

CRANEMASTERS®
Equipment Design-Build (EDB)

CRANEMASTERS EQUIPMENT DESIGN-BUILD

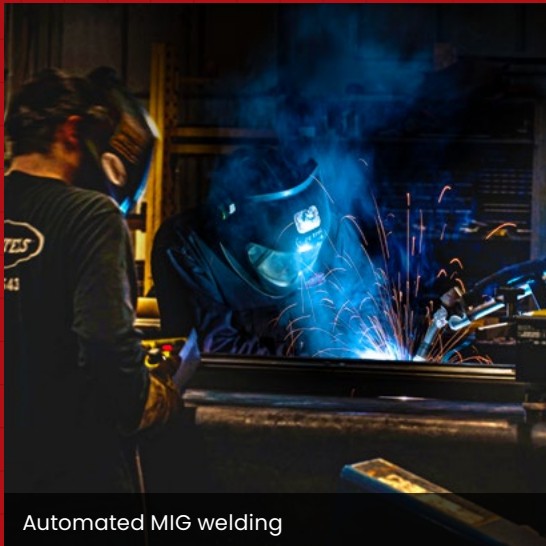
Keep Cars and Locomotives Rolling with Cranemasters Hi-Rail Recovery Cranes

Purpose built hi-rail cranes, with up to 150-ton lifting capacity, to handle mainline, short-line, and industrial siding challenges like derailments and infrastructure construction and repair.



CRANEMASTERS[®]

Equipment Design-Build (EDB)



Automated MIG welding



CNC Plasma Cutter

Cranemasters state-of-the-art manufacturing facility in North Chesterfield, Virginia

Cranemasters is the premier innovator in purpose-built lifting equipment for railroad operations and the OEM provider for Mantis 30011 rebuilds and customization.

Cranemasters Equipment Design-Build (EDB), a business unit of Cranemasters, Inc., is one of the only crane builders equipped to work with contractors and engineers to develop customized lifting solutions that meet the most demanding project challenges.

The Cranemasters Engineering and Manufacturing plant located in North Chesterfield, Virginia is well-equipped for heavy-duty equipment fabrication.

Look for the "CMD" in equipment model numbers. It stands for "Cranemasters Design," your assurance of quality and integrity.

Cranemasters Hi-Rail Heavy-Duty-Recovery Cranes

The Hi-Rail Heavy-Duty-Recovery Crane has been the workhorse for onsite rerails for years. But these legacy designs are showing their age and are difficult to keep repaired. Cranemasters has upgraded the versatile and essential piece of equipment to provide powerful road-ready cranes for rerails and construction jobs at your job site – The Cranemasters CMD150R and CMD130R.

The CMD150R and CMD130R Models

The CMD150R and the CMD130R are built on the Peterbilt OEM truck base, upgraded by our engineers, and outfitted with rail gear.

The Base-Build can be optimized for your specific job needs with Mid-Build and Full-Build alternatives and additional customizations to address your specific jobs and site challenges.

The CMD150R and CMD130R are built like beasts by Cranemasters EDB

- Massive steel fabrications are over-sized to handle the toughest jobs, year in and year out.
- The Cranemasters 150-ton Hi-Rail Recovery Crane is all hydraulic with fast and safe set-up.
- The crane is equipped with a 2-speed main winch and Load Moment Indication (LMI) system. The LMI displays the crane position, capacity and crane load indication.
- Powerful state-of-the-art hydraulics meet the most rigorous project demands.
- Performance-proven telescopic boom with highly compact dimensions mean the Cranemasters CMD150R and CMD130R can often get closer to a job.
- The operator's cab is designed for comfort with custom ergonomic controls, integrated heating and air conditioning, and a seat built to Cranemasters' specifications.
- Large access doors and spacious machinery compartments simplify preventative maintenance and service of the crane.

Save time and money. Hit the road at highway speeds and deploy rapidly with fewer personnel required. Get to work within minutes of arrival at a job site with a self-attaching counterweight stored on the crane's car body.



The Cranemasters CMD custom ergonomic controls.



