POTAIN
by Manitowoc

MDT CCS City Range

THE NEXT GENERATION IS HERE

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Now with new Crane Control System

With the new Manitowoc Crane Control System (CCS), Potain MDT CCS City Range cranes help you get more work done faster and with greater precision. Get outstanding lift performance, time-saving setup, ultimate operator control and outstanding ROI* with the next generation of cranes.

Now available in Potain MDT CCS City Range:

> **MDT 109 | MDT 139 | MDT 189 | MDT 219 J8 | MDT 219 J10**

- Highest safety standards in the industry
- Increased performance
- Optimized ergonomic control
- Integrated maintenance
- Fast, easy set up on the job site

**Return on investment.*

Highest safety standards in the tower crane industry

With proven components and innovative design, the CCS system allows MDT City cranes to set the new benchmark in the tower crane industry.

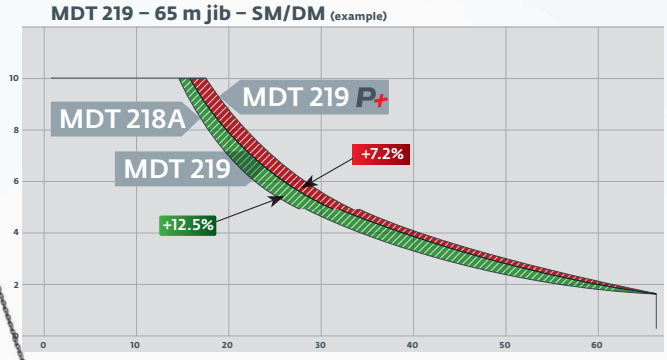
Using fully tested and certified, reliable components; CCS constantly controls and monitors all crane movements and structural stresses in real time using a superior redundant sensor design.

Increased performance

The CCS allows a more precise information exchange and analysis on the crane which maximizes lifting capacities and provides more flexibility on the job site.

- CCS provides increased load chart with the maximum speed potential
- Utilizing the Potain Plus function generates an extra load chart increase. This function can be switched on directly from the joystick

MDT 219 – 65 m jib – SM/DM (example)



Ultra visibility and comfort

The Ultra View cab takes comfort, ergonomics and functionality to new heights. The new design makes it easy for the crane operator to maximize all of the features of the new Manitowoc Crane Control System.

Optimized ergonomic control

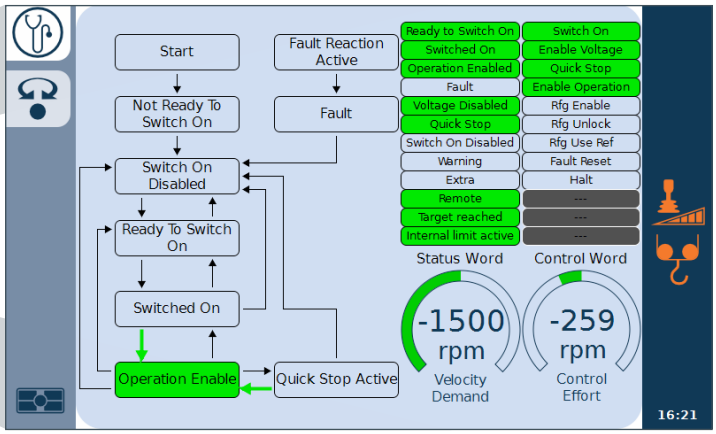
Premium Ultra View cab is equipped with a complete new driver control unit for enhanced ergonomics and comfort.

- Ergonomic design for reduced operator fatigue and increased productivity on the work site
- All commands can be done from the joysticks for ultimate operator ergonomics
- Jog Dial provides easy on-screen navigation
- Speed limiter function provides great control and accuracy by adjusting the speed for all crane motions, by 25 percent increments
- Operator customization mode allows to define the speed and dynamism of the crane motions
- Auto-switch between the cab control unit and the remote control does not require plug-unplug operation

Integrated maintenance

MDT CCS City range cranes provide CCS for an integrated on-site maintenance tool to diagnose and centralize maintenance.

