-LIFT™ Design**

Kason’s AIR-LIFT design consists of two vertically-mounted air cylinders located on opposing sides of the screener and affixed to mounting brackets on the lower and upper screening frames. To raise the upper frame, band clamps or quick-disconnect clamps connecting the frames are removed/released and a remote air valve is actuated.

A safety lock-out secures the frames in the open or closed position when the upper screening housing is raised or lowered, and safety bars prevent the housing from accidentally descending while in a fully-raised position during screen changes or wash down.

The AIR-LIFT device is available on any new Kason screener, and can be retrofit to any circular vibratory screener of any make or model from 40 to 100 in. (1016 to 2540 mm) in diameter.

**“Clamshell” Design**

Kason’s “Clamshell” design consists of a hinged frame section that is released from the screen frame below it by removing band clamps or releasing quick-disconnect clamps. The upper frame is raised and held in an open position by gas pistons, allowing rapid screen changes and easy, thorough wash down of all interior surfaces.

The “Clamshell” option is available on VIBROSCREEN® separators of 30 to 60 in. (760 to 1525 mm) in diameter.

In addition, these screeners can be configured with AIR-LIFT or “Clamshell” devices for quick screen changes and wash down (described at left), and with gap-free screen frames and/or Clean-In-Place cleaning nozzles as follows:

**Gap-Free Design**

This Kason innovation features an interlocking flange between screen frames that protrudes from the external side of the frame to fully envelop the circular support ring of the internal screens. This enables the mesh of the screen to fully extend to the wall of the frame, eliminating the gap between the screen ring and frame wall of conventional screeners where material typically collects. The gap-free design dramatically reduces the possibility of contamination due to bacteria growth, while improving sanitizing efficiency, making it suitable for pharmaceutical, food and dairy applications as well as chemical applications where cross-contamination is a concern.

Screens are mounted to support rings using FDA-approved epoxy and sealed using FDA-approved gasket material. The wire mesh screening material is offered in 304, 316 and “magnetic” 400-series stainless steel that, if broken, can be captured by a downstream magnet.

**Clean-In-Place (C.I.P.) design**

VIBROSCREEN C.I.P separators employ spray nozzles that emit cleaning solutions, rinsing solutions and/or steam for sanitizing the unit’s interior without the need to open or disassemble the unit. Perforated, ball-shaped, stainless steel nozzles at the end of stainless steel pipes extend outward from the screen deck frames and upward from the top surfaces. Quick-disconnect clamps allow two-minute disassembly of water supply hoses, Clean-In-Place spray head fittings, and screener sections for screen changes. Available in diameters from 18 to 60 in. (460 to 1525 mm).

Designs for Sanitary Applications

All VIBROSCREEN® circular vibratory screeners from 18 to 100 in. (460 to 2540 mm) in diameter are available designed, constructed and finished to industrial, food, dairy and pharmaceutical standards including FDA, 3-A, USDA, BISSC and others. Sanitary screeners generally incorporate rounded corners, continuous ground and polished welds, dorned lids, quick-release “U” clamps, and 4-post open bases with stainless steel motor enclosures allowing thorough wash down of the underside and plant floor.

In addition, these screeners can be configured with AIR-LIFT or “Clamshell” devices for quick screen changes and wash down (described at left), and with gap-free screen frames and/or Clean-In-Place cleaning nozzles as follows:

**Clean-In-Place (C.I.P.) design**

VIBROSCREEN C.I.P separators employ spray nozzles that emit cleaning solutions, rinsing solutions and/or steam for sanitizing the unit's interior without the need to open or disassemble the unit. Perforated, ball-shaped, stainless steel nozzles at the end of stainless steel pipes extend outward from the screen deck frames and upward from the top surfaces. Quick-disconnect clamps allow two-minute disassembly of water supply hoses, Clean-In-Place spray head fittings, and screener sections for screen changes. Available in diameters from 18 to 60 in. (460 to 1525 mm).