The Cranemasters CMD130R with a short, telescoping boom and a fixed hook

You'll Find Cranemasters CMD Hi-Rail Cranes Where Work Gets Done Right, Fast, and Safe

- Main lines
- Short lines
- Side Tracks
- Where derailments disrupt operations
- Bridge work and confined spaces
- Pick and carry for track and infrastructure construction and repair (option)

The Cranemasters CMD Hi-Rail Recovery Cranes are indispensable

Cranemasters' first priority is our customers and their safety. So, even though we'll remediate tough derailments for you, we want to ensure you keep your cars rolling with the right equipment on your sites.

That's why we design and build the CMD Hi-Rail Recovery Cranes to exacting specifications for our customers.



The Cranemasters CMD150R at work



Rolling out a new CMD150R



The Cranemasters self-attaching counter weight

Machines like side booms and buckets can't accomplish recovery as fast and safely as CMD Hi-Rail Cranes. They get to the site at highway speeds with almost no prep—load up and go. No wonder they're the go-to tool for rerailments and rail yard work. New and rebuilt Hi-Rail Recovery Cranes like Cranemasters CMD150R and CMD130R, outfitted

with rail gear and our upgrades, are impossible to find elsewhere.

CMD Cranes: Superior utilization, lower cost of ownership, and high return on investment.

**Call or
Email
Today!**

Call to learn more about Cranemasters Design-Build capabilities and Railroad Services.

Let's work together to build the exact Hi-Rail Recovery Crane that you need.

804-236-4900

Emergency 24/7/365:
800-624-0543

info@cranemasters.com

www.cranemasters.com

Unless otherwise specified, all information in this brochure refers to standard crane equipment and is intended as general information only. Photos are of cranes built to customer requirements and may not reflect standard dimensions and specifications.

No liability is assumed. Errors reserved. Product specifications are subject to changes without notice. This brochure's photographs and/or drawings are for illustrative purposes only. The most current operating manual and lifting capacity charts are essential for correct and safe crane operation. Failure to follow the corresponding Operator's Manual when using Cranemasters equipment or failure to act responsibly may result in property damage, serious injury, or death. The sole warranty applicable concerning Cranemasters equipment is the standard warranty per general terms and conditions of sales and service (ask your Cranemasters Equipment Design-Build (EDB) Strategic Business Unit representative for details). Cranemasters makes no other warranty, express or implied. All rights reserved. Any use of the trademarks, logos, brand names, and model names used herein is prohibited.

Cranemasters CMDI50R and CMDI30R Hi-Rail Recovery Cranes

Specifications



Cranemasters-Design (CMD) Hi-Rail Crane Base Build and Options

Base Build

CMD150R 150-Ton Hi-Rail Crane (Telescoping Boom)

CMD130R 130-Ton Hi-Rail Crane (Fixed Boom)

Maximum Capability OEM Truck Base

- Hi-Rail Modification
- Hydraulic Radiator and Cooling System
- Rear Air-Ride Suspension with 25.9cfm Air Compressor

Heavy-Duty Boom

- Boom types:
 - Telescopic CMD150R
 - Fixed CMD130R
 - Lattice
- 2-Speed Hydraulic Boom Hoist Winch
- Hook Block

Fast Set Up Counterweight

- Cranemasters (CMD) Self-Attaching Counterweight with Electronic Controls

Telescopic Hydraulic Outriggers

- Swing-Out Front Outriggers
- 1 Fixed Structural Outrigger (Rear)
- Trombone Cylinders in Rear Outriggers

Superior Safety and Control

- Customized RaycoWylie LMI System
- Simultaneous Multiple Hydraulic Operations
- Touch Displays in Crane and Truck Cabs
- Multiple Exterior Cameras Throughout
- Four Hydraulic Pilot Controls for Crane Functions
- Manual Two-Hand Hydraulic Controls for Outriggers
- Fold-Out Side Access Ladders
- Hydraulically-Operated Cab Step
- Travel Lights, Rail Gear Lights, and Work Lights
- Safety Decals and Warnings on All Equipment
- Fire Extinguishers in Crane and Truck Cabs
- Custom Brand Colors
- Validation Testing
- Operating and Maintenance Manuals (English)

