

Modernizations



Why modernize?

- Prolong the economic service life of your crane
- Critical components are reaching the end of their economic service life
- Your production demands are increasing
- Your application has changed
- Statutory requirements have changed
- Costs and time spent maintaining your aged crane are rising
- You are considering replacing your crane



Are your cranes fit for the future?

If you're considering whether a modernization is a valid option, you need a tool to help make decisions about the future use of your cranes. A Crane Reliability Study is an engineering assessment that evaluates the current condition of your crane and provides a theoretical estimate of its remaining design life and recommendations for next steps.



All cranes have a finite service life

You may choose to perform a Crane Reliability Study when you're not sure if your cranes are capable of meeting growing production demands, or if you're using your crane for purposes other than how they were originally classified. If you have safety issues or aren't sure if it's time to modernize, a CRS can give you the information you need.



CRS process

- A team of Konecranes specialists observes the production and operating environment of your crane
- The overall condition of your crane structures and components is evaluated in detail with a focus on safety, productivity, reliability, usability and remaining design life
- Operators and maintenance personnel are interviewed and all pertinent documentation is reviewed
- The team provides a detailed report and further consultation with advice on maintenance, modernizations and future investments



Transform your existing crane

Modernizations can provide a complete transformation of your existing crane as an alternative to replacing it. Modernizations can also give you an opportunity to add current technologies. Common modernizations include the replacement of hoists, trolleys, operator cabs and controls to achieve increased capacity, speed, duty and load control.



Hoist, trolley and crane upgrades

GIRDERS: MODIFICATIONS AND REINFORCEMENTS

Increase or decrease the length of the girder span, which may be required during building expansions or when fitting a used crane into an existing building. Girders may need to be repaired or reinforced, particularly when the lifted capacity is being upgraded.

UNITON TROLLEY

Available with multiple configurations and a wide range of hoisting speeds, load control features, and load and duty class options. With a lifting capacity of up to 160 tons on a single trolley (320 tons with two trolleys), UNITON can be built for almost any application.

SMT TROLLEY

Built for heavy process industries. The motor, gearbox and control unit are designed and manufactured in-house. The flange-mounted motors have integrated brakes, which support the proper alignment of the machinery.

PLATFORMS

Increase safety by adding or refurbishing walkways and handrails.

BOTTOM BLOCKS

Complete bottom blocks in a wide variety of sizes and configurations, as well as common wear items such as hooks, frames, pins, sheaves, bearings and safety latches.

HOIST GEAR CASE

Gear cases can be overhauled or entirely replaced to suit the operating environment or uprate the lifting capacity. Critical components such as shafts, bearings and gears can be precision machined and heat-treated for long life.

SELF-ADJUSTING, SELF-ALIGNING BRAKES

Reduce maintenance by automatically compensating for lining wear with DC AISE spring set, electric release or AC impulse-actuated shoe brakes.

