



SCREENING

MATERIAL SEPARATION SOLUTIONS

- Incline Screens
- Horizontal Screens
- Combo Screens
- Heavy-Duty Scalping Screens
- High-Frequency Screens
- Cascade Screens



AGGREGATE AND
MINING GROUP

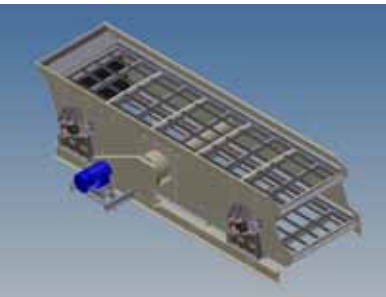
INCLINE SCREENS

For screening operations that favor a circular stroke pattern, Incline Screens from KPI-JCI pack reliable and consistent screening performance into a wide selection of alternative designs. Choose from multiple deck configurations, wet or dry action, in portable or stationary set-up, and you'll get the most accurate screening performance available.



BUZZER SCREENS

Here is a simple and handy screen for the separation of two or three sizes of material. Buzzer screens provide perhaps the most economical screening tool available, which is ideal for light-duty screening applications with smaller feed sizes, including cleaning gravel, stone, coal, chips and crushed material. These units can be bin-mounted or installed at the head-end of a conveyor with power supplied by the conveyor drive.



CASCADE INCLINE SCREENS

Cascade screens were designed to provide an economical, high-quality screening tool for light scalping and general aggregate separation. Typical applications might include HMA cold mix feed, etc., recycled materials, sand and gravel screening, and general quarry screening. Cascade screens can be tailored to fit into existing structures with minimal effort, and can be configured for either grease or oil lubrication.




QUARRY INCLINE SCREENS

Available in single, twin, and even triple shaft configurations, these screens are designed for the producer focused on up-time and reliability, period. With sizes up to 8' x 24', these screens are engineered for the rigorous demands of today's high-production facilities. Robust construction, multiple deck configurations, optional bearing sizes, and adjustable stroke are just some of the features that will minimize your operating costs. For replacement needs, these screens can also be tailored to fit into an existing structure with minimal effort.



LOW-PROFILE INCLINE SCREENS

Low-profile screens were designed for inclined screening applications where low-profiles/headroom are preferred or required. The reduced operating angle provides a moderate material travel speed, resulting in a high probability of separation. The reduced profile height makes low-profile inclined screens suitable for portable installations at a more economical purchase price than a horizontal multi-shaft screen. These time-proven screening machines are available in both wet and dry configurations in sizes up to 8' x 20.'



Reliable Performance | Multiple Configurations | Rugged Dependability

BENEFITS

“Buzzer” screens are a low-cost design with C-spring suspensions that excel in light-duty applications.

“Low-Profile” inclined screens operate at a 10- or 15-degree angle with grease lubrication and are ideal for portable installations or those with limited headroom.

“Cascade” incline screens with grease or oil-bath lubrication can be tailored to fit in existing facilities and are high-quality, economical screening tools.

“Quarry” incline screens feature oil-bath lubrication and are designed for the high-capacity producer. Available in multiple shaft and bearing configurations and tailored to fit in existing facilities.

Type	Fine Screening	Standard Screening	Light Scalping	Speed RPM	Maximum Stroke (in/mm)	Slope (degrees)	Max Feed Size (inches)
Buzzer	X	X		1100-1500	0.25 / 6.35	10-15	TBD
Low-Profile	X	X	X	850-950	0.375 / 9.53	10-15	TBD
Cascade	X	X		850-1050	0.375 / 4.76	20*	8
Quarry (Single Shaft)	X	X	X	800-1150	0.375 / 9.53	15-25*	10
Quarry (Dual Shaft)	X	X	X	750-1200	0.5 / 12.7	15-25*	10

*optional slopes available

STANDARD WARRANTY

The standard warranty period is one (1) year or two-thousand (2000) hours, whichever comes first, from date of delivery to the first end user.

HORIZONTAL SCREENS

Horizontal Screens from KPI-JCI deliver high productivity and efficiency in a low-profile package. The triple-shaft design employs an oval motion stroke pattern that generates a more aggressive screening action, to reduce plugging and blinding while providing extended bearing life. This innovation, in conjunction with other features like huck-bolt construction, ensures our horizontal screens are the most durable and efficient screens available.

BENEFITS

Adjustable oval motion length and timing angle provides optimum application flexibility.

Low screen height allows for operation in height-restricted areas and maximum portability.