Customizations

- Truck Chassis (ex. Rear Tri-Axle instead of Standard Dual-Axle)
- Custom Tonnage
- Modifications by regulation (i.e. State or Federal Regs for size, weight, fuel type, etc)

Optional Add-Ons

- Arctic Weather Package
- Radio Remote Control for all crane functions
- Auxiliary Pendant Controls for Deck Winch
- Detachable 15' Fly Jib, 12.5 Ton Capacity
- Heavy Carry Rail Gear Bogie with load charts
- Diesel Generator Set

Additional Equipment

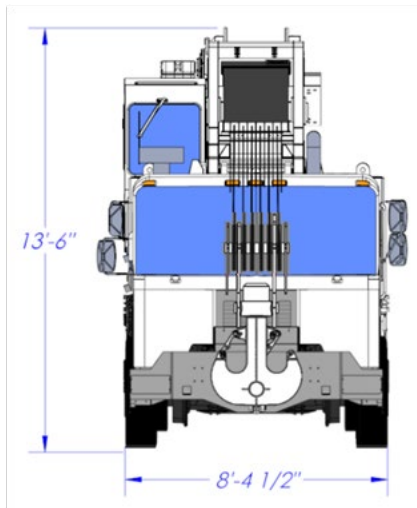
- Rigging box truck (Rigging Equipment, Tool Storage Boxes and More)
- Cranemasters-Design (CMD) Spreader Beams
- Pup Trailer

Cranemasters-Design (CMD) Hi-Rail Recovery Crane Specifications

	CMD150R	CMD130R
Load Capacity	300,000 lbs	260,000 lbs
Rated Distance From Center of Rotation	11 ft	11 ft
Basic Truck-Crane Weight	86,000 lbs	75,000 lbs
Crane Dimensions	L = 43' 5" H = 13' 6" W = 8' 6"	L = 38' 5" H = 13' 0" W = 8' 6"
Track Width	56.5 in	56.5 in
Boom Length	27.5 ft (retracted) 42.5 ft (extended)	25.5 ft
Slewing	360° continuous	360° continuous
Hoist Line Speed	300 ft/min (high speed) 97 ft/min (low speed)	300 ft/min (high speed) 97 ft/min (low speed)
Allowable Line Pull	12 line parts	12 line parts
Duplex Hook Block	150 Ton Rated	130 Ton Rated
Wire Rope Size	1 in. Steel	1 in. Steel
Counterweight	25,000 lbs	N/A
Recovery Winch Rating	45,000 lbs	45,000 lbs
Truck Chassis	Peterbilt 520	Peterbilt 520
Engine Make/Model	Paccar MX-11 diesel 430 HP @ 1600 RPM	Paccar MX-11 diesel 430 HP @ 1600 RPM
Transmission	Allison 4500, 6 speed, Automatic, Gen 5	Allison 4500, 6 speed, Automatic, Gen 5
Fuel Tank Capacity	100 US Gal	100 US Gal
Electrical System	12V DC	12V DC
Highway Travel Speed	65 MPH max	65 MPH max
Front Axle (Tandem Steer)	20,000 lbs x 2	20,000 lbs x 2
Rear Axle (Tandem Drive)	23,000 lbs x 2	23,000 lbs x 2
Forward Hi-Rail Speed*	25 mph	25 mph
Reverse Hi-Rail Speed	12 mph	12 mph
Front Tires	425/65R22.5, 20 ply	425/65R22.5, 20 ply
Rear Tires	315/80R22.5, 20 ply (dual)	315/80R22.5, 20 ply (dual)

