

# THE FEED



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2017

ISSUE 17  
QUARTER 1

The official magazine of KPI-JCI and Astec Mobile Screens

# From the Executive's Desk



Happy New Year. A new year always brings optimism and rightfully so. The Dali Lama XIV said to choose to be optimistic because it feels better. Gunga Galunga! 2017 looks like both an exciting and hopefully optimistic year. One thing is for sure, there will be some changes in Washington, D.C. The Presidential Inauguration celebrated a new day in America as Donald J. Trump and Michael R. Pence were sworn in as President and Vice President. The 115th Congress has been seated and includes Republican control

of both the House of Representatives and the Senate. There are plenty of changes in discussion, some of which could influence our markets. In my discussions with the end users of our equipment, producers are optimistic that less regulatory oversight from the government and new infrastructure investment could have a positive impact on their business. In an era of change, your voice is important. I urge you to let your political leadership know how you feel about the issues on the table. Your voice makes a difference.

2016 proved to be a record year for us, in spite of challenging market conditions. We appreciate your support and each and every order. It's a competitive marketplace and every order is the culmination of our efforts to deliver our customers a compelling product. 2016 picked up pace as the year progressed and our companies were blessed with end of year record backlogs. Kolberg-Pioneer, Johnson Crushers International and Astec Mobile Screens have aggressive plans for the future. Our focus is on growth and we have set aggressive goals for ourselves. We have made continued investments in new products, our manufacturing facilities, our relationships, and our team. We look forward to the opportunities you bring to us, every one of them, and promise to do all in our power to help us achieve our mutual objectives – win the deal.

We anxiously await ConExpo, March 7 – March 11 in Las Vegas, N.V. You will find us in the Astec booth, located in the Central Hall #C30332. Astec's display will feature 65 products, many of which are new, state-of-the-art product introductions. KPI-JCI and Astec Mobile Screens have many new products to offer at the show. Most customers come to ConExpo to learn about what is new and seek products that will offer them a competitive advantage. Astec's booth, as always, will be a centerpiece of ConExpo. It will feature all of the new products our customers come to expect from the Astec companies. We are bringing a big team to staff the booth and look forward to seeing you in the Astec booth.

Let's make 2017 a great year!

I Love Parts,

## THE FEED

The Feed is a quarterly magazine designed to bring awareness to the latest equipment offerings, customer and dealer success stories and upcoming industry and factory events from Kolberg-Pioneer, Johnson Crushers International and Astec Mobile Screens.

To report an error, subscribe or suggest a story idea, please contact:

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## ABOUT

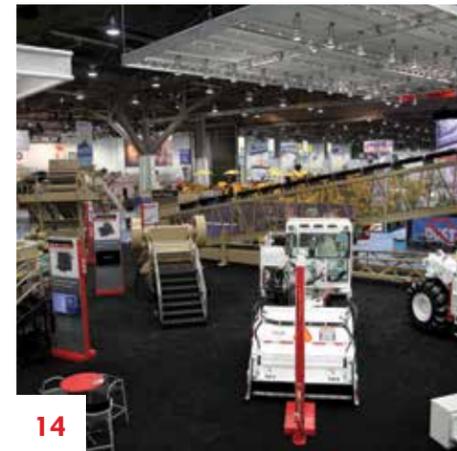
Kolberg-Pioneer, Inc., Johnson Crushers International, Inc. and Astec Mobile Screens, Inc. of Astec Industries (NASDAQ: ASTE) are worldwide leaders in manufacturing equipment for the aggregate, construction and recycling industries. As innovative, high-integrity manufacturers, the three companies develop quality, state-of-the-art products and have the ability to engineer custom products because of a highly-qualified sales application and engineering staff. Kolberg-Pioneer, Inc. manufactures its products in Yankton, South Dakota, Johnson Crushers International, Inc. in Eugene, Oregon and Astec Mobile Screens, Inc. in Sterling, Illinois. For more information, call (605) 668-2524 or visit [www.kpijci.com](http://www.kpijci.com).

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## UPCOMING EVENTS

### MARCH

March 7-11

ConExpo-Con/Agg  
Las Vegas, Nev.

### MARCH

March 28-30

Level 1 & 2 Track School  
Kolberg-Pioneer, Inc.  
Yankton, SD.

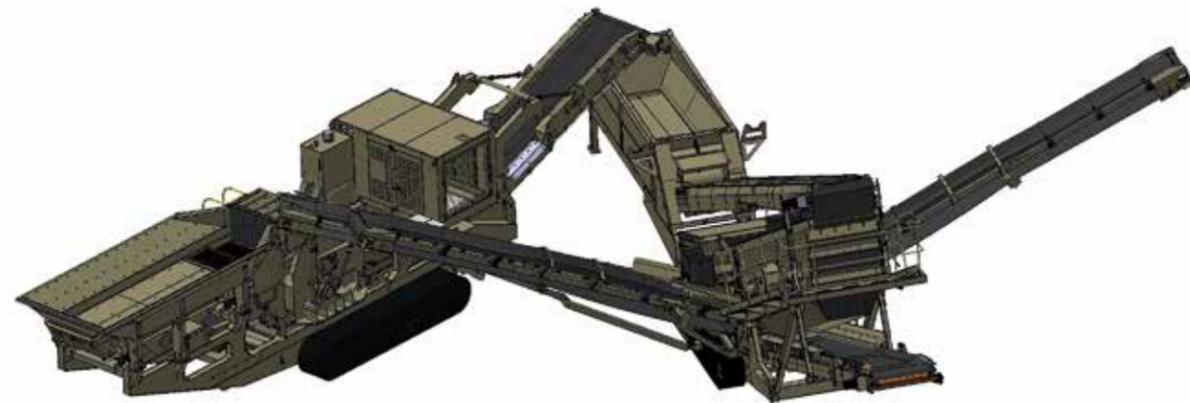
### AUGUST

August 1-3

Cone & Screen School  
Johnson Crushers International  
Eugene, Ore.