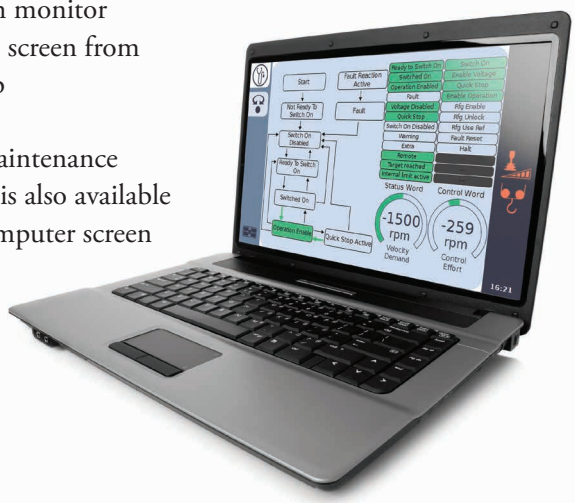
A remote version is available with activation of CraneSTAR Diag for easy maintenance and operational cost savings.



^ Maintenance screen provides systems status at a glance

< Operator can monitor maintenance screen from the crane cab

> Real-time maintenance information is also available from any computer screen



Fast and easy set up

All crane configuration limit settings are completed using the CCS display from within the cab.

With CCS, it takes only 15 minutes to configure the crane, calibrate sensors for crane movement, set the trolley limit switch, and set jib length. The crane will then automatically know its stopping points.

Cranes without CCS can take more than three hours to properly configure and put in service.

Simple, fast and efficient erection

The first step towards better productivity

The MDT CCS City Range offers simplified installation to reduce the time needed to put the crane in service. Crane sections are compact and can be folded for easy transport to the jobsite. Easy pinning and multiple slinging points provide greater control while assembling and lifting the jib. Reduced installation time maximizes your crane investment.

Assembling the counter-jib on the ground

The compact counter-jib installs easily from the ground and features a reduced footprint, ballast supports and stabilizer plates that are designed to be folded away for transport.

^ One single section folded for transportation with lifting points.

^ Integrated ready-to-fit pin and moment safety device.

^ The counter-jib unfolds rapidly. No locking required.

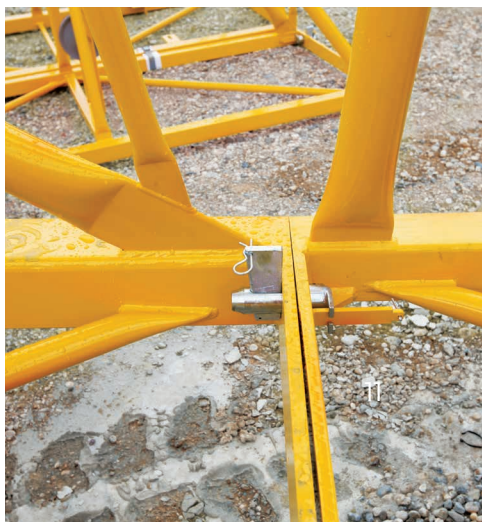
Assembling the jib on the ground

Jib assembly is simplified with the help of numerous installation features.

v Fishplate for centering pin and port to enable quick and easy pinning.

v Maintenance safety rope on each 5 meter jib-section.

v Assembly is simplified by centering of jib sections and wedge-locking of the pins.



Installation of the cab-mast

The cab-mast is a single, compact section. A dual-function guardrail protects the cab during transportation. Slinging from three points offers excellent balance. While packed for transportation, access to the cab and electrical cabinet is prevented.

Cab and cab mast are delivered in one package.

Only the hoist and trolley mechanisms, with their respective safety devices, need to be plugged in.

The electrical cables are all centralized in the tube of the cab-mast.

The protective guardrail is now placed on the access platform.

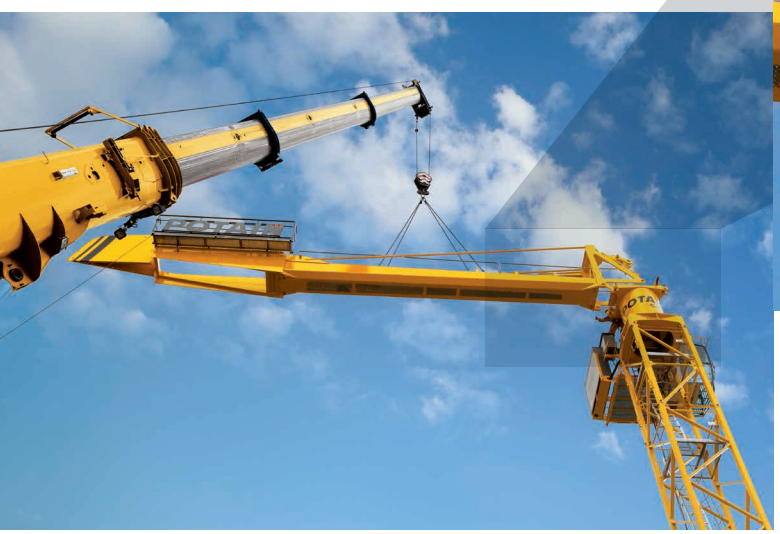
The cab-mast section is lowered onto the mast and secured.

