ElJay Legacy™ Series Screens

Cedarapids

Profit with the Innovative Legacy™

The Legacy Screen combines the integrity, durability and innovation you've come to expect from Cedarapids/ElJay. So whether you are looking at mobile or stationary, scalping or finishing, wet or dry, depend on our Legacy... the most efficient screen–period.

Cedarapids/ElJay Legacy™ Series Screens combine the latest design improvements with the unique features of the original oval stroke ElJay screen. The proven Legacy units increase production, reduce recirculation load and add profit to your daily operation.

The Legacy combines the efficiency of a horizontal screen with the bearing life and maintenance of an inclined screen.

The efficient and durable design uses a three-shaft impulse mechanism located in the center of the screen box to create a unique oval throw. This oval throw makes the screen virtually non-plugging.

The ability to change angle of throw, amplitude of throw and speed of screen allows the Legacy to be fine-tuned to maximize production for almost any condition.

The bearing mounting method provides long service life because loading is distributed over a large area.

These features plus the extra strong box construction, heavy-duty spring mounts and precise robot welding of certain components add up to make a screen which will yield maximum performance under tough conditions year after year with minimum downtime.

Screen Box

The screen box is an all Huckbolt® assembly, heavily built to withstand the stress of day-to-day operation.

Huckbolts make a stronger one-piece unit by eliminating welding and the possibility of cracking due to stress buildup. Huckbolts are the strongest mechanical fasteners known in the industry and they can't shake loose.

The tops of the side sheets are bent over forming flanges which act as stiffeners.

A triple-wall around the drive and impulse shafts put extra strength in the area of greatest stress. The side sheets, fish plates and drive housings are Huckbolted together to create a very strong three-layered construction. In addition, vertical angles at each corner add rigidity.

A computer-controlled punch assures accuracy of size, alignment and location of holes for the drive mechanism, mounting the deck frames and clamp bars.

The deck frames have strong I-beam cross members and square-tube bracing.

Rubber Springs mounted at each corner, isolate the frame from the screen's vibration. They also provide extended service life, eliminate violent action at start-up and shut-down and offer significant noise reduction.

Rubber Snubbers are standard to assure straight-line movement of the screen box. Located at the corners near each set of support springs, the snubbers also reduce lurching at start-up and shutdown and are wear-adjustable.

Feed Box

The standard bolt-on feed box with replaceable liners spreads material across the full screen width, allowing use of all the wire area for screening. The liners absorb impact and wear of incoming material, thus providing longer wire life.

Bolt-on replaceable discharge lips are also standard. The lips direct screened material into the proper bins, chutes or hoppers. Replaceable liners protect the lips from wear.

Water-tight feed box is standard except on scalping screens.

Screen Cloth Tension

Even material distribution over the entire deck is assured by equal tensioning through the combination of properly crowned decks, rubber channel and bolted clamp bars.

Screen boxes are assembled in fixtures to assure parallel sides necessary for even tensioning. Properly tensioned cloth eliminates loose wire whip, a major cause of premature failure.

Hand Access Holes

Removable covers over hand access holes allow easier and faster screen cloth changes.

The Legacy Triple Shaft Horizontal Screen Offers More Productiv

Efficient Horizontal Screen Action

Increase your production and profit with the efficient Cedarapids/ElJay Legacy Screen action. This design combines the best features of the circle and straight line throw into a unique **oval stroke**.

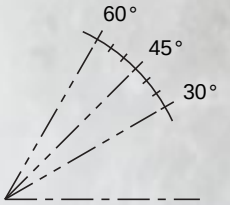
Unique Oval Stroke

Oval Stroke Advantages

- *Less horsepower required*
- *Smooth running—eliminates jerking action of straight stroke screens*
- *Adjustable angle and length of stroke*
- *Virtually non-plugging in "arrow head" type material*

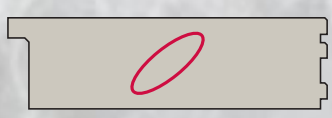
Oval Action Adjustable to Any Position

Another profit feature found on the efficient oval-stroke Legacy Screen is the ability to change the length and angle of the stroke to best suit your screening needs. The more vertical short stroke gives maximum accuracy for separating fines, while the longer more horizontal stroke moves the coarse materials faster. These adjustments are easily made in a matter of a few minutes.