# application angle

It's all about perspective. It's all about results.



An asphalt company in Florida, producing 1.5 million tons of hot-mix asphalt, invested in a mobile crushing and screening plant. By making this investment, the company was able to process recycled asphalt (RAP),

which led to a savings of up to 50 percent, along with the ability to produce a higher-quality product, increase the amount of recycled product in its mix, and eliminate its dependence on sub-contractors.

## THE OBJECTIVE

Prior to processing its own RAP material, this producer relied on sub-contractors to crush the material. The asphalt processed is composed of Florida limestone, Canadian granite and hard limestone imported from various islands. Florida limestone materials tend to be high in fines content, creating additional challenges when processing RAP. After running the numbers, it determined it could crush the same material for at least the same cost, if not cheaper, than what it was contracting out. Production was key, as the company had to beat the sub-contractors' production and expense numbers to make this venture work.

## THE SOLUTION

The company used the FT4250 in an open-circuit configuration, along with a GT205S screen and 13-3080 conveyor. The broken-up asphalt pavement first enters the FT4250OC, where it is crushed then conveyed to the GT205S feed hopper. Any overs (typically 7-10% of original material) are fed from the middle-deck conveyor back to the impactor, where it is crushed again and then screened to make a finished product of ½"-minus.

## THE FIGURES

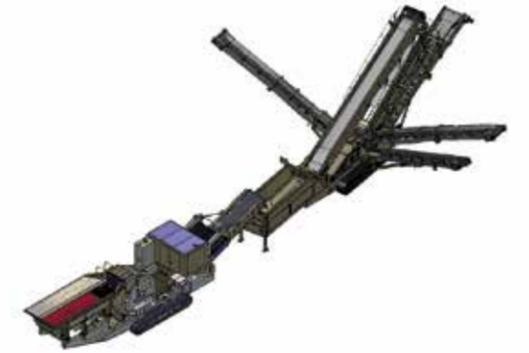
Thanks to their addition of the FT4250 with the GT205, the company achieved a savings of up to 50% of what they were paying an outside contractor. By not contracting out the crushing, the producer was able to experiment and process the RAP differently, allowing them to work better with the fines material and dust. Because they can get a better product crushing it themselves, they can use a higher quantity of RAP in their asphalt mix (an increase of up to 5%), which results in a considerable savings for them as the costly liquid asphalt expenses go down. They originally anticipated processing 60% of the material. The operation was able to produce a ½"-minus RAP product that met their state's Department of Transportation specifications. The producer also reported they were averaging around 290 TPH processing the RAP, but have found they could do as much as 450 TPH.

## THE BOTTOM LINE



# 50%

Approximate cost savings of what was previously paid to an outside contractor.



## FT4250 IMPACT CRUSHER

- The FT4250 is the only continuous crushing and tracking impactor
- Up to 30 percent more uptime than competitive models
- Up to 25 percent more production than competitive models



## GT205

- Available in 2 or 3 decks to provide up to 4 sizes of product
- Compact design makes machine easy to transport
- Low profile design allows machine to be driven off trailer and immediately start screening



# GAMBLING for GOLD

Hoffman crew risks it  
all in hopes of striking  
Oregon pay dirt

*written by Michelle Cwach*

From the wilds of Alaska, to the remote corners of the Canadian Klondike, to the jungles of Guyana, Dave Turin and Todd Hoffman – the masters of reality TV mining – have spent the better part of a decade travelling the globe in search of gold. But it’s in their home state of Oregon that they may have met their toughest challenge yet.

The pair, which is a part of the 316 Mining crew on Discovery Channel’s hit TV show Gold Rush, is currently mining a parcel of dry desert ground in northeastern Oregon. Now in its seventh season, longtime fans of the show have witnessed a massive evolution of the crew – once a rag-tag group of inexperienced miners, now seasoned professionals capable of pulling in over 3,000 ounces of gold worth over \$3.3 million in a single season.

Coming off their record-breaking haul in season six and anxious to tackle a new mining challenge in season seven, Hoffman and Turin set up camp in Oregon, a location much closer to their families and a historically gold-rich area. They entered their new mining claim armed with a highly productive wet wash feed system, along with a combo screen from Johnson Crushers International (JCI) that Turin estimates is capable of increasing operational efficiency by 20 percent.

But the 14-person crew faced enormous unseen challenges in season seven. Once they began excavating, their struggle to find

the pockets of rich gold left behind by the previous dredge became so difficult that it only allowed them to sluice 7,000 yards over the course of the season. That’s less than 2 percent of the material they sluiced in season six.

That’s the risk you run in any new mining endeavor, Turin said.

“Each year, the biggest challenge for us has been trying to figure out how to mine the resource,” Turin said. “You can build the right plant and have the right tools that allow you to clean and sort and size your rock, but at the end of the day, it always comes back to the source. Here, we underestimated how successful the original dredge was at capturing the gold in the area, and that’s the reason we have such a small pay zone. But you never really know until you get right down in there and start digging.”

## SETTING A HIGH EXPECTATIONS

The Oregon claim they mined is a well-known placer deposit that was once a river channel that meandered through the valley. The secret to mining an area like that is finding the deepest channels in the mature river plaster ground, because that’s where the deepest gold lies, Turin said. And finding those deep channels would be key if the crew wanted to meet Hoffman’s ambitious season goal of 5,000 ounces– worth upwards of \$5 million.

The bottom of claim’s gold deposit consists of three- to

four-foot boulders encased in mud, which can have gold settled within the mud, Turin said. That makes processing the rocks more challenging, because the larger stones have to be scrubbed clean to remove the gold.

