

Process and port cranes

– lift reliability to a higher level

SKF Crane Asset Management contributes to increased productivity, cost savings and equipment life



In steel plants, container ports, heavy industries and other large-scale manufacturing and materials handling operations, cranes are critical elements of the process. When they stop working, a chain reaction of problems can begin, impacting costs and productivity.

In a steel mill, the failure of a ladle crane feeding the casters can halt production, costing an industry average of €30 000 per hour of downtime. In ship-to-shore port operations, ship departures can be delayed by a non-functioning crane used to load containers onto a container vessel. This can result in port operator penalties equivalent to the ship operator's charter rates, which in some cases can be as high as €35 000 per day.

A comprehensive solution for crane reliability

SKF Crane Asset Management is a solution that supports proactive maintenance implementation to achieve increased reliability, productivity, safety and cost efficiency.

The SKF solution takes a full circle approach towards asset reliability, including:

- Performance of a client needs analysis
- Criticality assessment of main crane system components
- Recommendation of solutions to help ensure crane reliability





A proactive approach

SKF Crane Asset Management supports maintenance and operations managers in making sure that cranes are maintained in good operating condition, and that service intervals and maintenance routines are optimized. Most importantly, the SKF solution facilitates a proactive and condition-based maintenance approach.

Applying SKF knowledge engineering to improve equipment reliability

With 100 years of manufacturing experience, an unparalleled knowledge of rotating machinery, decades of consulting expertise in process industries, and leadership in condition monitoring, SKF's expertise in machine reliability is recognized and respected throughout the world.

Benefits

- Improved health and safety in the workplace
- Increased reliability and availability
- Improved total cost of ownership
- Improved understanding of asset criticality

Typical applications

- Electrical overhead travelling cranes used in metals and steel making
- Container handling cranes used in port operations

Improved maintenance efficiency and equipment reliability

SKF Crane Asset Management focuses on the following three key areas that enable proactive condition-based maintenance.

1 Client needs analysis

The starting point is an assessment of maintenance strategy, and the identification of existing maintenance routines, work control and work execution methods. This creates a starting point for improvements.

2 Crane needs and criticality assessment

This analysis focuses on crane assets. The criticality of main system components is identified, and an assessment is made of failure consequences related to health and safety, the environment and business impact.

3 Crane reliability solutions recommendations

Recommendations are made for improved reliability. Needs are prioritized and matched with service routines and component solutions that can reduce the risk of failure and offer increased productivity and reduced total cost of ownership.

Solution installation and monitoring

Utilizing the SKF assessment and recommendations, customers gain an understanding of reliability factors, and the tools and methods needed to ensure proactive and effective implementation of maintenance practices and solutions. These may include bearings, lubrication solutions, condition monitoring systems and services.

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PUB 43/S7 11136 EN · December 2010

Printed in Sweden on environmentally friendly paper.

