

SERVICE
LIGHT LIFTING
INDUSTRIAL CRANES
PROCESS CRANES
PORT CRANES
LIFT TRUCKS

KONECRANES[®]
Lifting Businesses[™]

Reliable and Safe **HOT METAL CRANES**



PROCESS CRANES

Konecranes is a world-leading provider of lifting solutions and services, with a track record in pioneering, leading, and shaping developments in the industry.

Konecranes customer services and lifting equipment keep production processes up and running around the world, meeting tough end-user demands for increased uptime, reliability, safety, top performance and lowest possible lifetime costs. We have the right equipment – large and small – to help our customers run their operations very efficiently, whatever field they are in, from paper, primary metals, mining, ports, through to shipyards and power generation, waste management, plastics, automotive manufacturing, and numerous other applications. We are organised along three global business areas: Heavy Lifting, Standard Lifting and Service.

We also lead the industry in the development of preventive maintenance services and offer that expertise to our customers through a global network of service professionals operating from more than 370 service depots worldwide.

We deliver the highest lifecycle value by focusing on both maximising the productivity of uptime and minimizing the cost of downtime. Thus, we do not just lift things – we lift entire businesses.



SAFETY



SAFE DESIGN

Konecranes sets requirements for the design and selection of components for cranes with the objective of protecting personnel from hazards affecting their lives and health, and of ensuring reliable crane operation.

The hoisting mechanism includes a minimum two independent rope reevings, one or two rope drums, and back-up brakes acting on the drums.

SAFETY STATEMENT

Konecranes aims to provide a healthy and safe working environment. The company assumes its share of responsibility for the physical, mental and social wellbeing of its employees. The company's overall objective is to avoid employees suffering from occupational accidents or work-related disabilities while employed at Konecranes or during their retirement.

In order to develop understanding of occupational health and safety matters and to encourage employee participation in its positive development, the company provides training in occupational health and safety.

Konecranes promotes a proactive approach to employee healthcare as a part of the company's health and safety effort.

The company aims to eliminate occupational accidents through the principle of zero tolerance for accidents. To achieve this objective, each employee is required to assume responsibility for his or her working capacity and work premises.

HEAVY DUTY

Crane classification

Crane machinery classification is based on FEM, ISO, CMAA and AIST standards that set design parameters based on the load spectrum of the planned application. Full selection methods are included in the standard.

The operating hours per day, lifetime expectations for machinery units and characteristics of operation determine the crane type in which the crane must be classified. The figure on the right illustrates how the classification for machinery units is applied.

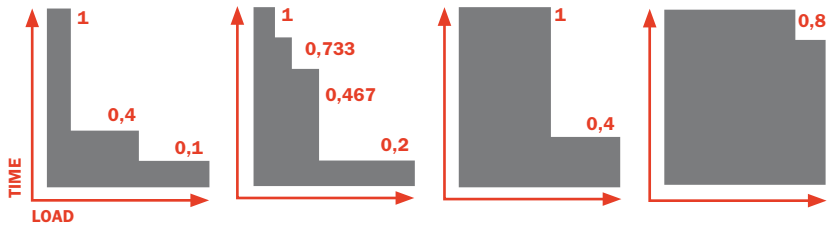
Safe working period

For steel structures, the FEM, ISO, CMAA and AIST standards set parameters for stress calculations. These and the requirement for deflection level affect the final dimensions and weight of steel structures. Differences between classifications and deflection requirements are made by altering the steel grade and material thicknesses.

The SWP very much depends on the actual capacity of the steel mill, actual distances and cycles in real production conditions, equipment maintenance, etc.