The process starts with a wet wash grizzly feeder, which shakes the rocks down and starts cleaning the bigger boulders. The larger rocks bounce across the top of the feeder, and the smaller rocks, dirt and gold that are washed off the boulders are transferred to a blademill. The blademill scrubs the rock with spiral flights and breaks the clay off with paddles.

Material is then fed to the combo screen, which separates based on size. Any material smaller than ½-inch-minus goes into the sluice box, where the gold is trapped in the riffles and carpet. At the end of the day, the crew cleans the sluice box and recovers the fine gold material, Turin said.

It didn’t take long, however, before Hoffman and Turin realized that they were not hitting the pockets of rich gold they had been hoping for.

“The challenge with this site is that the dredge went up the middle of this valley,” Turin said. “So we wanted to do two things: get underneath where the dredge went, and get the side pay that it left.”

“What we found was that the dredge did a great job. We were chasing a pay zone where we thought we would be able to run about 12 hours a day. In the end, we



*Dave Turin and Todd Hoffman standing on top of Monster Red.*





didn't find the pockets of rich gold that exist in the claim."

### SMOOTH SCREENING

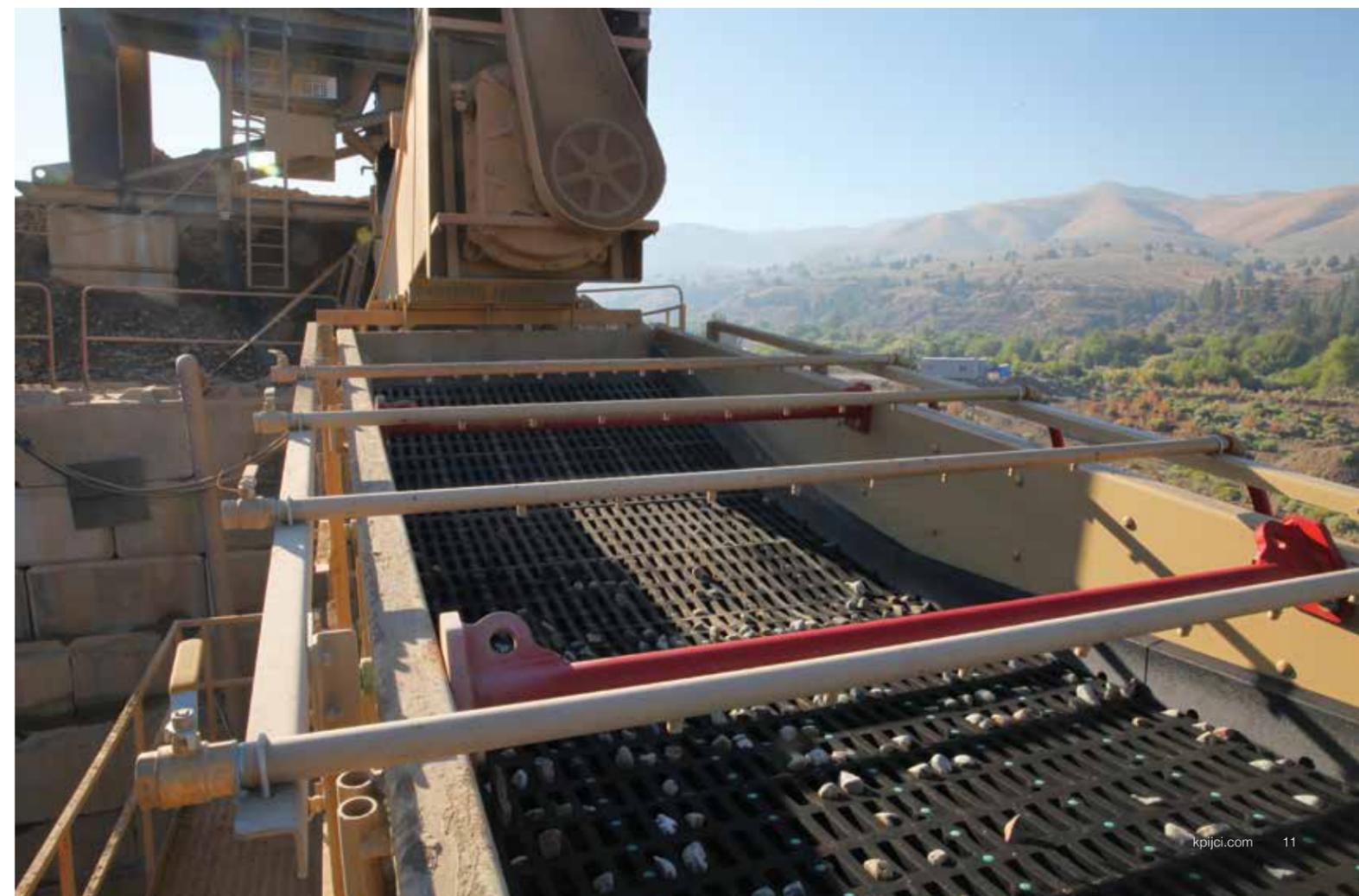
Although Turin had plenty of experience with a variety of screens in his mining career, he rates the combo screen as one of the best screening tools he's ever used.

"I love the combo screen," he said. "I was a bit apprehensive initially with the added size and height and the fact that it looked to me like it was going to be out of balance, but boy, once we fired it up, it ran so smoothly."

"Since we turned it on, it's the smoothest-running screen we've ever used," Hoffman said.

The combo screen from Johnson Crushers International is a new breed of screen that combines the best characteristics of both incline and horizontal screens, and delivers productivity, efficiency and flexibility in wet and dry applications, according to Nick Hahn, product development manager for JCI. The combo screen also offers a sloped feed zone for quicker fines separation, and 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, Hahn said.

