

ArcelorMittal Genk Belgium OPTIMIZED CRANE CAPACITY AND INCREASED SAFETY

ArcelorMittal is the world's leading steel and mining company. It operates in 60 countries and employs about 260,000 people worldwide. Since June 2006, ArcelorMittal Genk has been part of ArcelorMittal Group. **ArcelorMittal Genk**, a steel plant in Genk (Belgium) is a subdivision of ArcelorMittal Genk. The plant in Genk electro-galvanizes 400.000 tons/year steel strip and has the primary focus in the automotive industry.

ArcelorMittal Genk receives daily in average 1600 tons / 90 steel coils from the steel mills. The customer had three electrical overhead cranes (EOT) in their coil warehouse. At every process step, the steel coils are handled by an overhead crane: for unloading and unpacking, feeding and evacuating coils at the coating line, the recoiling line and packing and for shipment. Each overhead crane lifts around 1.300.000 tons every year.

CHALLENGE

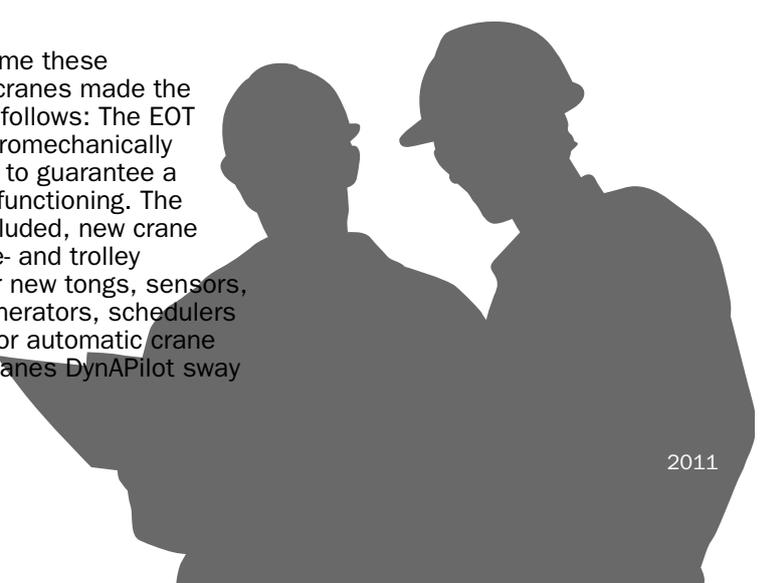
The overhead cranes were 25 years old and the coil management system was only partially automated. As many as 8 crane operators were manning just one crane 24/7. Four extra operators manned the two other cranes 16 hours per day and 5 days per week. Safety was considered as an issue. The customer wanted to reduce operating costs, eliminate coil handling damages and increase the availability and reliability of their overhead cranes.



SOLUTION



In order to overcome these challenges, Konecranes made the modernization as follows: The EOT cranes were electromechanically upgraded in order to guarantee a reliable and safe functioning. The modernization included, new crane controls for bridge- and trolley travelling and four new tongs, sensors, encoders, job generators, schedulers and sequencers for automatic crane operation. Konecranes DynAPilot sway





control system was installed to improve load control for the EOT cranes.

RESULTS

Konecranes' modernizations met the customer's needs. The sway control system is working well, which increases the safety in the coil warehouse. The total benefits of the modernization will be realized by end of year 2012 when the cranes are functioning in 100% automatic mode. The anticipated benefits will be less coil damages, completely watertight coil management and shorter waiting time in different process lines.

"ArcelorMittal chose Konecranes as their partner because of the technical proven solution provided by Konecranes, very competent technicians and the possibility to take over maintenance of the overhead cranes", says **Johan Aelter**, General Manager ArcelorMittal Genk.

"When passion meets work, motivation is all around! Thanks to the complete team", says **Marco Della Volpe**, Project Engineer at ArcelorMittal.



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 monorails 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 forklifts, reach stackers, empty container handlers, gantry trucks/toploaders.



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 make of crane and hoist. With a global network of maintenance professionals operating from more than 570 service depots around the world, we repair, inspect, modernize and maintain more cranes worldwide than any other company.



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