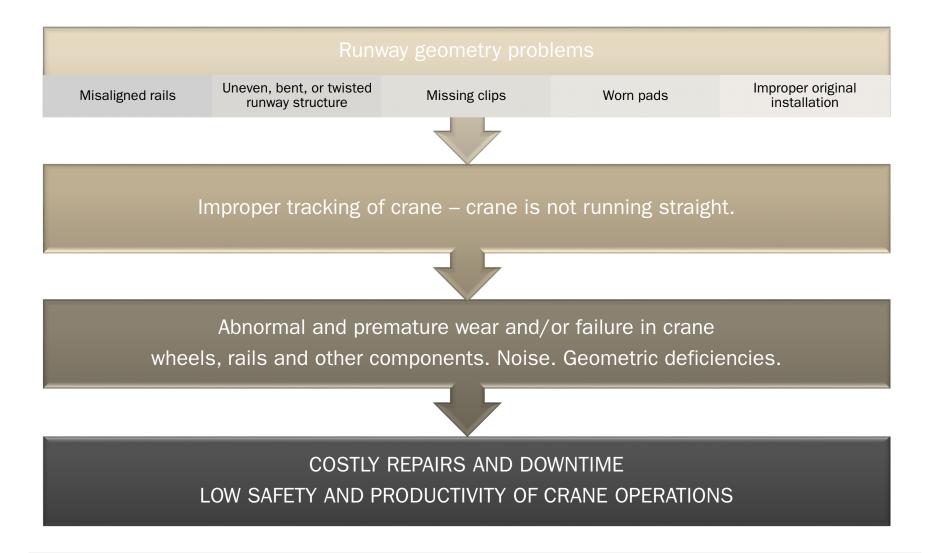


CRANE OWNER CONCERS





WE ARE OFFERING OUR UNIQUE SOLUTION TO

Ensure your crane run smoothly and safely on its rails



IMPROVED SAFETY AND PRODUCTIVITY OF YOUR CRANE OPERATIONS

SAVINGS IN REDUCED REPAIR AND DOWNTIME COSTS

RAILQ – FASTER, SAFER AND MORE ACCURATE

- Advanced laser survey technique that utilizes a remotely controlled robot trolley Roborail
- Faster, safer and more accurate than any other rail survey
 - Less production downtime
 - Safer to perform
 - More accurate data
- Provides recommendations for optimal and cost effective corrective actions



RAILQ RUNWAY SURVEY

STATE OF THE ART METHOD

Methods and tools

- Trimble S8 Total Station
- Roborail with prism
- Visual inspection
- Analysis and visualization software
- **Suitability:** Rail width 45-120mm
- Results:
 - Customised report with 3D Viewer
 - Identifies misalignments and other problems
 - Creates 3-D and 2-D graphs
 - Presents optimal recommendations for
 - · Corrective actions
 - Cost effective solutions



Konecranes RailQ Runway Survey

RAILQ RUNWAY SURVEY

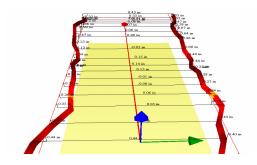
TYPICAL REPORT

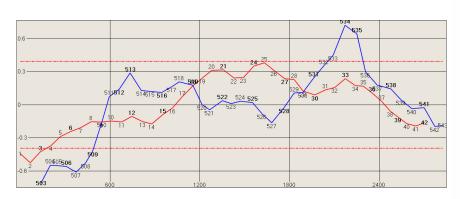


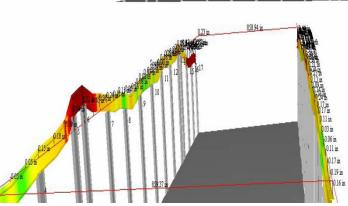
2.2 Visual inspection of Runway

The points on the runway that had marks from the end truck rubbing the rail were between column 5 and 6 at trectumn number 0 and just east of column 13. The scrape mark between 5 and 6 is the most seven. The survey the column of the colum