"The combo screen allows you to quickly get your oversized material out first, and then at the bottom you're getting perfect fine screening," Turin said. "At the beginning the material's not just moving with the vibration, but



it's rolling over itself, which then allows it to get into the opening."

Turin is no stranger to equipment from JCI. Long before joining Gold Rush, he earned his degree as a civil engineer and served as vice president and quarry manager of his family's aggregate business, Mt. Hood Rock, just a couple of hours away from the Eugene, Ore.-based manufacturing facility.

"We've used JCI products for years," Turin said. "Their equipment has always held up for us, and it's always competitively priced. In my family business, we've always looked at long-term goals. We don't do things on a short-term basis- we want to know how long something is going to last. We're not interested in buying something and using it for a year. We're interested in

buying something and having it last 15 to 20 years."

"The thing I especially like about JCI is that they're not just sitting there making exactly the same product every single year," he continued. "I like the fact that they're trying new things, like this combo screen. They're willing to take a chance, take a risk. That's how you improve."

The combo screen allows you to quickly get your oversized material out first, and then at the bottom you're getting perfect fine screening. At the beginning the material's not just moving with the vibration, but it's rolling over itself, which then allows it to get into the opening.

*Dave Turin*

As the 316 Mining crew races against the clock to capture as much gold as they can before the season's conclusion, there's no time to waste waiting for parts – which is a big reason why Turin appreciates being back in Oregon.

"When we were in the jungle, it would be weeks before getting parts. When we were in the Yukon, it was literally five, six days before you could get a bearing. So being in Oregon is nice. JCI has all of their parts ready to go, you can just make one phone call and I've got a part by the next day."

"But I know that next year, wherever we may be, we're still going to be taken care of when it comes to parts and service," he said. "All of the easy gold is gone, so now we have to go to the remotest parts of the planet to find gold. I've had to learn how to adapt and find people that can get me parts immediately, and JCI can do that. I don't know where we'll be next season, but I do know that I want to take that plant with me. As far as I'm concerned, that will go with us."

### FOCUSING ON THE FUTURE

While Hoffman and Turin may not have found the golden payday they hoped for in Oregon, they've already got their sights set on season eight. Though he never imagined himself a reality TV star, putting mining in the spotlight internationally is an important responsibility, Turin says, and one he takes seriously.

"Worldwide, there are millions and millions of guys who mine for a living, and that's how they pay

the bills. And in a certain respect, I represent those guys that are sitting at home watching the show. And honestly, I want them to be happy with me. I want them to say, 'Hey, that's one of us!' I want them to embrace what I'm doing and I want to show the positive aspects of mining."

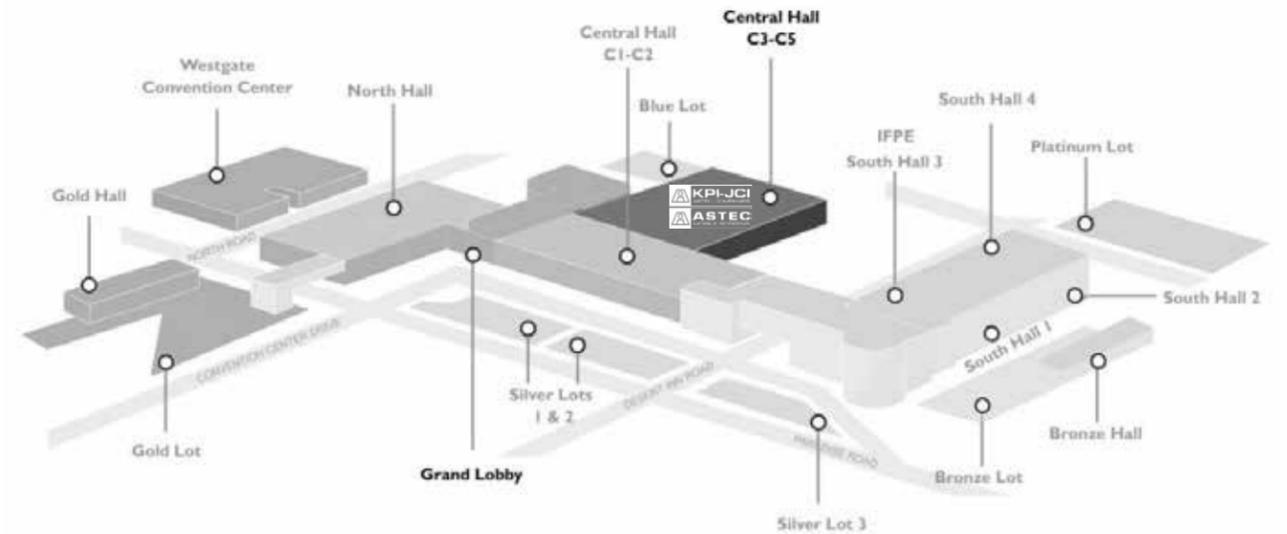
"And for the most part I'm proud of what they show on TV," he said. "We get to show how hard of work it is, but then we also show how gratifying it is. There aren't many jobs where you get the instant satisfaction after busting your butt and getting your hands dirty, but we get to walk up to the sluice box at the end of the day and see gold in it. In the past, I would crush for weeks and weeks and we would have a great big pile of rock and you'd think, 'Wow, that's a great pile of rock.' But here, you can walk up to the sluice box and immediately see all that gold in the box. There's no better feeling than that. That's why we mine."

▶ For more on this story, check out our YouTube page at [www.youtube.com/kpijciofficial](http://www.youtube.com/kpijciofficial).

