

## An Integrated Steel Plant

# QUALITY PARTS TO ENHANCE SAFETY AND DECREASE DOWNTIME

### CHALLENGE

One of the largest international steel mills in the world produces flat rolled steel coils for Ford, GM and Chrysler. The mill uses four Electrical Overhead Traveling cranes to transport 125 tons of metal slabs across a pair of #175 rails for the 1,700 ft runway yard. The cranes operate 24/7, and the constant movement creates abrasive and adhesive friction that can take a toll on bridge wheel flanges. When flanges get too thin, the wheels must be replaced.

At the steel mill, bridge wheel flanges started breaking off and falling 40 feet to the work area below. Because this was an area that workers walked through, this was a safety concern. The problem needed to be solved quickly because interrupting production time could cost the mill \$5,000 USD a minute.

Unfortunately, no one at the mill could be sure what exactly was causing the premature thinning of the flanges. When a railway survey was brought in to see if a railway misalignment was the problem, the surveyors suggested that they consult a crane company for answers.

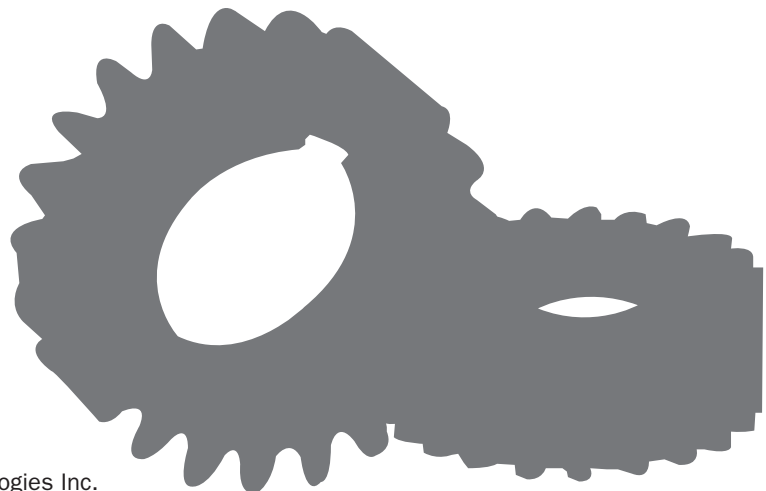


### SOLUTION

After assessing the situation, the P&H® wheel product manager quickly determined that the taper tread wheels were the problem. The solution was to upgrade to flat tread wheels, which have thicker flanges. A set of 60+ test wheels were installed on one of their cranes to see how things would improve. The test wheels did not have any flange wear, while the three cranes with taper wheels continued to experience problems.

### RESULTS

Because of the overall quality of the wheels, the test wheels were still in brand new condition three years later. The success of the wheels enhanced safety at the mill and convinced management of the benefits of flat tread tires. Within a few years, the plant's three other cranes had new flat tread tires installed as well.





**INDUSTRIAL CRANES:** Konecranes is the industry benchmark for safety, reliability, cost saving and productivity-enhancing innovation. Standard and heavy duty cranes include electric overhead cranes up to 1,000+ tons and explosion-proof cranes and components. Workstation lifting systems feature enhanced material flow with ceiling-mounted monrails and free standing cranes systems, jib cranes and manual lifting products and electric chain hoist up to 7500 kg. Konecranes provides any lifting application in any industry.



**NUCLEAR CRANES:** With nearly a half century of nuclear crane experience Konecranes is the most seasoned supplier in the industry. Our wide range of products are designed specifically for operation in nuclear applications and our quality control program ensures that each nuclear crane and component is designed, manufactured and installed to the demanding standards of the nuclear industry.



**PORT AND PORTAL CRANES & SERVICE:** Konecranes designs, manufactures, and delivers large cranes for ports, container terminals, intermodal terminals, shipyards and bulk material handling. We also provide expert maintenance and after-sale support as well as complete crane service worldwide for all types and makes of harbor and shipyard cranes.



**HEAVY-DUTY LIFT TRUCKS:** Konecranes is a world-leading manufacturer of lift trucks with lifting capacities of 10 to 80 tons. For over 50 years Konecranes has designed and customized trucks for the most demanding applications and continues to offer a wide range of trucks for customers in many different industries. Products include fork lifts, reach stackers, container handlers, and Roll-on Roll-off (RoRo) Trucks.



**CRANE SERVICE:** Konecranes provides an extensive range of services and unique capabilities dedicated to improving safety and helping your business decrease the cost of downtime and increase the productivity of uptime. We can service any brand of crane and hoist. As a leading global manufacturer with a 120-year history and the leading maintenance provider in the Americas and around the globe, Konecranes technicians understand what it takes to keep your equipment working at top performance.



**MACHINE TOOL SERVICE:** As a global leader in machine tool maintenance service, Konecranes offers world-class service on all makes and models of machine tool equipment. From maintenance programs to rebuild, remanufacture and retrofit, we have the knowledge and expertise required to keep your equipment running effectively and efficiently.



**PARTS:** Konecranes is the OEM for many of the best known brands of hoists and cranes as well as the largest single source supplier for parts of all makes. We have the most extensive inventory in the industry, as well as dedicated in-house parts manufacturing and extensive reverse engineering services to assist you with obsolete and/or not readily available parts. Our expert technicians are always available to help with field installation and support.



**TRAINING:** One of the easiest and most cost effective ways to improve safety and productivity while reducing maintenance costs is crane operator training. We can provide on-site training that is tailored to your needs, budget and schedule. In addition you will improve employee morale, generate good will and may reduce liability. We also offer courses at our Training Institutes in Milwaukee and Los Angeles as well as regional seminars in 40 cities per year.