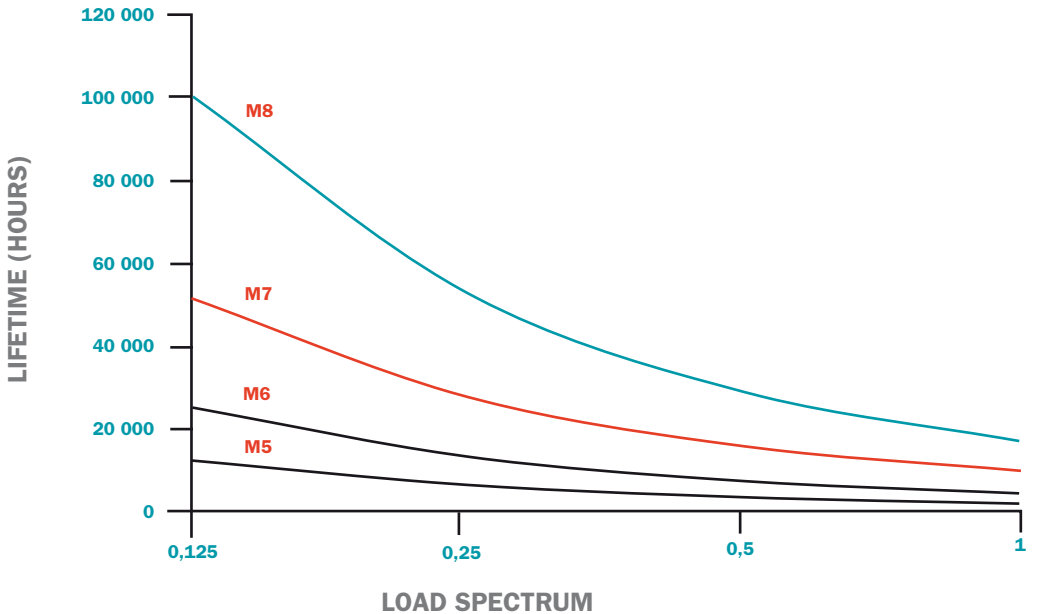
RIGHT SOLUTIONS



	10	50	100%	10	50	100%	10	50	100%	10	50	100%
RUNNING TIME/DAY	<8	<16		<8	<16		<8	<16		<8	<16	
CLASSIFICATION FEM/ISO	M5	M6		M6	M7		M7	M8		M8		
ED%	40	50		50	60		60	60		60		

PROCESS CRANES AND AUTOMATIC DRIVE CRANES

SAFE WORKING PERIOD



SERVICE

Konecranes is the world's leading crane supplier and crane service organisation. We provide expertise and products that increase our customers' value and productivity. Konecranes is committed to advanced technology and innovative engineering combined with local professional customer care. Konecranes operates from numerous locations throughout the world.

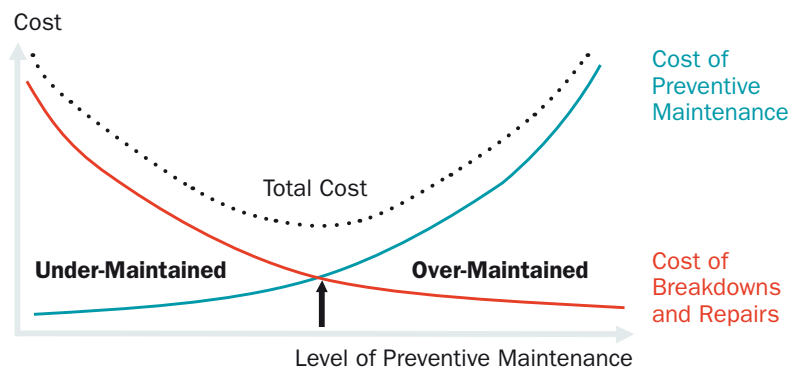
Trust Konecranes to increase your profitability by:

- > Improving equipment performance
- > Reducing downtime
- > Extending equipment lifecycles
- > Targeting your valuable resources
- > Keeping your workforce safe
- > Complying with the law

Konecranes is the market leader in terms of quality and reliability. Konecranes has been ISO 9001 certified since 1993.