# CONEXPO: IMAGINE WHAT'S NEXT.

**MARCH 7-11, 2017**

**LAS VEGAS CONVENTION CENTER  
CENTRAL HALL, BOOTH #C30332**



**COME VISIT US IN BOOTH C30332**

## ASTEC SCHEDULE



### TUESDAY, MARCH 7

9:00 am – 5:00 pm - Exhibit Hall Open

### WEDNESDAY, MARCH 8

8:00 am – Press Conference

9:00 am – 5:00 pm - Exhibit Hall Open

### THURSDAY, MARCH 9

9:00 am – 5:00 pm - Exhibit Hall Open

5:00 – 7:00 pm – Customer Appreciation Event, Astec Industries Booth C-30332 Central Hall (To attend, pick up an invitation from KPI-JCI and Astec Mobile Screens sales personnel. Invitations are limited.)

### FRIDAY, MARCH 10

9:00 am – 5:00 pm - Exhibit Hall Open

### SATURDAY, MARCH 11

9:00 am – 3:00 pm - Exhibit Hall Open



Inside this year's ConExpo-Con/Agg booth, KPI-JCI and Astec Mobile Screens will feature a 3365 Pioneer jaw crusher with the industry's largest dynamically-balanced flywheels, a Kodiak® K500+ cone crusher with the industry's leading tramp iron relief system and a 170 foot SuperStacker® with the industry's premier automation system, WizardTouch™. In addition, producers will be able to view multiple system layouts, track equipment with the latest hybrid technology and visit with the company's team of industry experts about solutions to their operational needs.

## VIP Customer Event

Thursday, March 9 | 5:00 p.m.

Join us for drinks, snacks and socializing in Booth C30332



## GT440 MOBILE HSI CRUSHER

- Mobile 42 X 40 horizontal shaft impactor (HSI) with power source options via hybrid technology.
- 30% more uptime with continuous crushing and tracking.
- Manage operating costs effectively using line or diesel power when necessary.
- On-site mobility and quick set-up provide more flexibility.
- Maximize performance and production with proven Overload Protection System.



## GT205 MOBILE MULTI-FREQUENCY SCREEN

- High performance 5 X 20 screen designed for aggregate, recycle and industrial operations.
- Up to 50% higher screening capacity on bottom deck with multi-frequency technology.
- Manage operating costs effectively with the option of line or diesel power when necessary.
- Simple controls create an easy-to-operate machine increasing uptime.
- Full line of mobile screening plants give on-site flexibility for every application.



## 33-36170 SUPERSTACKER®

- Application flexibility with configurable stockpiles using interactive, patent-pending Wizard Touch™ automation.
- 30% more stockpile capacity and minimized material segregation compared to traditional conveyors.
- Safe and efficient stockpiling due to tail end counterweights and wide operating footprint.
- Offered in 10 different sizes for a wide range of production capacities (containerized available).
- Integrated quality from complete in-house design and manufacturing.



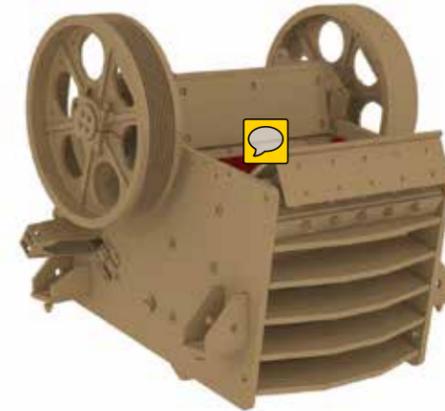
## HYBRID TECHNOLOGY

Look for this logo  
at CONEXPO to  
identify the new  
hybrid equipment



## K500+ CONE CRUSHER

- Industry-leading, patented tramp iron relief system and brass v-seat liners provide protection during overload events.
- Kodiak cone crushers offer up to 50% reduced operating costs through precision roller bearing design.
- Fully-protected, patented internal counterweights maintain true balance throughout cone crusher life.
- Increased uptime due to simplified liner changes with patented liner retention system.
- Consistent product quality with patented 360° thread locking ring that eliminates bowl creep.



## 3365 JAW CRUSHER

- Reduce hp requirements with industry's largest dynamically-balanced flywheels.
- Pioneer jaw crushers offer 25% more capacity with class-leading 1½" stroke.
- Instant closed-side-setting adjustment with dual hydraulic wedge or tramp iron relief system allows for safe operation.
- Replaceable jaw die retention wedges eliminate costly repairs.
- Maximum shaft integrity due to innovative bearing and seal design.



## 6203-32CS COMBO SCREEN

- Combines incline screen benefits with horizontal screen performance.
- Up to 25% more capacity without increasing the footprint or reducing efficiencies.
- Provides flexibility for wet or dry conditions with adjustable speed, stroke length & stroke angle.
- High energy, triple-shaft and multi-angle vibrating screen available in multiple configurations.
- Extensive testing proves increased performance when efficiency is critical and high capacity is required.



**BOOTH  
FEATURE**

**FAST PACK®**



- Turn moving days into production days with moving times as low as twelve hours.
- At least 20% savings with more effective operational management.
- Operate as a complete system or individual components capable of producing seven products.
- Improved safety through advanced automation and reduced human interface.
- Industry-tested and proven components.

## RAP PROCESSING SOLUTIONS

- Improve producers bottom line by increasing RAP utilization in their operation.
- Multiple stationary configurations for producers needing less mobility and more stockpile capacity.
- High performance mobile crushing and screening equipment to meet site-to-site processing needs.
- Material handling product offering from unloading systems to stockpiling solutions.
- Industry's most advanced application knowledge from the asphalt plant to the RAP processing operation.

## AGGREGATE PROCESSING SOLUTIONS



- Creative and accurate solutions from component installation to complete turnkey engineered systems.
- Comprehensive crushing, screening, material handling and washing and classifying product lines.
- Advanced automation controls for added versatility and enhanced productivity.
- Industry experts provide custom designs, components, installation and support.
- State-of-the-art manufacturing facilities.