END TRUCKS AND WHEEL ASSEMBLIES

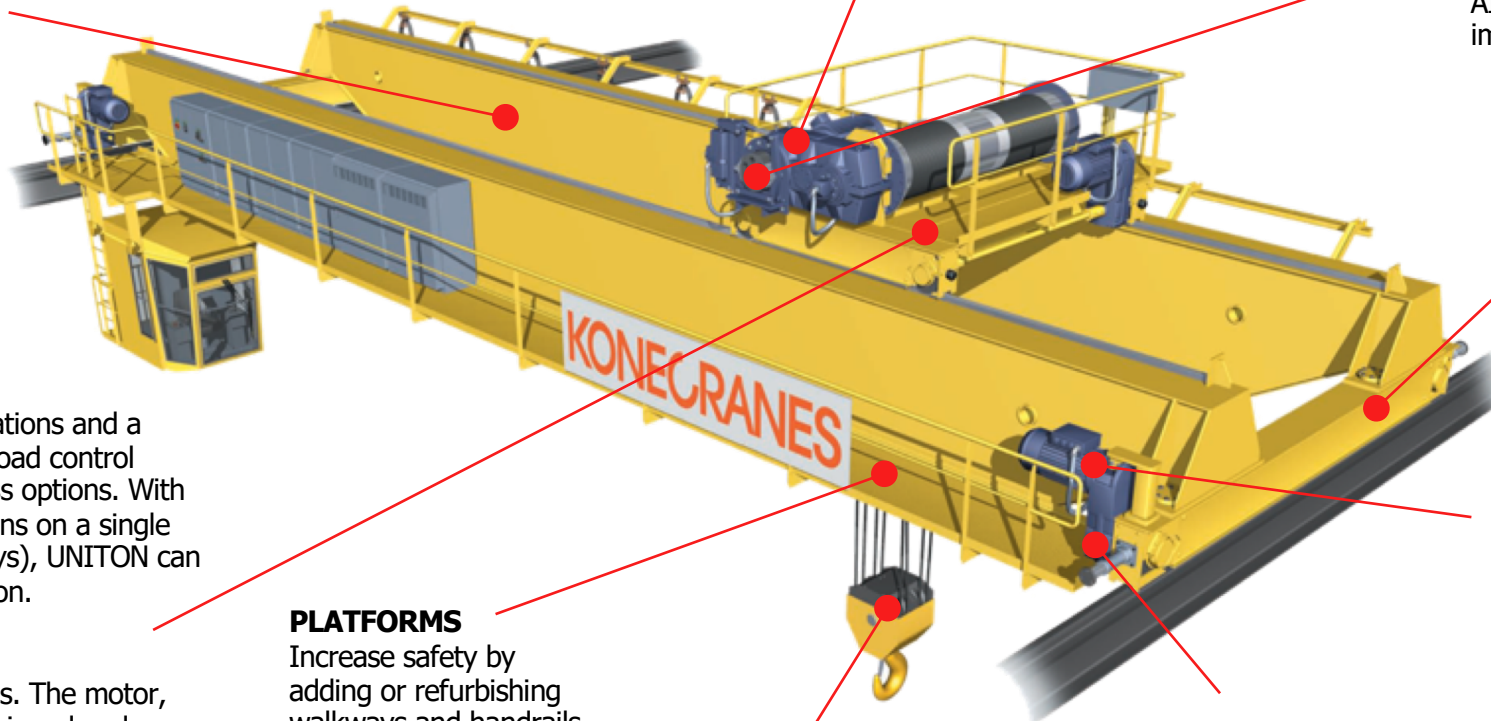
Anti-friction bearings help meet increased productivity demands. High-capacity end trucks are designed to extend wheel life and improve crane tracking.

BRIDGE BRAKES

These brakes can be arranged for cab or floor operation. Components to refurbish or replace include electric and hydraulic shoes, DC spring sets, discs and release mechanisms.

BRIDGE BUMPERS

Protect your crane and your building by installing a spring, hydraulic or rubber bridge bumper.



Control upgrades

MOTORS

DC and AC long-life motors are designed and built for harsh environments and rugged use. Options include AC squirrel cage motors, external blower motors and DC mill motors.

CONTROL SYSTEM UPGRADE

Older control system can be upgraded to current technology and more advanced systems for ergonomics and load control.

OPERATOR CAB

Award-winning operator cabs provide an enclosed, insulated, air conditioned workspace with maximum visibility. A deluxe console chair offers optimum comfort to the operator.

BRIDGE DRIVES

Drives can be upgraded with heavy-duty foot mounted gearboxes. Shaft mounted motor reducers can also be applied.

POWER SUPPLY

Festoon systems increase safety by replacing wear-prone open conductors and collectors. Energy Chain is an alternative that protects the power and control cables from mechanical wear and reduces the risk of external damage.

REMOTE MONITORING

TRUCONNECT Remote Monitoring collects condition, usage and operating data from control systems and sensors on an asset and provides alerts of certain anomalies.

UPPER LIMIT SWITCHES

Provide upper-limit protection to prevent the bottom block from damaging the drum and cable.

BRAKING

With regenerative braking, power is sent back to the power grid during every downward or decelerated motion, instead of being dissipated by resistors. With more energy returned to the grid, less energy needs to be produced—leading to increased cost-savings.