Available stroke angles, adjustable in 5° increments

Scalping
Angle—35° to 45°
Stroke—Full .718*
Speed—Slow



Medium Size Material
Angle—40° to 50°
Stroke—Medium .680*
Speed—Medium

Medium Size Material
(maximum efficiency bottom deck)
Angle—45° to 55°
Stroke—Medium .663*
Speed—Medium

Fine Screening
Angle—45° to 60°
Stroke—Short .646*
Speed—Fast

** Stroke dimensions will vary with different size screens.*

Vibrating Mechanism

The gear-drive vibrating mechanism provides easy stroke adjustment to fine-tune the screening action.

To change the angle of action, simply remove the locking keybolt from the center gear and rotate the center impulse wheel to the desired angle of stroke in 5° increments in relation to left and right impulse wheels. Then replace the keybolt, locking the impulse weights in the new position. The adjustment takes just a few minutes.

Stroke angle can be changed in 5° increments from 30° to 60°. Amplitude can be changed by adding or removing plug type counterweights on the impulse wheels. Total change is from 9/16" to 3/4" (14.3 to 19.1 mm). Speed ranges from 675 to 875 rpm are made with the adjustable-speed motor sheave.

The central location of the vibrating mechanism in the screen box eliminates the tipping action often associated with overhead or underslung vibrators. In addition, the drive location permits low-headroom installation and more between-deck space.

Keyless Locking Hub

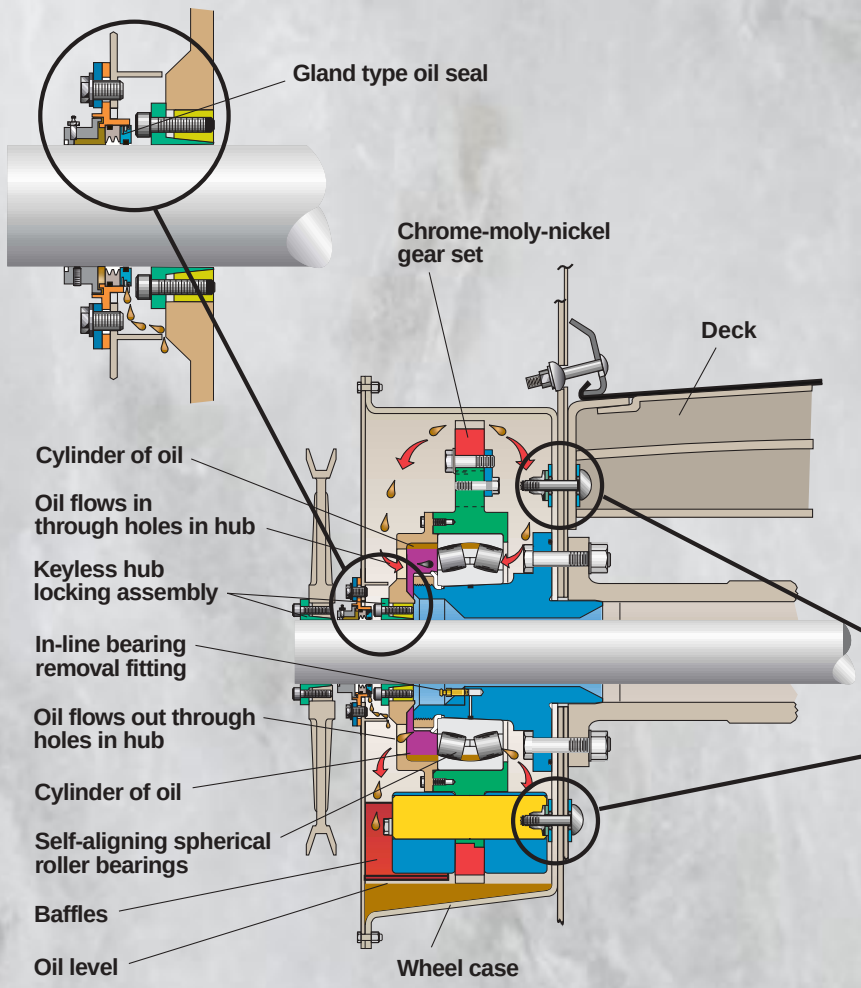
The keyless locking hub assembly provides a simple positive lock of hub to shaft and eliminates the key, keyway, locknut, washer and tapered mounting sleeve. This assembly is used on all three shafts of the drive system.