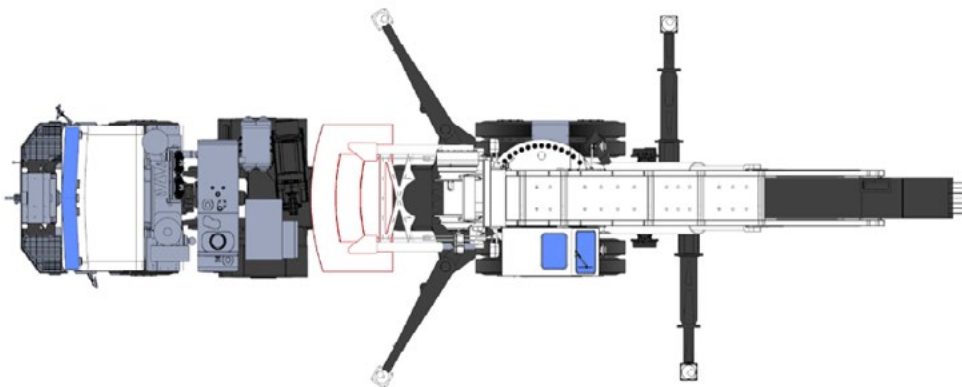
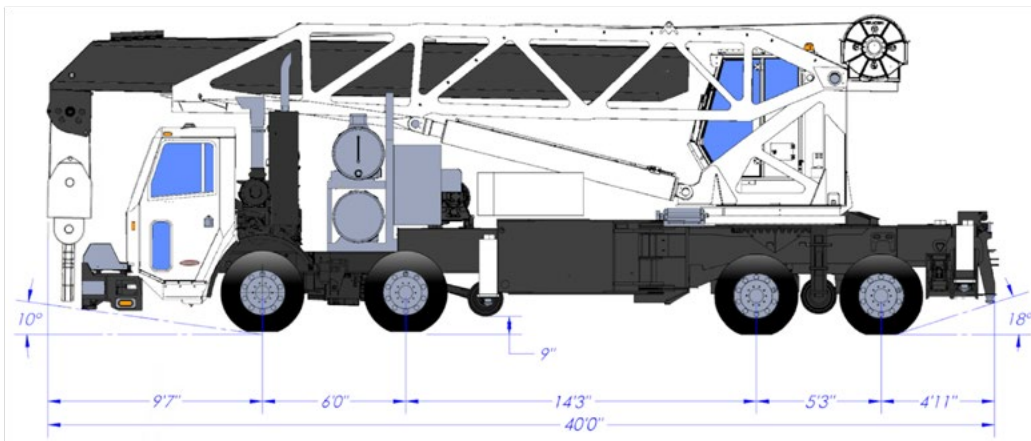
*Adequate track conditions required for maximum travel speeds

Cranemasters-Design (CMD) CMD150R Dimensions

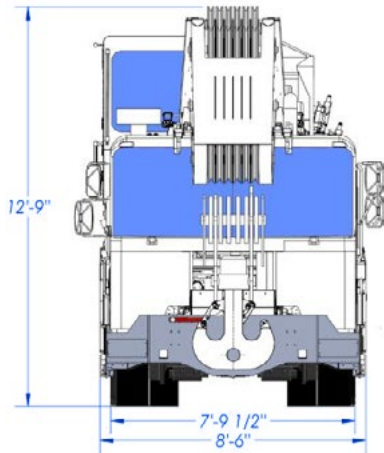


Axle Weights and Spacing (Estimated)

Axle	Weight	Spacing
1	20,000 lbs	-
2	20,000 lbs	72"
3	23,000 lbs	171"
4	23,000 lbs	63"
GVW	86,000 lbs	-