SMART FEATURES

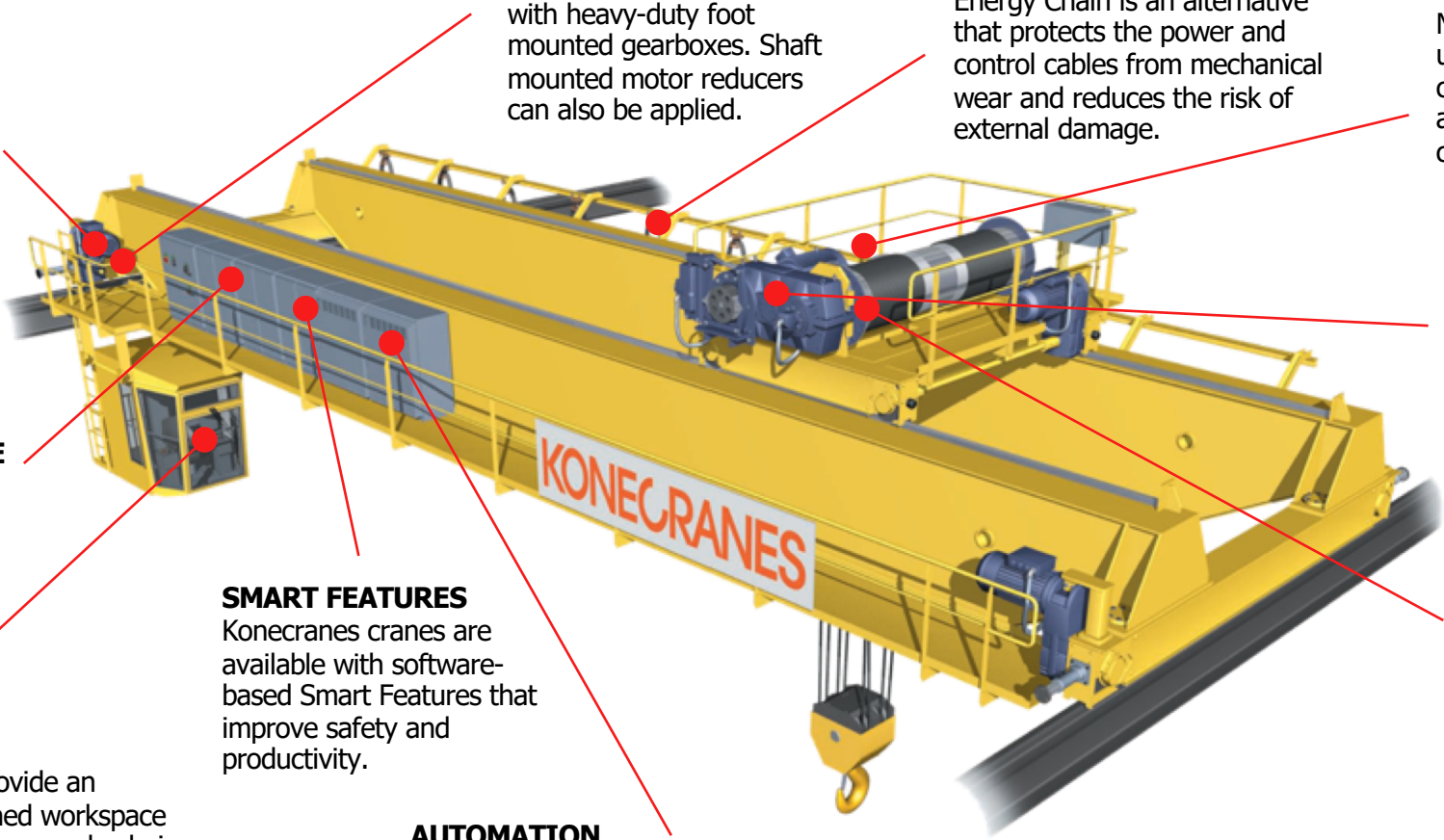
Konecranes cranes are available with software-based Smart Features that improve safety and productivity.

AUTOMATION

Automated features improve efficiency and precision while allowing crane operators to pay increased attention to the surrounding work environment, promoting safer and more productive operations.

RADIO CONTROL

Floor operated controls allow the operator to have a good view of the load on the hook and to manually assist it, if necessary. These controls can be equipped with real-time load data.





**NOT JUST LIFTING
THINGS, BUT ENTIRE
BUSINESSES**

Learn more at [konecranes.com](https://www.konecranes.com)