A wedging action solidly locks hub to shaft with powerful torque transmission across the full shaft diameter. This prevents shaft stress fractures under heavy load conditions because stress concentrations caused by keyways have been eliminated.

The locking assembly also speeds maintenance since only a torque wrench and socket set are needed to install or remove the hub. Hydraulic rams, puller and tools associated with older systems are not needed.

ity And Profit Opportunity Than Any Other Screen On The Market!

On-going Innovations from Cedarapids/ElJay is Our Legacy



Roller Bearings

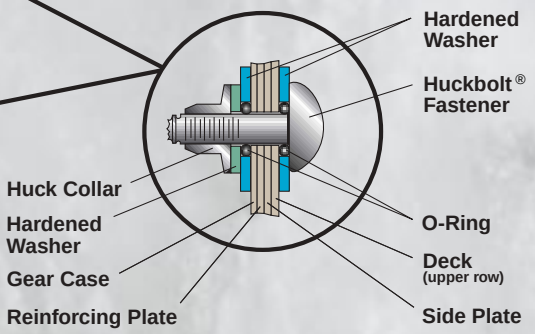
Bearings are double-roll, spherical self-aligning designed for vibrating screens. They have superior load-carrying ability, made to high tolerances for smooth rolling and extended service life.

They are mounted on high-strength alloy steel spindles which are tapered for easy installation and removal. This design permits the outer race to rotate, which results in longer average bearing life through better load distribution.

Bearings are "over-the-counter" type which means they are readily available to keep your downtime to a minimum.

Double Sealed Huckbolt® for Wheel Case

(Patents Pending)



Exclusive Features of the Legacy Series Screen

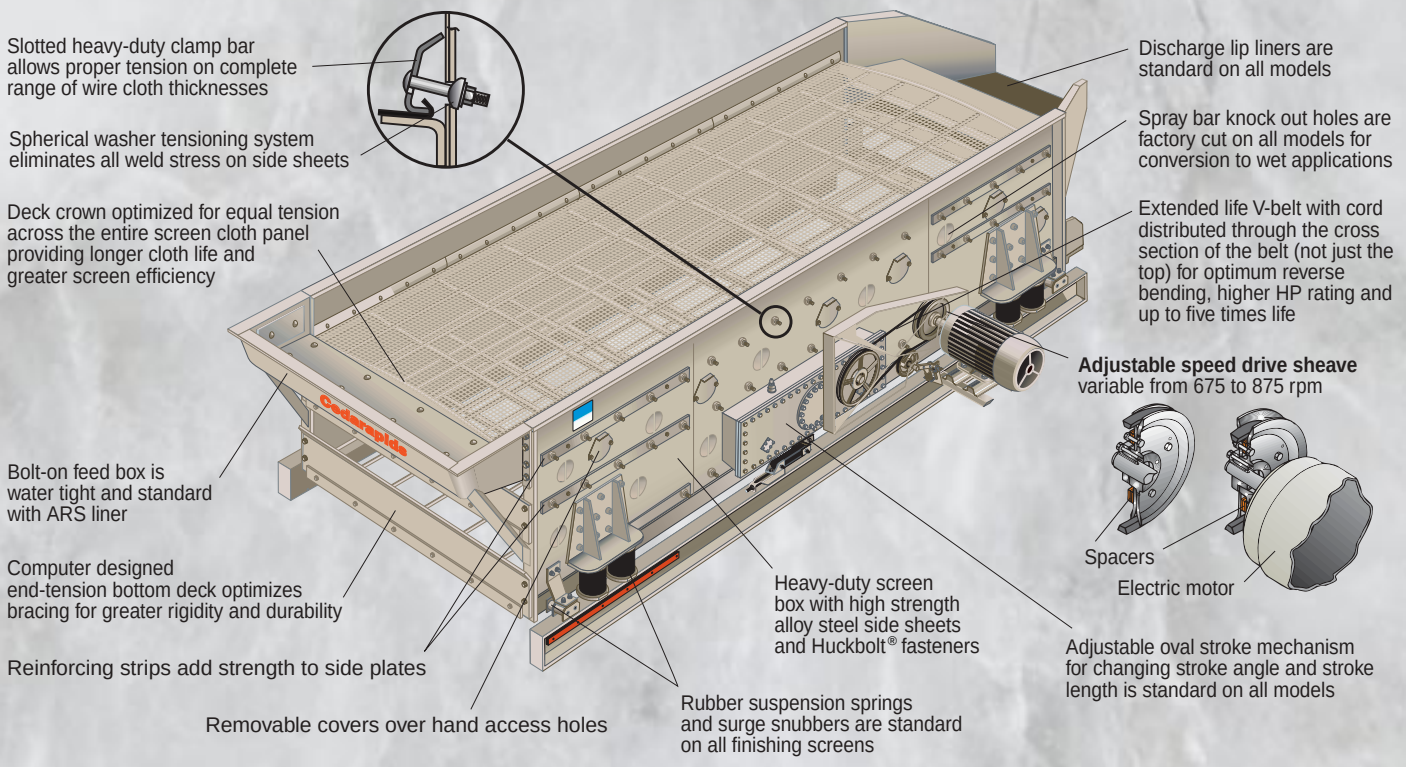
- **Computer designed chrome-moly-nickel gear set** with premium metallurgy and optimized tooth profile for smooth running and maximum life.
- **Double sealed wheel case** with Huckbolt® fasteners.
- **Eccentric spindle** for bearing backlash adjustment. Spindle pilots in gear case for increased strength and precision centering. Spindle has four puller bolt holes for ease of removal. ***In-line bearing removal fitting*** and improved hydraulic groove for ***easier bearing removal*** with shaft in place.
- **High-tech rotary non-contact "gland type" oil seal** in hooded wheel case cover ***maximizes seal operating life and effectiveness*** in the most severe conditions.
- **Innovative baffle system in wheel case** ***reduces operating temperature*** by reducing agitation and improving oil flow. ***Improves lubrication*** by eliminating areas of build-up and evacuation which are caused by the rotating weights.
- **Strategic oil flow holes in wall of drive hub** ***improves lubrication*** and reduces temperature by allowing oil to flow through bearing rather than just into the bearing with ***"flow in - flow out"*** design. Position of holes create a centrifugal cylinder of oil for consistent lubrication at each bearing.