Standard, medium and heavy-duty scalping configurations ensure optimal applications and performance.

Triple-shaft vibrating mechanism provides maximum resistance to blinding and plugging, and provides longer bearing life.

Type	Fine Screening	Standard Screening	Light Scalping	Speed RPM	Maximum Stroke (in/mm)	Slope (degrees)	Max Feed Size (inches)
"LP" Flat Standard Screen	X	X		950-1050	0.75 / 19.0	0	10
"MS" Flat Medium Scalper		X	X	850-950	0.75 / 19.0	0	14
"HS" Flat Heavy Scalper		X	X	800-1150	0.875 / 22.22	0	18



Low-Profile Design | Unmatched Efficiency | Heavy-Duty Construction



ECCENTRIC CRESCENT WEIGHTS

Reduces the “egg beater” effect on oil, thereby reducing oil temperature. Additionally, segmented weights offer more stroke adjustment.



WET/DRY CONFIGURATIONS

Because of a consistent and adjustable material travel speed, as well as a low-profile height, horizontal screens are ideal for both wet and dry applications. The screens are equipped with standard spray bar “knock-out” holes. An optional spray system, complete with manifold and spray nozzles, is also available. They are the perfect tool to install on portable wash plants.



TUNED AND BOLT-IN DECK BRACING

The unit is confirmed to be operating clear of natural frequencies. That, and minimal welds reduce cracking in the cross members, ensuring maximum service life.



“TITAN” OIL SEALS

Non-contact centrifugal force drives the oil back to the wheel case, a labyrinth seal keeps contaminants out and an O-ring maintains the

COMBO® SCREENS

Developed based on extensive side-by-side testing of traditional flat and horizontal screens, KPI-JCI's Combo® Screen is a new breed of screen that delivers unsurpassed capacity and efficiency. This truly unique innovation combines the best characteristics of both incline and horizontal screens, and has proven to deliver unsurpassed productivity, efficiency and flexibility in wet or dry applications.



SLOPED DECKS

These unique decks initially accelerate material to reduce bed depth, introduce finer particles to the screening surface faster for higher capacities, as well as decelerate near-size material for higher efficiency.



HINGED TAILGATE FOR REAR ACCESS

Screen media changes are quick and easy when compared to conventional designs.



PUNCHED-PLATE FEED BOX DESIGN

Provides a 10% bonus area to start introducing fines to lower decks immediately.



TRIPLE-SHAFT SCREENING

The Combo® Screen is the only sloped screening tool that provides the benefits of a triple-shaft vibrating mechanism: anti-plugging/blinding, extended bearing life, and stroke amplitude adjustment.



Maximum Capacity | Exceptional Flexibility | Rugged Dependability

BENEFITS

Sloped feed zone accelerates material to provide a thinner bed depth for quicker fines separation.

Fines are introduced to lower decks faster than conventional screens for increased utilization.

Horizontal discharge zones decelerate material for the increased probability of separation of near-size material.

Triple-shaft oval motion assembly provides maximum application flexibility and optimum resistance to blinding and plugging.

Type	Fine Screening	Standard Screening	Light Scalping	Medium Scalping	Speed RPM	Maximum Stroke (in/mm)	Slope (degrees)	Max Feed Size (inches)
"CS" Combo Screen	X	X	X	X	675-875	0.75 / 19.0	multiple	10

STANDARD WARRANTY

The standard warranty period is one (1) year or two-thousand (2,000) hours, whichever comes first, from date of delivery to the first end user.

HEAVY-DUTY SCALPING

Built to scalp the toughest, most abrasive materials, KPI-JCI's scalper screens are built to work in conjunction with a primary crusher or in the production of riprap. The heavy four-bearing Mesabi® design creates an eccentric, positive flow action that is highly effective on heavy loads at maximum capacity, while our Iso-vibe® screen-mounting system keeps the vibration in the screen — not on your plant.



BEARING HOUSINGS

Mesabi® vibrating screens are rigidly and securely bolted to the main frame, eliminating any chance of wobble or shaft misalignment. Heavy vertical bracing under the housing also helps maintain the shaft in proper alignment and prevents sagging.



EXCLUSIVE ISO-VIBE® SYSTEM

The secondary spring suspension (standard on all Mesabi screens) "floats" the entire working screen on a set of dual springs at each corner of the frame. The heavy bottom spring carries the weight of the screen and the downward thrust, while the smaller top spring absorbs the upward thrust for a smooth vibrating action.



