







CMAK Crane Systems is an expert engineering and manufacturing company focusing on high quality electric crane components. Our Story We reach customers worldwide, through the partners thanks to our affordable products that are produced in one of the most modern production facilities. In addition to our crane systems that are produced with the world's leading technologies, we offer traditions, business ethics and our engineering success to the customers. We do meet the needs of the market in standard capacity cranes with FEM class, in addition to that, we manufacture high capacity cranes with custom designs. With continuous research and development, we've formed an ergonomic design which leads easy maintenance and minimum service requirement. CMAK

INDUSTRIES

- Metals Production
- Power
- General Manufacturing Warehouses

- Mining
- Petroleum and Gas
- Paper and ForestShipyards

- Container Handling
- Waste Management
- Automotive Workshops







OPEN WINCH

CMAK's highly experienced team of engineers can design you the custom application you require, and with your approval, those machines can be manufactured in-house with top-notch quality standard CMAK has.







CMK Series Electric Wire Rope Hoists

- (b) Increased Falls Capablity
- Maximum Height of Lifting
- Amaximum Power Economy
- Minimum Hook Drift
- ---- Maximum Reachable Area

Maximum Wire Rope Service Life





- Long Service Life
- Fficient Main Coiling
- | Minimum Maintenance Requirement
- **↑** Smooth Acceleration and Deceleration
- (d) Service Optimization
- Special Bottom and Top Double Layer Limiter

CMX Series Electric Wire Rope Hoists

- Rebust Design
- Long Service Life
- 🏋 Minimum Maintenance Requirement
- **S** Botom and Top Hook Movement Limiter
- **Safe Operation**
- Operator's Health First





- Rope Guide
- Direct Driven Drivers and Articulation
- (M) Manuel Brake Release
- High Tensile Vire Rope
- (1) High Efficiency



End Truck Carriages, Wheel Blocks and Travel Systems

CMAK end truck carriages and long travel systems are produced with high-tech geometrical controls. End truck carriages are designed and produced in FEM classifications to meet the required duty.

- All trolleys have direct-drive systems
- Lifetime lubricated bearings
- Trolleys are in a standard double speed driven by frequency inverters
- F class isolation and IP55 protection
- Modular and easy installation with socket connections











HoistSense+

HoistSense is an advanced electronic system that constantly keeps track of usage, load and critical incidents; while using this information to the advantage of the user to further increase the efficiency and decrease the downtime of the hoist.

Stored Parameters:

- Remaining safe working period (SWP) of the hoist
- Current load on the hook
- Total number of overload incidents
- Total running time of the hoisting motor
- Mean load
- Load spectrum (Light, Medium, Heavy, Very Heavy)
- Total number of starts
- Time to next maintenance (Depending on the usage Dynamic)
- Duty





Real-Time Monitoring

- Permanent SWP (Safe Working Period) calculation
- Up-to-date information about the remaining duration of service
- Comply with the regulations

Increased Efficiency

 With ultra speed function enabled, HoistSense increases speed to 150% nominal speed on all motions when the load is below 15% of the SWL (Safe Working Load)







Safe Working

- Continuous overload protection with precisely calculated strain gauge load measuring system

Weighing Display

- Real-time display of the loads via strain gauge sensor

Service Optimization

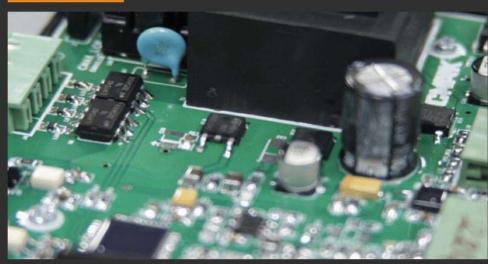
- Available alarms for preventive maintenance periods
- Tracking of past maintenances

Functions

- Weighing and Informative Display
- Overload limiter
- Faster speeds depending on the load
- Dynamic service timer



HoistSense+



Industry 4.0 HoistSense+

- Industry 4.0 application with HoistSense+ makes the whole crane transform from a regular one to an automatic crane supervisor
- HoistSense+ can integrate into a generic industrial wifi or mobile data router and connect to the internet to start flow of information securely to CMAK cloud servers to monitor and create reports/alarms for the users in real-time

Informative Display

- With its display mounted on hoist, the HoistSense informs the operator and maintanence crew for critical information (Total runtime, Number of Overloads, Next Service Hour - Dynamic, Remaining SWP%, Number of Starts, Average Load)
- Comply with the regulations

Easy to Use

- HoistSense does not add more buttons or require constantly checking the pushbutton pendant, as the system will start displaying the load on the large display attached to the hoist – easily visible – immediately after the operator starts commanding the crane and the stored information will be shown on the large display after the hoists stays idle for a short period of time

Stand-alone Application

Can be integrated to any of your hoists



Business Intelligence

How much of an experience and knowledge requires for crane supervision and monitoring?

For HoistSense+, it is multiple decades of knowledge, which will give you the best insight about what is going on with your crane. With using multiple advanced sensors and historical data, it can predict the problems you might face, thus preemptively acting and advising you to take a proactive approach, letting you avoid or get rid of the electrical, mechanical and operational problems all together

Reporting

HoistSense+ is a unique crane supervisor that works everyday for you with minimum cost. It reports back to you instantly and with neat graphical reports every month, will let you know about how your crane is operating with performance values

Monitoring

HoistSense+ is monitoring the current conditions of the crane including design working period calculations, load sharing, overloads, slackrope, faster speeds depending on the weight of the oad, brake wear-tear, electrical and mechanical stability and much more, with the help of advanced sensors





Cable Festoon System

CMAK crane's electricity systems are carefully selected and applied as appropriate crane electricity installation. CMAK electricity systems provide easy installation, modularity and the appropriate solution to your application thanks to the plug/socket system principle.