After removal of the guardrail, the cab is rotated manually and locked in the working position.

Erection of the counter-jib

Erection of the counter-jib is achieved in a few basic steps.

› Simplified assembly using only two pins, which are tapered for easier fitting.



^ Notches guide and center while connecting counter jib to mast.

< Balanced slinging points enhance lifting.

Fitting and pinning the jib

The jib is fully assembled and cabled on the ground. The hoist motor at the base of the jib allows the complete cabling of the hoist and trolley mechanisms. The fully assembled jib is then placed by a mobile crane in one lift. Fitting and pinning the jib is achieved in a few easy steps.

˅ Numerous slinging points for any jib length assist horizontal lifting.

˅ Notches are used to guide and center the jib.

˅ Centering pins allow seamless, automatic adjustment and centering of the lower member before locking it into place.

Mechanisms

Potain technology is devoted to operator productivity and comfort with standard-fitted variable frequency mechanisms that provide outstanding performance.

DVF mechanism (Distribution)

With the Crane Control System, MDT CCS city range cranes have a DVF Optima trolleying mechanism that enables the trolleying speed to be adapted to the load.

The trolleying speed can reach 100m/min, which contributes to increased efficiency on the jobsite.

LVF mechanism (Lifting)

With three mechanisms (25, 33 and 50 LVF Optima), the MDT CCS City Cranes are capable of high working speeds by optimizing speed in accordance with the load hoisted, allowing for gains in productivity.

- For working speeds, the Optima system adapts the speed in accordance with the load hoisted. This enables full power of the engine to always be used for optimum productivity.
- The LVF Optima provides a gain of up to 25 percent.

RVF mechanism (Rotation)

The RVF mechanism offers complete, progressive control that adapts slewing and counter slewing speed to the crane operator's particular control behavior.

- Action is mastered by stopping the control, and the jib decelerating time is controlled by the frequency converter
- Reverse control is possible in the decelerating phase or counter-slewing

The crane operator is able to control decelerating and stopping. And the mast torque is always automatically controlled.

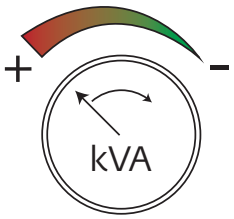
Technical solutions

The latest generation of technical solutions.

Power control

Power Limiter Functionality

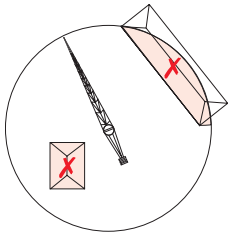
Thanks to CCS, it is possible to supply power to the winch and reduce the power required by the crane. This provides flexibility on the jobsite and saves energy.



Top Site

Zone Control System

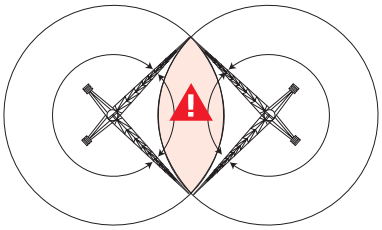
Integrated directly inside the CCS, Top Site creates a forbidden area for added safety on the jobsite.



Top Tracing III

Zone and / or interference control system.

This is the latest generation of devices for controlling working zones and interference between cranes. This system can monitor up to 16 cranes for interference. It has a full screen display for better viewing of the crane and its environment (including forbidden zones and interfering cranes).



Crane Configuration Optimizer

Potain provides a calculation of each mast composition and base ballast definition for each jib length or combination. This allows adaptation to the job site and maximizes transportation and logistics.

NEW

Manitowoc CraneSTAR

Data management and planning for up-to-date crane fleet information regarding working conditions, maintenance, lifting schedules and more.

CraneSTAR

Manitowoc CraneSTAR Diag for real-time remote crane diagnostics.

CraneSTAR Diag

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Manitowoc Crane Care

Manitowoc Crane Care when you need it.

The assurance of the world's most advanced crane service and support to get you back to work fast.

Manitowoc Finance

Manitowoc Finance helps you get right to work generating profits for your business.

Financial tools that help you capitalize on opportunity with solutions that fit your needs.

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