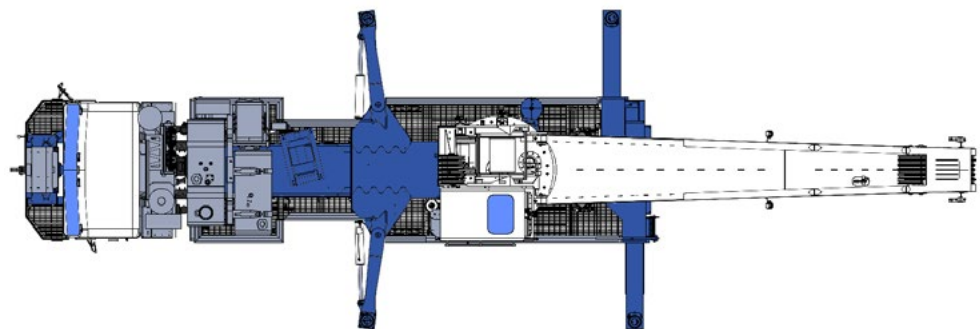
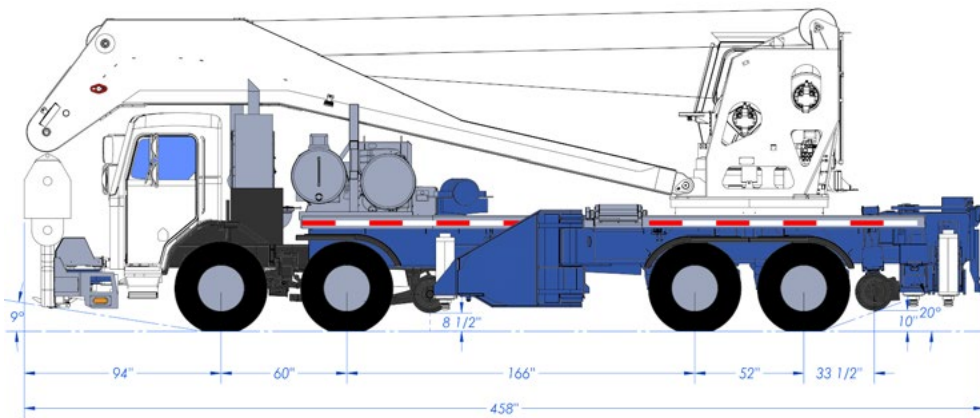


Cranemasters-Design (CMD) CMD130R Dimensions



Axle Weights and Spacing (Estimated)

Axle	Weight	Spacing
1	16,000 lbs	-
2	16,000 lbs	60"
3	21,500 lbs	166"
4	21,500 lbs	52"
GVW	75,000 lbs	-



The CMD150R and CMD130R 2-Year Warranty Period

Heavy-duty cranes with advanced features require diligent maintenance in addition to operators with steady nerves and a thorough knowledge of the crane's operations.

During the 2-year Warranty Period, Cranemasters plans four scheduled inspections and checkups on the equipment and operators.

Cranemasters also offers an annual service plan beyond the 2-year Warranty Period.

Design-Build-Deliver

Step I: Project Initiation

Cranemasters works with each customer to develop their custom scope of work, timeline, and cost for the project including applicable quote documents. Equipment delivery specifics are confirmed during the initiation phase.

With agreement to terms and issuance of a purchase agreement, Cranemasters will assign your job to a project leader who will be responsible for the build and act as your primary contact throughout the project.

The project leader will initiate the kickoff meeting with the customer and key Cranemasters' employees on the build team.

Step II: Project Engineering and Fabrication

The project leader will provide a status report on the project's engineering, fabrication, assembly, and schedule each month or more as needed. This is an

opportunity for either party to discuss options and changes necessary due to the customer's evolving requirements.

The final Testing Period will be communicated to the customer. The customer is always welcome to visit during the build and is strongly encouraged during testing.

Step III: Delivery and Professional Operator and Maintenance Instruction

The Cranemasters team will be at the delivery site on the day of the equipment's arrival. Typically, this includes a three-person team (engineer/project leader, mechanical lead, and operator) for three days. During this time, we will:

- Finish the receipt inspection checklist.
- Finish classroom training along with review of the load chart operator's manual.
- Finish all operational and maintenance training.
- Provide all inspection paperwork and unsigned copy of warranty (Note: Manufacturer's Statement of Origin (MSO) and other contingent paperwork will be provided upon final payment.)

Step IV: Additional Support After Delivery

Cranemasters will send a technician to address any concerns, training gaps, or known issues.

- Ninety days
- Nine months
- Eighteen months

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Cranemasters Railroad Equipment Design-Build Solutions

**Cranemasters Equipment
Design-Build Headquarters**

8020 Whitepine Road
North Chesterfield, VA 23237

www.cranemasters.com

info@cranemasters.com

804-236-4900

Emergency 24/7/365:
800-624-0543