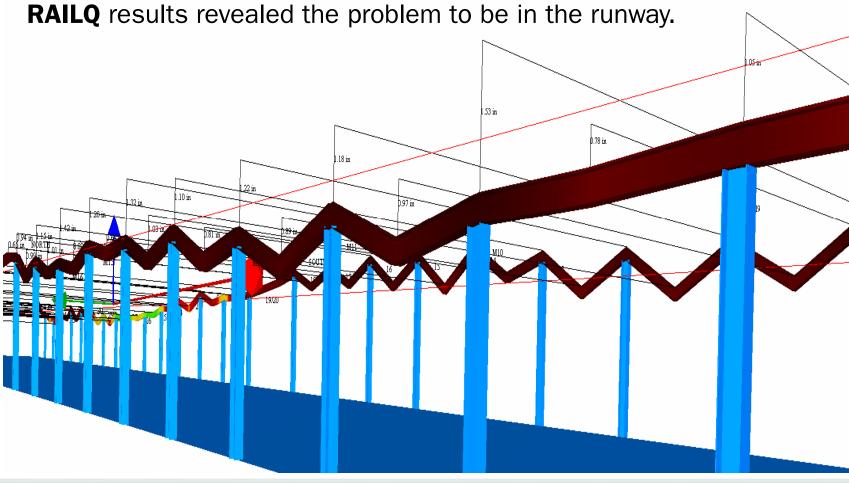


-0.30 in

RAILQ RUNWAY SURVEY

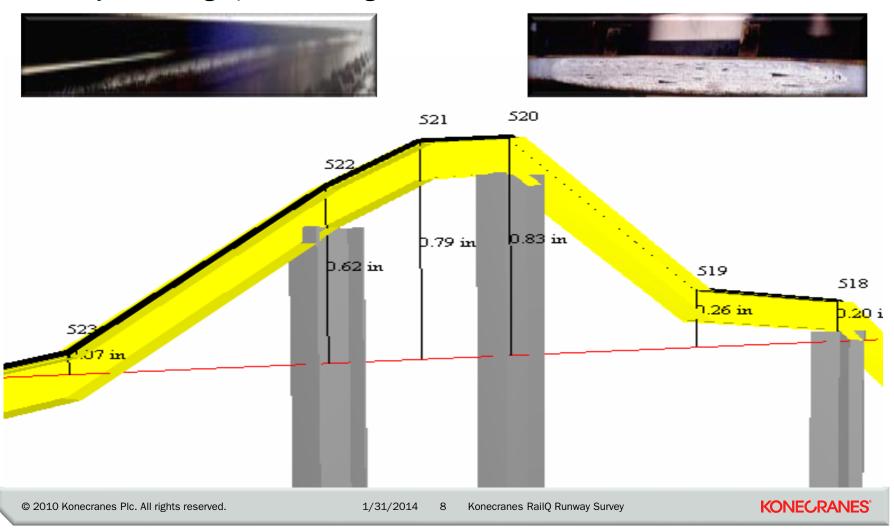
CASE EXAMPLE

A new crane installed on an old runway was not working as planned.



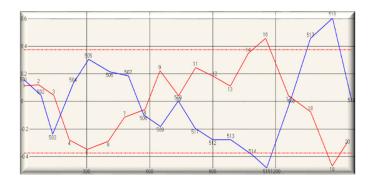
RAILQ RUNWAY SURVEY EXAMPLE – DETAILED RESULTS

Runway Beam High point causing crane to bottom out



RAILQ RUNWAY SURVEY FOR DIFFERENT CHALLENGES

- Typical crane runway issues
 - Improper span
 - Straightness issues
 - Elevation deviations
 - Rail to Rail elevation offset



- For old cranes on an old runway
 - Needs to be surveyed periodically to ensure peak performance
 - Needs to be surveyed before and after the repair work of the runway
- For new cranes placed on an old runway
- For new cranes placed on a new runway
 - To check the runway is installed in accordance to the cranes specifications or the local regulations

RAILQ RUNWAY SURVEY **GUARANTEED QUALITY**

FASTER

 Averages substantially less time on rails providing customers with less down time to conduct survey

SAFER

 Automated robot navigates the runway carrying a prism removes the risk of falls because no person need to walk the runway

MORE ACCURATE

 Total Station with the highest available accuracy up to a distance of 600 meters. Robot tool can access rails that are not accessible with other methods.

COMPREHENSIVE REPORT INCL. RECOMMENDATIONS FOR OPTIMAL AND COST EFFECTIVE CORRECTIONS

SAFER AND MORE PRODUCTIVE CRANE OPERATIONS

SAVINGS IN REDUCED REPAIRS AND DOWNTIME