EXTRA HEAVY-DUTY CONSTRUCTION

The fabricated screen box has extra heavy-duty steel sides with side liners above the top deck. Constructed with heavy-duty support frames and materials, the screen assembly is a box-like structure designed to withstand the continuous stresses the screen box is subjected to.



RUGGED SERVICE

The Mesabi screens are designed for the most rugged screening applications, like producing riprap or scalping ahead of a large primary crusher. And because of its innovative design, four products can be produced simultaneously.



Rugged Dependability | Heavy-Duty Construction | Maximum Productivity

BENEFITS

Ideal for extreme and abrasive conditions with unparalleled ruggedness and resistance to wear.

Mesabi heavy-duty four-bearing design creates an eccentric-type, positive throw action, highly effective in handling heavy loads at maximum capacity.

Type	Light Scalping	Medium Scalping	Heavy Scalping	Speed	Maximum Stroke	Slope
				RPM	(in/mm)	(degrees)
Mesabi Standard-Duty	X	X	X	850-1000	0.375 / 9.53	10-12
Mesabi Heavy-Duty	X	X	X	900	0.375 / 9.53	10-15

HIGH-FREQUENCY SCREENS

Astec Mobile Screens' high-frequency screens are engineered to provide higher production capacities and more efficient sizing compared to conventional screens. High-frequency screens feature aggressive vibration applied directly to the screen that allows for the highest capacity in the market for removal of fine material, as well as chip sizing, dry-manufactured sand and more.

BENEFITS

Large-capacity hoppers make big jobs easy to handle.

Hydraulic screen angle adjustment reduces downtime by making adjustments quick and easy.

Easy-to-reach engine controls and grease points allow routine service to be conducted efficiently.

Type	Fine Screening	Standard Screening	Light Screening	Speed	Slope
				RPM	(degrees)
Vari-Vibe	X	X		4200	38-43
Duo-Vibe	X	X	X	1200 / 4200	38-43





High Capacity | Efficient Productivity | Rugged Dependability



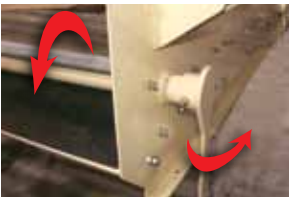
VARI-VIBE® SERIES

Vari-Vibe® screens are ideal for post-screening applications and offer high frequency vibrations on all decks. These screens achieve the highest screen capacity in the market for fines removal, chip sizing, dry-manufactured sand and more.



HYDRAULIC VIBRATORS

All high-frequency screen decks are driven by variable-speed hydraulic vibrators (0-4200 RPM) for optimal screen efficiency and production. Electric vibrators operating at 3600 RPM are available upon request.



ROTARY TENSIONING SYSTEM

Unique tensioning system provides the quickest screen media changes in the market. Easy replacement of each screen section translates into less downtime for screen changes and increased operation time.



DUO-VIBE® SERIES

Duo-Vibe® screens are ideal for pre-screening applications by offering a scalper top deck with conventional frequency mounted over high-frequency bottom decks. This configuration improves production needs earlier in the circuit by removing fines from coarser materials.

STANDARD WARRANTY

The standard warranty period is one (1) year or two-thousand (2,000) hours, whichever comes first, from date of delivery to the first end user.

CASE STORY: ASHMORE BROS.

CRUSH, SCREEN AND MOVE:

Compact, Portable RAP Plant Fits On-the-Go Routine

“The way bidding has been, you have to use recycle to get the job anymore,” says Malcolm Vest, Asphalt Plant Operations Manager for Greer, S.C.-based Ashmore Bros., Inc. He explains that between the high costs of virgin stone and liquid asphalt, the company has increased its RAP (recycled asphalt pavement) content in state and private mixes in order to be competitive in the bidding process.

Ashmore Bros. is a medium-size asphalt paving company with three hot-mix plants serving the Upstate area of South Carolina. Ashmore Bros. provides high quality spec asphalt paving jobs for Interstate highways, state roads, airports and county roads.

“We have used recycled asphalt for a number of years,” Vest notes. “But when we stepped up our RAP content substantially, materials handling became a burden and the stationary crusher couldn’t keep up,” he explains. “And because we have limited stockpile room, it was tough using contract crushers because we either had to wait on the crew, or it wasn’t cost-efficient to crush our smaller volumes of RAP.”

