Screening
Incline Screens

For screening operations that favor a circular stroke pattern, our incline screens ensure reliable and consistent screen performance with a wide selection of alternative designs. Choose from multiple deck configurations, wet or dry action, and portable or stationary set-up for the most accurate screening performance available. Producers can choose from Buzzer Screens, Cascade Incline Screens, Quarry Incline Screens or Low-Profile Incline Screens to meet their application needs.

Cascade Incline Screens
Our Cascade Incline Screens are designed to provide an economical, high-quality screening tool for light scalping and general aggregate separation. Typical applications include hot mix asphalt, cold mix feed, recycled materials, sand and gravel screening and general quarry screening. Cascade Incline 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- or dual-shaft configurations in sizes up to 8’ x 24’, our Quarry Incline Screens are engineered for the rigorous demands of today’s high-production facilities. Robust construction, multiple deck configurations and stroke combinations all work together to minimize operating costs. Oil bath lubrication standard.

Buzzer Screens
One of the most economical screening tools on the market, our Buzzer Screens are ideal for light-duty screening applications with smaller feed sizes, including cleaning gravel, stone, coal, chips and crushed material. Buzzer Screens allow for the separation of two or three sizes of material and can be bin-mounted or installed at the head-end of a conveyor with power supplied by the conveyor drive.

Low-Profile Incline Screens
Our Low-Profile Incline Screens operate at a 10- or 15-degree angle, which provides a moderate material travel speed, resulting in a high probability of separation. The reduced profile height makes Low-Profile Incline Screens suitable for portable installations at a more economical purchase price than a horizontal multi-shaft screen. Grease lubrication available.
<table>
<thead>
<tr>
<th>Type</th>
<th>Speed</th>
<th>Maximum Stroke</th>
<th>Slope</th>
<th>Maximum Feed</th>
<th>Size Range</th>
<th>Decks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RPM</td>
<td>In.</td>
<td>mm</td>
<td>In.</td>
<td>mm</td>
<td>Feet</td>
</tr>
<tr>
<td>Cascade</td>
<td>750 - 1,000</td>
<td>0.5</td>
<td>12.7</td>
<td>20&quot;**</td>
<td>10</td>
<td>254</td>
</tr>
<tr>
<td>&quot;SI&quot; Quarry</td>
<td>800 - 1,150</td>
<td>0.375</td>
<td>9.52</td>
<td>15&quot; - 25&quot;**</td>
<td>10</td>
<td>254</td>
</tr>
<tr>
<td>&quot;DI&quot; Quarry</td>
<td>900</td>
<td>0.5</td>
<td>12.7</td>
<td>15&quot; - 25&quot;**</td>
<td>10</td>
<td>254</td>
</tr>
<tr>
<td>Buzzer</td>
<td>1,100 - 1,500</td>
<td>0.25</td>
<td>6.35</td>
<td>10&quot; - 15&quot;</td>
<td>5</td>
<td>127</td>
</tr>
<tr>
<td>Low-Profile</td>
<td>850 - 950</td>
<td>0.375</td>
<td>9.53</td>
<td>10&quot; - 15&quot;</td>
<td>10</td>
<td>254</td>
</tr>
</tbody>
</table>

*Optional angle available.
Horizontal Screens

Our horizontal screens deliver high productivity and efficiency in a low-profile package. The low screen height allows for operation in height-restricted areas and maximum portability. The triple-shaft design employs an oval motion stroke pattern that generates a more aggressive screening action, reducing plugging and blinding while providing extended bearing life. Multiple configurations are available for a wide range of applications, from fine screening to heavy scalping.

Eccentric Crescent Weights
Eccentric crescent weights reduce friction in oil, thereby reducing oil temperature.

Triple-Shaft Design
Our triple-shaft design employs an oval motion stroke pattern that generates a more aggressive screening action, reduces plugging and blinding and provides an extended bearing life.

