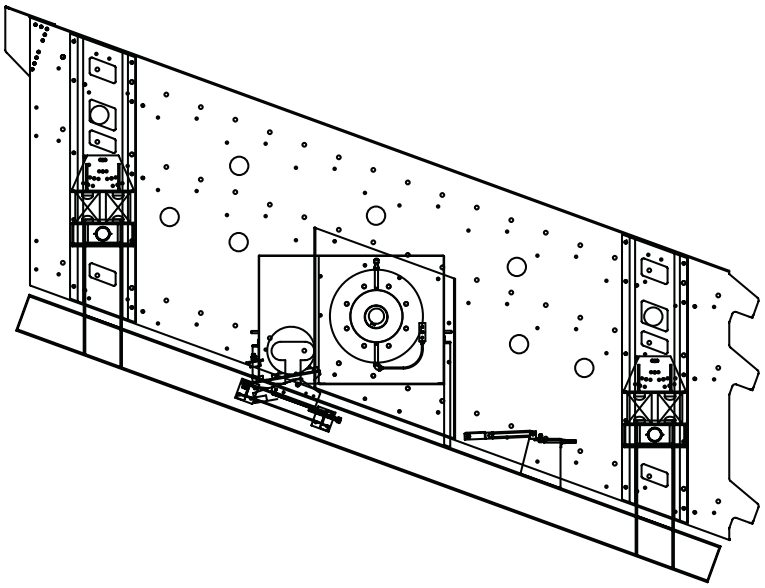
Screening

KPI-JCI ASTEC COMPANIES | ASTEC MOBILE SCREENS

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.

	Speed	Maximum Stroke		Slope	Maximum Feed		Size Range		Decks
Type	RPM	In.	mm		In.	mm	Feet	Meters	
Cascade	750 - 1,000	0.5	12.7	20°*	10	254	5 x 16 *up to* 6 x 20	1.5 x 4.9 *up to* 1.8 x 6.1	2-3
"SI" Quarry	800 - 1,150	0.375	9.52	15° - 25°*	10	254	6 x 16 *up to* 8 x 20	1.8 x 4.9 *up to* 2.4 x 6.1	2-3
"DI" Quarry	900	0.5	12.7	15° - 25°*	10	254	6 x 16 *up to* 8 x 24	1.8 x 4.9 *up to* 2.4 x 7.3	2-3
Buzzer	1,100 - 1,500	0.25	6.35	10° - 15°	5	127	2 x 4 *up to* 5 x 14	.6 x 1.2 *up to* 1.5 x 4.3	1-3
Low-Profile	850 - 950	0.375	9.53	10° - 15°	10	254	5 x 16 *up to* 8 x 20	1.5 x 4.9 *up to* 2.4 x 6.1	2-3

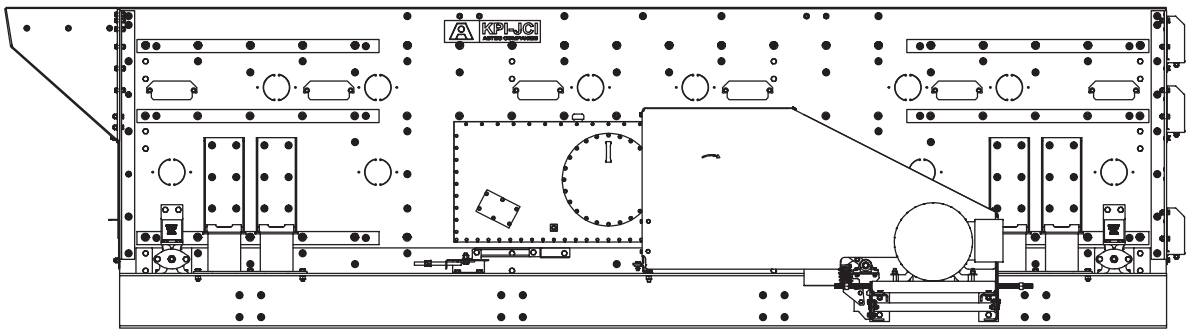
*Optional angle available.

Available as

Track-Mounted Portable Stationary

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.

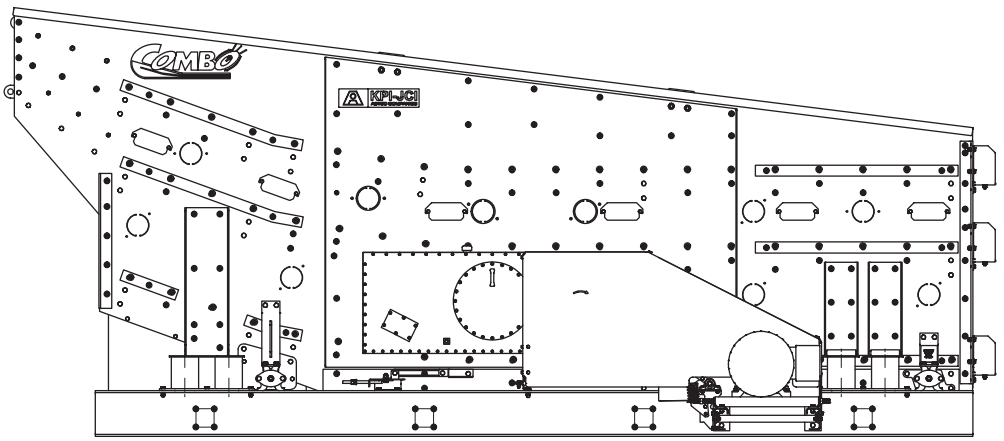
	Speed	Max. Stroke		Max. Feed		Size Range		Decks
Type	**RPM**	**In.**	**mm**	**In.**	**mm**	**Feet**	**Meters**	
"FS" Finish Screen	875 - 1,075	0.5	12.7	8	203	5 x 16 *up to* 8 x 20	1.5 x 4.9 *up to* 2.4 x 6.1	2-3
"QF" Four-Deck Screen	775 - 975	0.5	12.7	8	203	6 x 20	1.8 x 6.1	4
"LP" Low-Profile Screen	675 - 875	0.75	19	10	254	5 x 14 *up to* 8 x 24	1.5 x 4.3 *up to* 2.4 x 7.3	2-3
"MS" Medium Scalper	675 - 875	0.75	19	14	355	5 x 16 *up to* 8 x 20	1.5 x 4.9 *up to* 2.4 x 6.1	2-3
"HS" Heavy Scalper	575 - 775	0.875	22.22	18	457	5 x 14 *up to* 8 x 20	1.5 x 4.3 *up to* 2.4 x 6.1	2
"XH" Extra-Heavy Scalper	575 - 775	0.875	22.22	24	609	5 x 14 *up to* 8 x 20	1.5 x 4.3 *up to* 2.4 x 6.1	2