Durable

Innovative

Efficient

Cedarapids/ElJay Legacy Series Screens provide the contractor with proven performance. The ability to change stroke angle, amplitude and speed to meet changing screening conditions makes this versatile screen highly efficient in most any application. Smooth operation, virtually non-plugging, exceptional bearing life and simplified adjustment procedure make the Legacy ideal for either stationary or portable applications.



Screen Decks

Single-crown decks are standard and have a true full-width cloth. In fact, the 6' (1829 mm)-wide screen actually has 6'3" (1905 mm) of screening width.

The crown is correctly sloped to spread material evenly across the screen for maximum efficiency and accuracy of separation, avoiding the problems of overloading the center or sides of the cloth caused by incorrect crown.

Heavy-duty frame construction provides strong support for the heaviest loads. The internally-mounted vibrating mechanism gives clear access to the top deck(s) and provides extra bottom-deck clearance for changing cloth.

End-tensioned Deck

Flat Decks for Various Media

Optional Decks

End-tensioned deck wires slice through sticky, clumpy material to give high productivity in material that would pancake and blind other types of decks.

Only a few cross wires are used to maintain spacing so the material is free to pass through virtually unobstructed.

The end-tensioned deck is in two sections with a step between. The step causes the remixing of material so stratification is minimized.

Wires are tightly secured in holders and are tensioned in groups to reduce field adjustment time and the chance of loose wires from whipping and breaking.

Another option is computer designed flat decks for use with urethane and rubber panels. The decks are not only designed for ease of installation and replacement, but even more importantly, the decks are designed to support the extra weight of this media.

The original warranty remains in effect when customers install any brand of media by following the simple factory installation instructions.

Washing Screen

The optional dual-wash, double-row spray bar system washes muddy aggregate sparkling clean. The alternating pattern of spray assures that all aggregate is cleaned.

Spray bars are available for each deck and can easily be added to screens using the pre-cut knockout plates. Each bar has a flow control valve so water delivery can be suited to the type of material. Spray bars are mounted on a separate frame so they are not stressed by the screen movement.

Bars with either holes and splash plates or threaded brass nozzles are available.

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Durable Innovative & Cost Effective

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