**BOOTH  
FEATURE**

# SCREEN OFFERING

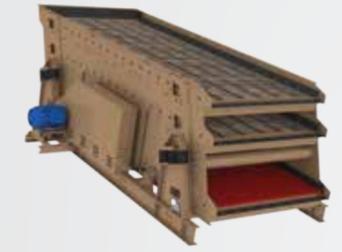
Your ability to screen, sort and segregate material efficiently and quickly is vital to your operation's overall profitability. KPI-JCI and Astec Mobile Screens engineers the toughest, most versatile, most efficient screens available. From horizontal and inclined to high frequency screens, we offer a screen that fits your operation's unique needs.



**Feeder**  
30" x 12' to 60" x 24'



**Heavy Duty Scalper**  
2' x 10' to 6' x 16' and up to double deck



**Incline**  
5' x 12' to 8' x 24' and up to four deck



**Horizontal**  
5' x 14' to 8' x 24' and up to four deck



**Combo**  
6' x 20' to 8' x 20' and up to triple deck



**Multi-Frequency**  
5' x 14' to 8' x 24' and up to four deck



**High Frequency**  
3' x 3' to 6' x 24' and up to four deck



**Industrial Screen**  
3' x 3' to 6' x 24' and up to four deck

# MEET THE MEMBERS OF GOLD RUSH

Stop by the KPI-JCI and Astec Mobile Screens booth to meet Parker Schnabel, Todd Hoffman, Dave Turin and other members of their crew.



View the actual Combo Screen from Todd Hoffman's operation at our CONEXPO booth.

MARCH 7-11, 2017 • LAS VEGAS CONVENTION CENTER  
**CENTRAL HALL, BOOTH #C30332**



## 2017 Service Training Schedule



### January 10-12

Washing and Classifying School  
700 W. 21st St. • Yankton, SD 57078  
Early Bird Registration: December 23

This course will cover proper operation, maintenance and lubrication for sand classifying tanks, log washers, coarse material washers, blademills, sand screws, Series 9000 Fines Recovery Systems and conveyors.

### February 14-16

Jaw Crusher and HSI School  
700 W. 21st St. • Yankton, SD 57078  
Early Bird Registration: January 27

This course will consist of 25% classroom and 75% hands-on assembly training. Classroom training on the jaw crusher includes wear component replacement, closed-side-setting adjustment, lubrication and troubleshooting issues that affect efficiency. Classroom training on the impactor includes wear component replacement and troubleshooting issues that affect efficiency, including feed size, rotor speed and blow bar metallurgy.

### March 28-30

Track School - Kolberg-Pioneer  
700 W. 21st St. • Yankton, SD 57078  
Early Bird Registration: March 10

This course will consist of two separate classes. Level 1 (for attendees with less than 2 years experience with KPI track-mounted equipment) will cover basic set-up, operation, maintenance, and lubrication of all KPI track mounts. Level 2 (for attendees with 2 or more years experience with KPI track-mounted equipment) will cover advanced level troubleshooting of the electrical and hydraulic systems.

### August 1-3

Cone and Screen School  
86470 Franklin Blvd. • Eugene, OR 97405  
Early Bird Registration: July 14

This course will consist of 25% classroom and 75% hands-on training for the Kodiak® Plus Cone Crusher, Combo Screen and triple-shaft horizontal screen. Students learn about operation, start-up and maintenance, and conduct a complete tear-down, re-assembly and inspection. This course is developed for dealer and end user maintenance personnel and operators, but is also recommended for parts, support and supervisory attendees.

### August 8-10

Track School - Johnson Crushers International  
86470 Franklin Blvd. • Eugene, OR 97405  
Early Bird Registration: July 21

This course will give the attendee an in-depth understanding of the JCI (GT and FT) cone and screen track plant systems. 50% of the course will be in classroom and the other 50% will be hands on with track units. Attendees will learn operation, maintenance, set-up, and navigation of the electrical control and hydraulic systems. This class will have extensive schematic reading on both hydraulic and electrical systems on JCI track screen and cone plants.

### October 10-12

Track and Screen School - Astec Mobile Screens  
2704 West LeFevre Road • Sterling, IL 61081  
Early Bird Registration: September 22