Available as

Track-Mounted Portable Stationary

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.



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.

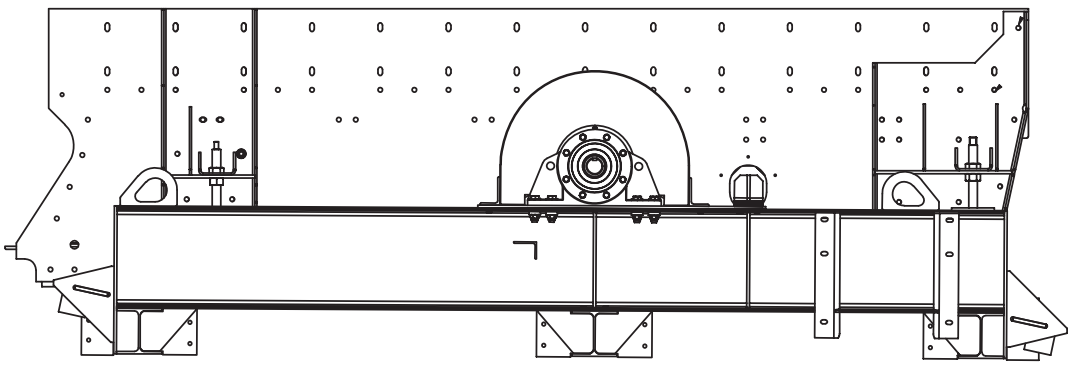
	Speed	Maximum Stroke		Slope	Maximum Feed		Size Range		Decks
Type	RPM	In.	mm		In.	mm	Feet	Meters	
"CS" Combo	675 - 875	0.75	19	20˚/10˚/0˚	10	254	6 x 20 *up to* 8 x 20	1.8 x 6.1 *up to* 2.4	2-3
"CF" Combo	875 - 1,075	0.5	12.7	20˚/10˚/0˚	8	203	6 x 20 *up to* 8 x 20	1.8 x 6.1 *up to* 2.4	2-3

Available as

Track-Mounted Portable Stationary

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.

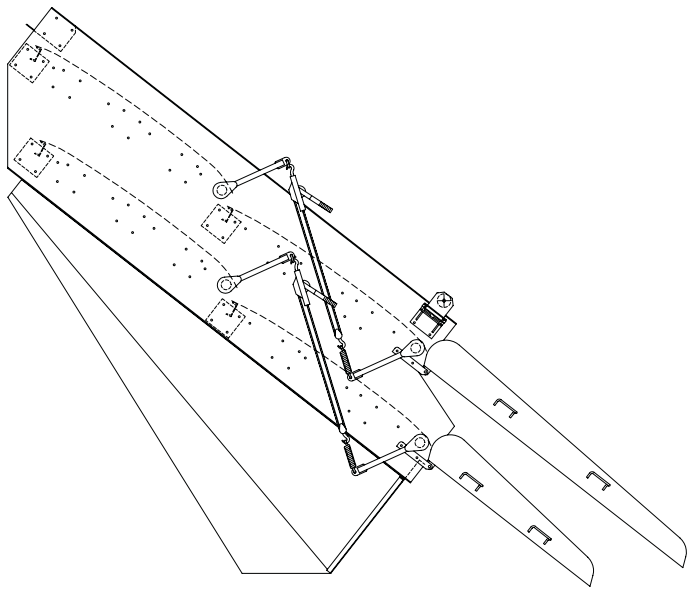
Model	Speed	Max. Stroke		Slope	Size Range	
		Inches	Millimeters		Feet	Meters
Mesabi Standard-Duty	850 - 1,000	0.375	9.53	10˚ - 12˚	2 x 10 *up to* 6 x 16	0.6 x 3 *up to* 1.8 x 4.9
Mesabi Heavy-Duty	900	0.375	9.53	10˚ - 15˚	2 x 8 *up to* 6 x 14	0.6 x 2.4 *up to* 1.8 x 4.3

Available as

Portable 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.

Type	Speed	Slope	Size Range		Decks
	RPM		Feet	Meters	
PEP Duo-Vibe	1,200 / 4,200	38˚ - 45˚	3 x 3 *up to* 6 x 24	0.9 x 0.9 *up to* 1.8 x 7.3	1-4
PEP Vari Vibe®	4,200	38˚ - 45˚	3 x 3 *up to* 6 x 24	0.9 x 0.9 *up to* 1.8 x 7.3	1-4

Available as

Track-Mounted Portable Stationary

TOUGHNESS REFINED.

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Rev. 7/16