Toward the end of 2009, Ashmore Bros. invested in a portable crushing/screening setup that could effectively fractionate RAP. Fractionated RAP — or FRAP — is RAP that is crushed and separated into different gradations. The gradations are introduced to asphalt mixes in specific amounts. The introduction of smaller FRAP particles in mixes helps to provide more efficient heat transfer in the hot-mix asphalt (HMA) and produces a more uniformly graded product. The practice allows a higher percentage of RAP into mixes without adversely affecting performance.

“We chose to purchase a ProSizer® crushing/screening plant,” says Vest. The ProSizer 2612V from Astec Mobile Screens is an all-in-one closed-circuit crushing/screening plant. It contains a PEP Vari-Vibe® 2612V double-deck, high-frequency screen coupled with a KPI-JCI 3136 horizontal shaft impact (HSI) crusher. The combination is ideal for handling recycled asphalt pavement.



ProSizer® 2612V from Astec Mobile Screens

Ashmore Bros. took delivery of the ProSizer in January 2010, and started processing RAP with it in March. Vest says the ProSizer fits Ashmore Bros.' operations ideally because of its size and portability (it can be set up onsite and running in as few as 15 minutes), combined with efficient production. And, he adds that since the company has started production with the ProSizer, it has seen cost-saving benefits. "It's more cost-effective than contract crushing and also more flexible," he says. "It gives us better control over our plants. Our properties don't have a lot of spare space, and we often have small amounts to crush in one location. The ProSizer is compact and it's easy to set it up so we can pull in, crush, screen and move."

Ashmore Bros. uses the end product in surface, binder and base. Vest says that fractionating the RAP gives the company a lot of flexibility with its mix designs and enables it to produce a mix that meets all State and Federal specs, which are getting tougher as time goes on. "We need all the control that we can

get. South Carolina does not allow RAP in Surface A or OGFC (open graded friction course). Fractionated RAP makes us more competitive," he says.

"Since March, we've done very well with the plant," Vest notes. "We've got it now where we can get good production — we are running at about 110 to 120 TPH — with good product coming off of it. Moisture doesn't seem to slow us down. And I like the crusher. I had never tried an HSI before; our virgin aggregate is granite, and I'm used to jaws and cones — but we've found the HSI works great in asphalt."

"The ProSizer is compact and it's easy to set it up so we can pull in, crush, screen and move."

- Malcolm Vest, Asphalt Plant Operations Manager
Ashmore Bros.



The team at KPI-JCI and Astec Mobile Screens is dedicated to more than just manufacturing the industry's best crushing, screening and washing equipment — we're here to improve the overall effectiveness and strength of your operation. That means focusing on service, support and training, as well.

Your customer support team, local KPI-JCI dealer and factory-trained technicians provide service before, during and, most importantly, after the sale — ensuring your equipment stays up and running with genuine parts and industry-leading service. We even make and stock parts to non-KPI-JCI and Astec Mobile Screens equipment and provide world-class training on every piece of equipment we manufacture.

All that in an effort to keep your operation up and running as efficiently and profitably as possible.



SCREENING MATERIAL SEPARATION SOLUTIONS

www.kpijci.com

KOLBERG-PIONEER, INC.

700 West 21st Street
Yankton, SD 57078 USA
800.542.9311 605.665.9311
F 605.665.8858

JOHNSON CRUSHERS INTERNATIONAL, INC.

86470 Franklin Boulevard
Eugene, OR 97405 USA
800.314.4656 541.736.1400
F 541.736.1424

ASTEC MOBILE SCREENS

2704 West LeFevre Road
Sterling, IL 61081 USA
800.545.2125 815.626.6374
F 815.626.6430

Because KPIJCI and AMS may use in its catalog & literature, field photographs of its products which may have been modified by the owners, products furnished by KPIJCI and AMS may not necessarily be as illustrated therein. Also continuous design progress makes it necessary that specifications be subject to change without notice. All sales of the products of KPIJCI and AMS are subject to the provisions of its standard warranty. KPIJCI and AMS does not warrant or represent that its products meet any federal, state, or local statutes, codes, ordinances, rules, standards or other regulations, including OSHA and MSHA, covering safety pollution, electrical, wiring, etc. Compliance with these statutes and regulations is the responsibility of the user and will be dependent upon the area and the use to which the product is put by the user. In some photographs, guards may have been removed for illustrative purposes only. This equipment should not be operated without all guards attached in their normal position. Placement of guards and other safety equipment is often dependent upon the area and the use to which the product is put. A safety study should be made by the user of the application, and, if required, additional guards, warning signs and other safety devices should be installed by the user, wherever appropriate before operating the products.

NOTE: SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

Rev. 3/14/11