Tuned and Bolt-In Deck Bracing
Our horizontal screens operate free of natural frequencies with minimal welds, which reduces cracking in the cross members and ensures maximum service life.

Titan Oil Seals
Non-contact centrifugal force drives the oil back to the wheel case, while a labyrinth seal keeps contaminants out and an O-ring maintains the seal between the shaft and oil flinger.

Application Flexibility
Adjustable oval motion length and timing angle provide optimal application flexibility. Standard, medium and heavy-duty scalping configurations ensure optimal performance in varied applications.

Portability
The low screen height on our horizontal screens allows for operation in height-restricted areas and maximum portability.

Wet/Dry Configurations
A consistent and adjustable material travel speed, coupled with a low-profile height, make our horizontal screens ideal for wet and dry applications. Our horizontal screens are equipped with standard spray bar knock-out holes. An optional spray system, complete with manifold and spray nozzles, is also available. These screens are ideal to install on portable washing plants.
<table>
<thead>
<tr>
<th>Type</th>
<th>RPM</th>
<th>Speed</th>
<th>Max. Stroke</th>
<th>Max. Feed</th>
<th>Size Range</th>
<th>Decks</th>
</tr>
</thead>
<tbody>
<tr>
<td>“FS” Finish Screen</td>
<td>875 - 1,075</td>
<td>0.5</td>
<td>12.7</td>
<td>8</td>
<td>203</td>
<td>5 x 16 up to 8 x 20</td>
</tr>
<tr>
<td>“QF” Four-Deck Screen</td>
<td>775 - 975</td>
<td>0.5</td>
<td>12.7</td>
<td>8</td>
<td>203</td>
<td>6 x 20</td>
</tr>
<tr>
<td>“LP” Low-Profile Screen</td>
<td>675 - 875</td>
<td>0.75</td>
<td>19</td>
<td>10</td>
<td>254</td>
<td>5 x 14 up to 8 x 24</td>
</tr>
<tr>
<td>“MS” Medium Scalper</td>
<td>675 - 875</td>
<td>0.75</td>
<td>19</td>
<td>14</td>
<td>355</td>
<td>5 x 16 up to 8 x 20</td>
</tr>
<tr>
<td>“HS” Heavy Scalper</td>
<td>575 - 775</td>
<td>0.875</td>
<td>22.22</td>
<td>18</td>
<td>457</td>
<td>5 x 14 up to 8 x 20</td>
</tr>
<tr>
<td>“XH” Extra-Heavy Scalper</td>
<td>575 - 775</td>
<td>0.875</td>
<td>22.22</td>
<td>24</td>
<td>609</td>
<td>5 x 14 up to 8 x 20</td>
</tr>
</tbody>
</table>
Sloped Decks
A sloped feed zone accelerates material to provide a thinner bed depth for quicker fines separation. A horizontal discharge zone decelerates near-size material for increased efficiency.

Triple-Shaft Screening
The Combo Screen is the only sloped screen that provides the benefits of a triple-shaft vibrating mechanism. These advantages include anti-plugging/blinding, extended bearing life, application flexibility and stroke amplitude adjustment.

Hinged Tailgate for Rear Access
Screen media changes are quick and easy compared to conventional designs.

Punched Plate Feed Box Design
Punched plate feed box design provides a 10% bonus area to start introducing fines to lower decks immediately.

Combo Screens
Developed based on extensive side-by-side testing of traditional incline and horizontal screens, our 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.
<table>
<thead>
<tr>
<th>Type</th>
<th>Speed</th>
<th>Maximum Stroke</th>
<th>Slope</th>
<th>Maximum Feed</th>
<th>Size Range</th>
<th>Decks</th>
</tr>
</thead>
<tbody>
<tr>
<td>“CS” Combo</td>
<td>675-875</td>
<td>0.75</td>
<td>19</td>
<td>10</td>
<td>6 x 20 up to 8 x 20</td>
<td>2-3</td>
</tr>
<tr>
<td>“CF” Combo</td>
<td>875-1,075</td>
<td>0.5</td>
<td>12.7</td>
<td>8</td>
<td>6 x 20 up to 8 x 20</td>
<td>2-3</td>
</tr>
</tbody>
</table>
Mesabi® Screens

Built to scalp the toughest, most abrasive materials, our Mesabi® 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 the plant.