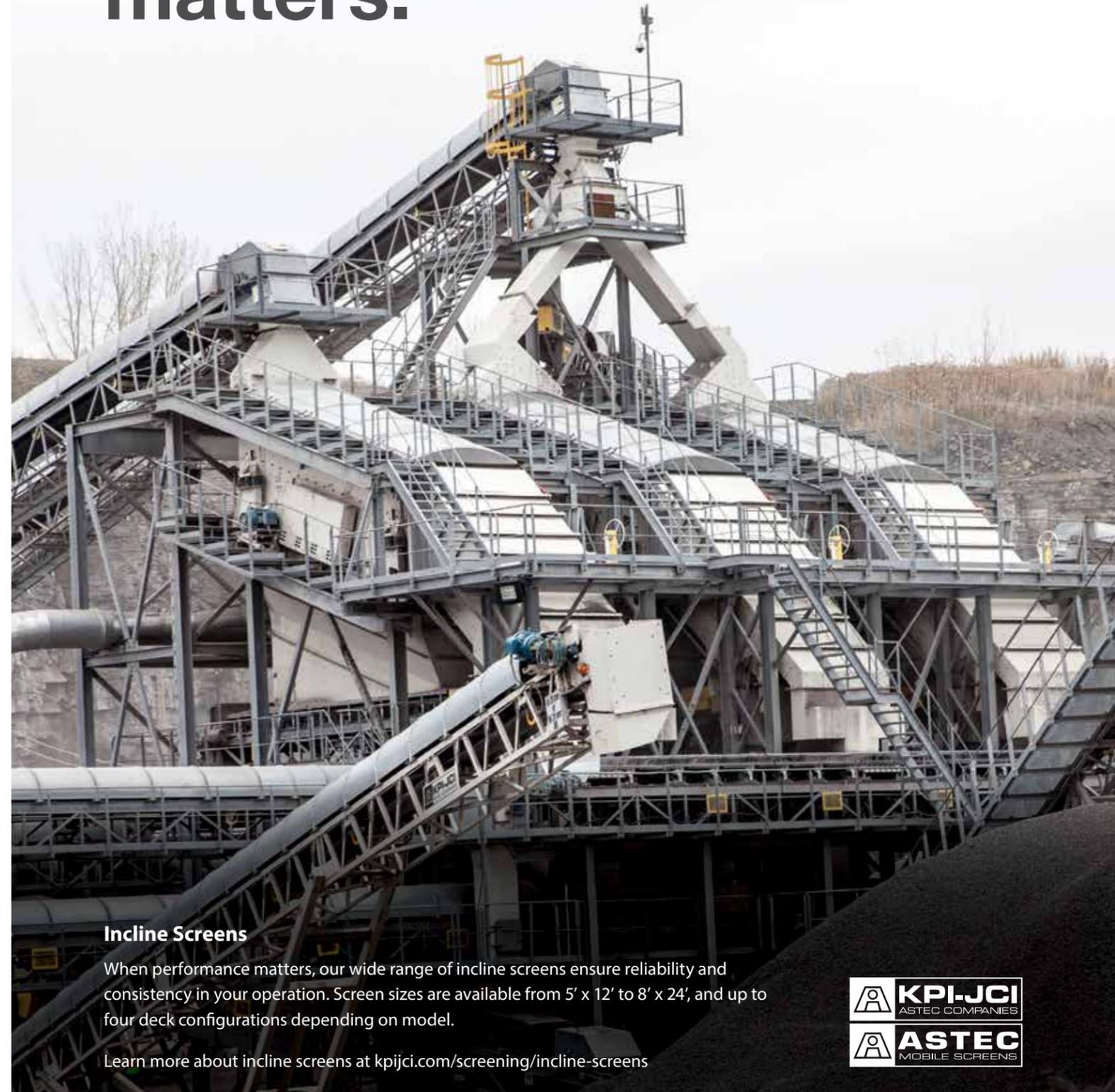
This course will focus on high frequency screens, ProSizer® RAP processing plants and track mounting screening plants. Utilizing a hands-on approach, attendees will work with full scale equipment and learn how to safely and efficiently set up, operate and maintain them. Upon completion of this course, attendees will achieve a comprehensive understanding of the equipment manufactured by Astec Mobile Screens.

### December 5-7

Service Application School  
700 W. 21st St. • Yankton, SD 57078  
Early Bird Registration: November 17

This course will use an entirely-theoretical approach taught by service and application sales experts, attendees learn to troubleshoot and resolve operational problems for all KPI-JCI and Astec Mobile Screens products. These industry authorities provide the tools necessary to streamline troubleshooting skills while learning the application of the equipment to resolve any problem.

# Performance matters.



## Incline Screens

When performance matters, our wide range of incline screens ensure reliability and consistency in your operation. Screen sizes are available from 5' x 12' to 8' x 24', and up to four deck configurations depending on model.

Learn more about incline screens at [kpijci.com/screening/incline-screens](http://kpijci.com/screening/incline-screens)



# NO SMOKE AND MIRRORS

We want our equipment to work for you for a long time. Our OEM parts are designed and manufactured to the precise specifications of our equipment. By using our parts, producers can improve production, prolong machine life and increase resale value.

Our experienced parts team is dedicated to extending the life of KPI-JCI and Astec Mobile Screens equipment with OEM parts. Our experts are available **24/7** to assist our customers with all of their parts needs.

---

- **PROVIDE MAXIMUM UPTIME**  
**PART SALES ASSISTANCE**  
**AVAILABLE 24/7**

- **GUARANTEED QUALITY PARTS**  
**6 MONTH, 1,000 HOUR PARTS**  
**WARRANTY**

- **LOWER OPERATIONAL EXPENSES**  
**WEAR PARTS PROGRAMS TO SAVE MONEY WITH ADVANCED ORDERING**  
**APPLICATION EXPERTS ENSURE PROPER PARTS ARE UTILIZED**

- **CONTACT INFORMATION**  
**KOLBERG-PIONEER INC. - 800-766-9793 OR 605-665-9793**  
**JOHNSON CRUSHERS INTERNATIONAL - 888-474-0115 OR 541-517-5536**  
**ASTEC MOBILE SCREENS - 800-545-2125 OR 815-626-6374**

*For more parts information visit [www.kpijci.com/parts](http://www.kpijci.com/parts).*

## *PARTS PRODUCT UPDATE*

- **OEM PARTS**

- NEW SUPERSTACKER FESTOON RETROFIT KITS**
- NEW EXTRA LIFE HSI APRON WEAR TIP OPTIONS**
- NEW EXTRA LIFE HSI SIDE LINER OPTIONS**
- NEW EXTRA LIFE VSI FEED DISC OPTIONS**
- NEW PEP 8000 VIBRATOR UPGRADE KITS FOR HIGH FREQUENCY SCREEN REBUILDS**
- HEAVY DUTY REPLACEMENT GRIZZLY FOR GT145 AND GT205 SCREENING PLANTS**
- NEW LONGER LIFE HIGH CHROME CERAMIC BLOWBARS FOR PROSIZER**

- **PDQ PARTS**

- MORE COMPETITIVE EAGLE IRON WORKS WASHING EQUIPMENT BEARING ASSEMBLY COMPONENTS**
- NEW HYDRAULIC POWER UNIT COMPONENTS FOR TEREX-CEDARAPIDS MVP CONE CRUSHERS**
- NEW LUBE ASSEMBLY COMPONENTS FOR TEREX-CEDARAPIDS MVP CONE CRUSHERS**
- VARIOUS FILTERS, VALVES, BREATHERS, PUMPS, MOTORS AND COUPLINGS FOR TEREX-CEDARAPIDS MVP CONE CRUSHERS**
- NEW HYDRAULIC COMPONENTS TO PDQ OFFERING OF POWERSCREEN EQUIPMENT**

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If there is something missing that you would like to see offered, please let us know. Through our investment in resources, training and inventory, we're committed to seeing our customers through the unexpected. Every minute, every hour, every day.