We want to invest in you

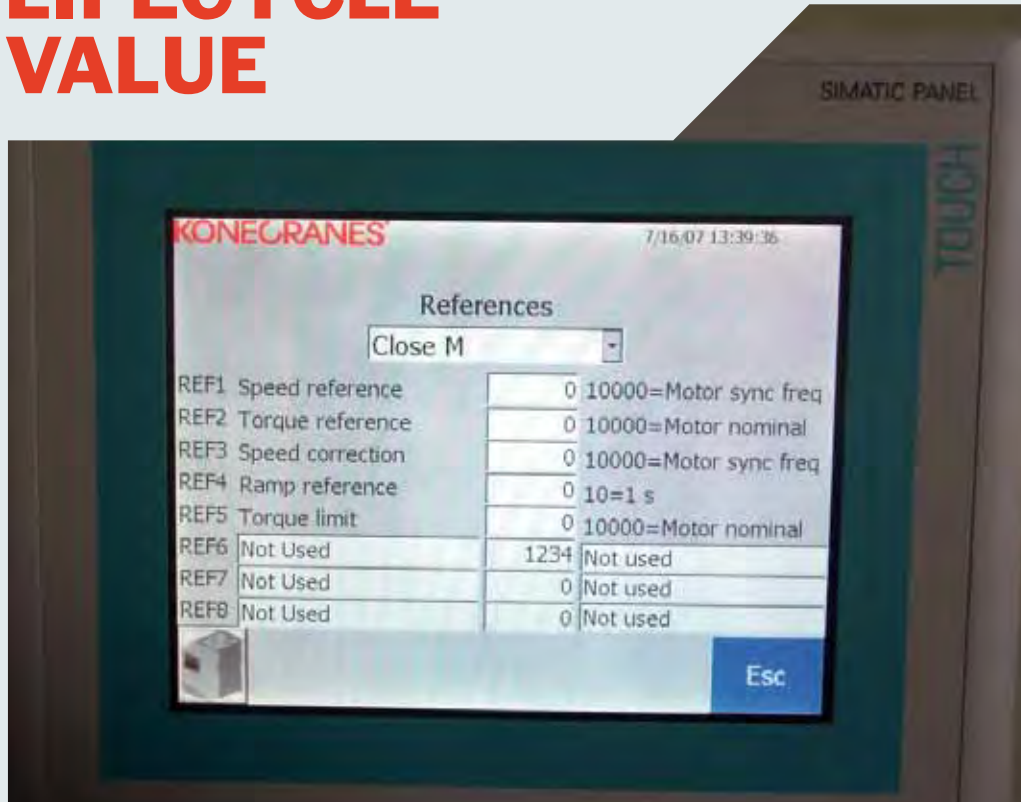
Our aim is to reduce your downtime costs and then cut your repair and maintenance bills by up to 20% a year. Our expertise coupled with our sophisticated crane maintenance software and monitoring systems are designed to cut your costs and protect your investment.



HIGHEST LIFECYCLE VALUE

CUSTOMER SERVICE

A comprehensive offering of maintenance services for all makes and models of overhead lifting equipment through 370 locations worldwide.



RELIABILITY

Konecranes has been delivering cranes since 1930. Konecranes R&D has developed reliable crane components including control system and application software. With customer-oriented design Konecranes can offer the most reliable equipment for your heavy lifting needs as a part of our customer core process, which guarantees maximum uptime productivity and minimum downtime costs.

RELIABILITY CONSISTS OF:

Construction

- > Customised solutions

Maintainability

- > Total package/capability/partner throughout the equipment lifecycle – a partner that takes responsibility and follows through

Installation, crane delivery

- > Commitment to turnkey deliveries and solutions

Service

- > Highest lifecycle value means commitment to a long-term partnership

Usage/Operation

- > Process knowledge – servicing of both Konecranes' and competitors' equipment

Redundancy

- > Continuous development loop



HIGH UPTIME



DRIVES

The Konecranes DynAFamily control system is assembled in a fully-enclosed, air-cooled and pressurised electrical room. This E-room provides a reliable, dust-free and maintenance-friendly environment for control devices.

Using Common DC-Bus drives we have taken modularity and redundancy one step further. Regenerative network braking units, DynAreg Vectors II's, can be connected in parallel to achieve redundancy for regenerative units also. The full power range of common DC-Bus drives – from 2.2 kW through to 1MW – is covered with modularized hardware solutions. The same hardware is used in network braking units and in motor bridges.

Speed control solutions have a substantial impact on crane productivity, safety and reliability. When these are your requirements, the best solution is Konecranes DynAFamily stepless speed control systems. DynAFamily offers the operator fast cycle times and accurate load positioning thanks to a high main speed and a very low creep speed. Additional productivity and ease-of-use can be achieved with separately adjustable acceleration and deceleration ramps for specific crane uses. Smooth and easy driving characteristics achieve enhanced safety and reduced load damage.





SERVICE



LIGHT LIFTING



INDUSTRIAL CRANES



PROCESS CRANES



PORT CRANES



LIFT TRUCKS



Konecranes is a world-leading group of Lifting Businesses™ offering lifting equipment and services that improve productivity to a wide variety of industries. The company is listed on the OMX Helsinki Stock Exchange and in 2006, sales totalled EUR 1,483 million. With 8,000 employees at over 370 locations in 41 countries, we have the resources, technology, and determination to deliver on the promise of Lifting Businesses™.

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