Bearing Housings
Mesabi® vibrating screens are 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 to which the screen box is subjected.

Rugged Service
The Mesabi Screens are designed for the most rugged screening applications, like producing riprap or scalping ahead of a large primary crusher. Our innovative design allows four products to be produced simultaneously, maximizing productivity and efficiency.
<table>
<thead>
<tr>
<th>Model</th>
<th>Speed</th>
<th>Max. Stroke</th>
<th>Slope</th>
<th>Size Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mesabi Standard-Duty</td>
<td>850 - 1,000</td>
<td>0.375</td>
<td>9.53</td>
<td>2 x 8 up to 6 x 16</td>
</tr>
<tr>
<td>Mesabi Heavy-Duty</td>
<td>900</td>
<td>0.375</td>
<td>9.53</td>
<td>2 x 10 up to 6 x 16</td>
</tr>
</tbody>
</table>

Available as Portable or Stationary.
High Frequency Screens

Our high frequency screens offer ideal gradation control for reclaiming fines in both wet and dry applications. All high frequency screen decks are driven by variable-speed hydraulic vibrators for optimal screen efficiency and production. Producers save time and money with easy hydraulic screen angle adjustments and our unique rotary tensioning system, which ensures the quickest screen media changes in the market.

Hydraulic Vibrators
All high frequency screen decks are driven by variable-speed hydraulic vibrators (up to 4,200 RPM) for optimal screen efficiency and production. Electric vibrators operating at 3,600 RPM are available upon request.

Rotary Tensioning System
Unique rotary tensioning system provides the quickest screen media changes in the market, up to 50% faster than competitive models. Easy replacement of each screen section translates into less downtime for screen changes and increased operation time.

Low Maintenance
The high frequency screen induces vibration directly into the screen media, leading to reduced maintenance and increased production and uptime.

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.

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.

Hydraulic Screen Angle Adjustment
Hydraulic screen angle adjustment makes adjustments quick and easy, reducing downtime.
<table>
<thead>
<tr>
<th>Type</th>
<th>Speed</th>
<th>Slope</th>
<th>Size Range</th>
<th>Decks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RPM</td>
<td>Feet</td>
<td>Meters</td>
<td></td>
</tr>
<tr>
<td>PEP Duo-Vibe</td>
<td>1,200 / 4,200</td>
<td>3 x 3 up to 6 x 24</td>
<td>0.9 x 0.9 up to 1.8 x 7.3</td>
<td>1-4</td>
</tr>
<tr>
<td>PEP Vari Vibe®</td>
<td>4,200</td>
<td>3 x 3 up to 6 x 24</td>
<td>0.9 x 0.9 up to 1.8 x 7.3</td>
<td>1-4</td>
</tr>
</tbody>
</table>

Available as
- Track-Mounted
- Portable
- Stationary
Because Kolberg-Pioneer, Inc., Johnson Crushers International, Inc. and Astec Mobile Screens, Inc. may use in their catalog and literature, field photographs of their products which may have been modified by the owners, products furnished by Kolberg-Pioneer, Inc., Johnson Crushers International, Inc. and Astec Mobile Screens, Inc. 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 Kolberg-Pioneer, Inc., Johnson Crushers International, Inc. and Astec Mobile Screens, Inc. are subject to the provisions of their standard warranty. Kolberg-Pioneer, Inc., Johnson Crushers International, Inc. and Astec Mobile Screens, Inc. do not warrant or represent that their 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 how the product is used. 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. 7/16