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# talking shop

## Preventative maintenance programs for mobile screening plants

As we begin the year optimistic that more funding will be released and invested into our infrastructure, it also means there will be a greater demand for mobile crushing and screening equipment. This equipment is operated in some of the toughest conditions and the need to properly maintain them is essential to their performance.

Downtime can be very expensive but the good news is the majority of the time it can be avoided with simple preventative maintenance. At most operations, the crushers will be maintained at a higher level than the screens since they are a much larger investment and more expensive to repair or replace. In doing so, the maintenance on a screening plant can be overlooked. Preventative maintenance does not have to be difficult as long as it is done properly and people know what to look for. Listed below are some of the most overlooked items on a mobile screening plant that in the majority of cases are key contributors to downtime.

### 1 Maintain the Tracks

While the track systems on mobile screening plants play a very important role in moving the machine, the reality is they remain idle for most of the time during normal operation. In order to keep them in good operating condition, it is recommended that the machine be moved at least 30 feet in either direction on a daily basis. This will not only cut down on the potential of the tracks seizing up but also allow the machine to be moved to reveal any material spillage or leaks that need to be addressed. Before moving the machine, be sure to clear away any material buildup

around the tracks and check that they are not frozen to the ground. If the machine needs to be moved a long distance, stop the machine for 30 minutes after tracking it continuously for 30 minutes to allow the critical components to cool down.

### 2 Leveling the Screening Plant

Now that the plant has been moved around, it's important to make sure the plant is put back on a level and stable surface. Operating the plant on an uneven surface can put added stress on the plant. This can lead to a variety of additional issues that include, but are not limited to, belt tracking issues, material spillage, uneven feed to the screen and excessive screen vibration. Every one of these issues will have a direct impact on the performance of the machine.

### 3 Proper Lubrication of Bearings

Mobile screening plants often operate in the harshest conditions and are exposed to a variety of potential contaminants, such as dust and water. Keeping these contaminants out of your bearings is essential to machine reliability. Bearing failures lead to extended downtime as they are usually in locations that can be difficult to reach and require the removal of other components in order to replace. Most premature bearing failures can be avoided by keeping to a routine lubrication schedule.

One of the most common mistakes is over greasing a bearing simply due to the fear of under greasing it. Over greasing can create more drag, leading to higher horsepower requirements and high bearing temperatures. In most instances, it's better to lubricate with smaller amounts with more frequency. Greasing the correct amount at the proper intervals not only keeps the bearings lubricated but also keeps contaminants out. Greasing intervals may change for different applications, so it's important to check with your manufacturer's service department to discuss your specific needs.

### 4 Protect your Hydraulic System

Similar to bearings the most common cause of failure in hydraulic systems is due to contamination. The easiest way to protect your hydraulic system is by keeping your oil clean. Oil cleanliness starts with doing routine filter and oil changes. Hydraulic filters aren't protecting your valuable hydraulic components if they are dirty or past their useful life.

It's also important to change the hydraulic fluid on schedule or before if necessary. Visually inspect the oil for contamination or discoloration as these may be signs of an underlying problem if corrected now could prevent downtime in the future. Send an oil sample to a laboratory at least once a year. Lastly check to make sure all hoses, fittings and all other connections are tight and in good working condition. If any leaks are found, repair right away.

### 5 Engine Maintenance

While it's very important to keep all of your engine's filters and fluids changed on a regular basis, it's the air around the engine that can become the

most damaging. The same air that is being used to keep the engine and hydraulics cool can also create issues if not dealt with properly. It's critical to only change the air filters as needed. It has always been a common practice in the past, especially in high dust applications, to pull the air filters out and attempt to blow them out with air or beat on them to knock the dust out. On most engine packages today, the air filter is outfitted with a restriction gauge and will tell you when the air filter needs replaced. Each time an air filter is removed, the dirty air has a direct entry into the engine. Limiting the amount of times you expose the engine to the environment will not only increase the life of the engine but make maintenance easier. Remember, always replace with new filters and do not attempt to re-use filters.

### 6 Keep Screen Cloth in the Machine

Mobile screening plants today can be supplied in multiple configurations with the ability to make a variety of cuts. Whether you intend to make as many as four products or as few as two, it's critical to have screen cloth installed in each deck. Screen cloth not only provides additional support but also protects the deck from premature wear. If you don't need to use a deck, the best solution is to install screen cloth with a larger opening to allow the material to pass through it. Be sure to keep the cloth tight and check periodically for any damage.

Implementing a preventative maintenance program for your mobile screening plant does not have to be cumbersome as long as you stick to a routine. Keep it simple and let your eyes and ears be your guide.

For more information on how to maintain the efficiency of your screening plant, contact Tim Mandrell at [tmandrell@astecmobilescreens.com](mailto:tmandrell@astecmobilescreens.com).



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## The Savings Come in the Travel Time

The ability to break down an operation, move the equipment to a new location, set up and begin processing once took days. Wheel-mounted portable plants reduce the transportation time from days or weeks to hours and minutes.

Time saved in travel and set-up is time better used increasing your operation's output. Talk to your dealer about the benefits of Kolberg-Pioneer, Johnson Crushers International and Astec Mobile Screens wheel-mounted portable equipment.



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