**Gap-Free Design**

This Kason innovation features an interlocking flange between screen frames that protrudes from the external side of the frame to fully envelop the circular support ring of the internal screens. This enables the mesh of the screen to fully extend to the wall of the frame, eliminating the gap between the screen ring and frame wall of conventional screeners where material typically collects. The gap-free design dramatically reduces the possibility of contamination due to bacteria growth, while improving sanitizing efficiency, making it suitable for pharmaceutical, food and dairy applications as well as chemical applications where cross-contamination is a concern.

Screens are mounted to support rings using FDA-approved epoxy and sealed using FDA-approved gasket material. The wire mesh screening material is offered in 304, 316 and “magnetic” 400-series stainless steel that, if broken, can be captured by a downstream magnet.

**Clean-In-Place (C.I.P.) design**

VIBROSCREEN C.I.P separators employ spray nozzles that emit cleaning solutions, rinsing solutions and/or steam for sanitizing the unit's interior without the need to open or disassemble the unit. Perforated, ball-shaped, stainless steel nozzles at the end of stainless steel pipes extend outward from the screen deck frames and upward from the top surfaces. Quick-disconnect clamps allow two-minute disassembly of water supply hoses, Clean-In-Place spray head fittings, and screener sections for screen changes. Available in diameters from 18 to 60 in. (460 to 1525 mm).
Efficiency Enhancements

**Ball Tray Anti-Blinding Device**

The Kason Ball Tray anti-blinding device utilizes the multi-plane inertial vibration of the screener and bouncing elastomeric balls to prevent screen blinding. The device consists of two screens spaced sufficiently apart to allow captive elastomeric balls to bounce between the upper “operating” screen and the lower coarse-mesh “ball screen” for the purpose of dislodging near-size, dry materials lodged in the apertures of the upper screen.

**Four-Finger Flex Wiper Anti-Blinding Device**

The Four-Finger Flex Wiper anti-blinding device employs four radial arms of durable neoprene to prevent screen blinding of the operating screen by slimes, pitch and other soft, gummy materials. Multi-plane inertial vibration of the screener causes the wipers to rotate continuously, enhancing the flow of material through apertures of the screen. Specially designed units are available for exceptionally difficult-to-screen products.

**KASONIC® Ultrasonic Anti-Blinding Device**

The patented KASONIC anti-blinding device allows sifting as fine as 500 mesh (25 microns) on any circular vibratory screener of 18 to 72 in. (460 to 1829 mm) diameter. It transmits ultrasonic frequencies (adjustable) to the screen, adjusting power automatically according to screen loads. It operates with standard screens, reducing cost, and is supported independent of the screen, prolonging screen life.

**KLEEN-SCREEN™ Ring Anti-Blinding Assembly**

Kason KLEEN-SCREEN Rings are effective at preventing fibrous, stringy and sticky materials from blinding the screen. Multi-plane inertial vibration of the screener causes plastic rings to move continuously across a perforated stainless steel plate, shearing fibers and scraping away gummy materials. Because they are hollow, the rings promote product flow over the entire screen surface, maximizing screening efficiency.

**AUTO-LUBE Auto Lubrication System**

This system pressure-feeds lubricant into bearings of gyratory screener motors for 6 to 12 months between reservoir replacements. Continuous lubricant flow flushes the race of wear materials, broken-down lubricant and contaminants, and minimizes dead spots of unused lubricant. Optional on VIBROSCREEN® separators ≥48 in. (1220 mm) in diameter. Can be retrofit in one hour to any circular vibratory screener.

