

The world's top aluminum producer

ALCOA PICKS RAILQ

The modern aluminum industry was discovered in 1888 by the Aluminum Company of America (ALCOA), which has been the world's largest producer ever since. ALCOA Lafayette, in turn, discovered Konecranes and RailQ in the last five years.

“I was getting some quotes for a crane rail replacement project,” says Vern Hendrickson, Project Engineer at ALCOA's plant at Lafayette, Indiana.

“Almost at the last moment, someone said ‘Try Konecranes’ and I said ‘Who?’”

Hendrickson turned to Dave Timble, Key Accounts Manager at the nearby Konecranes service location in Indianapolis.

“That's when Dave and I first met. He came in with a bid that convinced me and we've been working together ever since.”

HEARING THE DIFFERENCE

ALCOA in Lafayette is dealing with the problems of aging equipment. Some 60 percent of its production cranes are over 40 years old.

RailQ was the answer, as Vern Hendrickson confirms.

“We used to replace crane wheels fairly frequently. RailQ told us we needed to replace the crane rail in several bays

and adjust the elevation. Since then we haven't needed to replace any wheels. They don't squeal on the rail as they did before.”

Hendrickson's Maintenance Manager Mark Mayes agrees: “After Konecranes started surveying the rails, squaring the cranes and doing the maintenance, we could hear the difference just by listening to the sound that the cranes make when they go down the rails.”

“In the past two years there have only been about three times when I've had to use my engineers to get a crane working again. Previously it was every day. We have hardly any unscheduled downtime.”

LIFELINE OF THE PLANT

In Mark Mayes's words, cranes are the lifeline of an ALCOA plant. “One of the first things I noticed, when I came here from the Chrysler Corporation in 2007 was that when the cranes went down, we stopped moving.”

“We have about 50 big overhead cranes on runways and a lot more small ones. They are how we move everything in shipping as well as production. We used to have a lot of plant-wide crane issues. We were constantly changing wheels, cables, and bearings.”

When ALCOA Lafayette started working with Konecranes, the RailQ service was done manually.

“When I heard that Konecranes was going to start using a robot I looked forward to it, and I'm glad it worked as well as it did. It eliminated somebody climbing down the bays to check spans and elevations. It has given us good results almost every time.”

Efficient crane operation requires a crane that runs straight and smooth on its runway. Experienced crane engineers analyze all RailQ survey data and provide customers with proactive, cost-effective recommendations for corrective action.



KONECRANES[®]



SURVEYS AS A BASELINE

Lafayette is a 2½ hour drive from Chicago down Route 52. The ALCOA plant there produces aluminum extrusions and dates back to the late 1930s. Vern Hendrickson believes that some of the problems with crane rail elevations have existed since that time.

“Until Konecranes came along, we’d never had the detailed survey that we get now. We’ve strung a tape between people

Konecranes’ Key Accounts Manager Dave Timble, Service Manager Scott Davis and Maintenance Workers Alan O’Brien and Chris Fleener shake hands in front of the ALCOA plant in Lafayette, Indiana, USA.

on each rail many times, but nothing had ever been done with the accuracy of the RailQ service.”

As long as annual inspections continue, ALCOA can now expect crane wheels to last for a long time. “In any case I’ll be long gone,” Hendrickson laughs.

Hendrickson is a believer in regular surveys. “I like to have a survey after we’ve done repair work so that we have a baseline. We can then compare this survey with the next survey and see if anything has changed.”

FACT SHEET

RailQ: faster, safer and more accurate

RailQ is a state of the art survey that provides 3D or 2D graphs on the runway rails and identifies runway misalignment and other problems. It offers optimal recommendations for corrective actions and cost-effective solutions.

BENEFITS

- Safer and more productive crane operations.
- Savings in reduced repairs and downtime.
- The survey method is faster, safer, and more accurate than traditional survey methods.
 - ✦ Faster survey method—averages substantially less time on rails providing customers with less down time to conduct survey.
 - ✦ Safer to perform—automated robot navigates the runway carrying a prism—removes the risk of falls because no person needs to walk the runway.
 - ✦ More accurate data—the highest available accuracy up to a distance of 600 meters (1,968.5 feet). The robot tool can access rails that are not accessible with other methods.

BETTER LIFTING

Konecranes now has two maintenance workers permanently on site at Lafayette. It has also helped with ALCOA operations, as Mark Mayes explains.

“I’ve had them attend meetings where we sat down with the production people and explained the operations of a crane. Some operators even thought that if a crane was out of square, you could square it up by bumping it or using emergency stops.”

“The operators now have a lot of faith in maintenance and in Konecranes. It’s a matter of safety as well as money. Management at ALCOA has its checkbooks open where safety is concerned.”

“This is a union shop so you are always going to hear some comments about using outside workers instead of plant employees, but most of our guys wouldn’t want Konecranes to leave. And I’d be scared to operate without them.” ■

STORY BY **PATRICK HUMPHREYS**

PHOTOS BY **LUCAS SCHIFRES AND KONECRANES**