**E-Z FORCE™ Weight Adjustment System**

The E-Z FORCE weight adjustment system allows precise control of material flow patterns (see page 2, top right). The high torque, high-efficiency, imbalanced weight gyratory motor, which is rigidly mounted to the screening assembly, has a double extension shaft fitted at each end with variable eccentric weights. Weights can be adjusted in several minutes by one operator, allowing maximum efficiency for each screening application.
Mesh*/Micron/Inch Conversions

<table>
<thead>
<tr>
<th>U.S. SIEVE</th>
<th>MARKET GRADE</th>
<th>MILL GRADE</th>
<th>TENSILE BOLTING CLOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SIEVE NO.</strong></td>
<td><strong>OPENING SIZE INCHES</strong></td>
<td><strong>MESH SIZE</strong></td>
<td><strong>WIRE SIZE (in.)</strong></td>
</tr>
<tr>
<td>1 in.</td>
<td>1.0000</td>
<td>25400</td>
<td></td>
</tr>
<tr>
<td>7/8 in.</td>
<td>0.8750</td>
<td>22400</td>
<td></td>
</tr>
<tr>
<td>3/4 in.</td>
<td>0.7500</td>
<td>19050</td>
<td></td>
</tr>
<tr>
<td>5/8 in.</td>
<td>0.6250</td>
<td>16000</td>
<td></td>
</tr>
<tr>
<td>1/2 in.</td>
<td>0.5000</td>
<td>12500</td>
<td></td>
</tr>
<tr>
<td>7/16 in.</td>
<td>0.4375</td>
<td>11300</td>
<td>2</td>
</tr>
<tr>
<td>3/8 in.</td>
<td>0.3750</td>
<td>9500</td>
<td>3</td>
</tr>
<tr>
<td>5/16 in.</td>
<td>0.3125</td>
<td>6300</td>
<td>4</td>
</tr>
<tr>
<td>1/4 in.</td>
<td>0.2500</td>
<td>6300</td>
<td>5</td>
</tr>
<tr>
<td>3/16 in.</td>
<td>0.2000</td>
<td>4900</td>
<td>6</td>
</tr>
<tr>
<td>1/8 in.</td>
<td>0.1250</td>
<td>3200</td>
<td>7</td>
</tr>
<tr>
<td>1/16 in.</td>
<td>0.0625</td>
<td>1600</td>
<td>8</td>
</tr>
<tr>
<td>1/32 in.</td>
<td>0.0312</td>
<td>800</td>
<td></td>
</tr>
</tbody>
</table>

*Mesh indicates the number of apertures (openings) in one linear inch. (25.4 mm) of screen.
Free Laboratory Testing

The Kason test laboratory controls and monitors all processing variables, optimizing equipment configurations according to customers’ materials and application parameters. Kason can evaluate the effect of controlled variations in flow rates, deck designs, temperatures, mesh sizes and a variety of screening accessories offered. Laboratory testing of customer-supplied materials is held in strict confidence and can be documented as a video for customers unable to attend the test.

VIBROSCREEN® circular vibratory screeners include units with single and multiple decks for measuring sifting, scalping, classifying, de-dusting and dewatering performance in both gravity-fed and vacuum/pressurized applications.

All models of laboratory screeners are quick-clean designs, allowing easy access to interior components for rapid inspection, disassembly, screen changes and cleaning.

A full complement of hoppers, mechanical and pneumatic conveyors and flow promotion devices enables Kason lab technicians to replicate virtually any process layout and production scenario, including running of customer-supplied materials at elevated temperatures.

In addition to providing free testing services for Kason customers prior to equipment fabrication, the test lab is utilized to test-run completed equipment and to measure performance characteristics of new equipment designs.

Kason also provides screeners for on-site trials at no charge to customers unable to ship materials for testing, and offers the equipment for pilot plant testing and other long-term trials on a rental basis.

Genuine Kason Parts

Maximize the performance of any circular vibratory screener

Kason replacement parts meet or exceed the performance of aftermarket parts and parts of other OEMs, maximizing service life and uptime while minimizing cost.

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 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 to prolong screen life, and anti-blinding devices such as ball tray assemblies, KLEEN-SCREEN™ rings and ultrasonic devices. Other replacement parts available include motors, grease cartridges and auto-lubrication systems, gaskets, flexible connectors, clamp ring assemblies, frames, dust covers, circular bases, motor support tables and support springs.

Kason’s premium quality parts and service are available to you for quick shipment at competitive prices. For a quotation call 973-467-8140 or inquire on-line. Ask about Kason’s “blanket order” discount pricing on replacement screens.