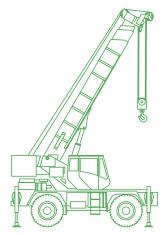


# Rough Terrain Mobile Crane Training Pack



# Simulated Equipment Specs

**Lifting capacity:** 35 Metric Tons (40 USt)

**Boom length:** 9.8 - 31.0 m (32 - 102 ft) **Max. working radius:** 28 m (95 ft) **Engine power:** 119 kW (160 HP)

#### Overview /

The Rough Terrain Mobile Crane Simulator Training Pack is part of the Vortex® construction equipment training product suite. From hook and load management to tandem lifts, operators who train with Vortex simulators develop the skills, coordination, and worksite awareness they need to learn safe lift operations.

### Key features & benefits /

The Rough Terrain Mobile Crane Training Pack is a complete training tool covering the entire lift process, from lift plans to controls familiarization to complex lifts, such as lifting steel structures, working in buildings, and work around power lines. Throughout training, trainees are scored based on a customisable system that tracks key metrics in real time.

A progressive learning program covering basic operating skills such as hook and load control, work in confined spaces, and more advanced lifts.

Performance metrics and reporting that provides students with feedback on their operating and lifting skills.

Best-of-class mobile crane, cable, and lifting simulation that ensures realistic crane and lifting behaviour and skills that transfer to the real equipment.





#### **Smart Training Technology**

The Rough Terrain Mobile Simulator Crane Training Pack incorporates CM Labs' Smart Training Technology™. That's why it delivers the most transferable operator skills anywhere, outside of the real equipment.

Smart Training Technology is comprised of CM Labs' proprietary and patented algorithms. Built on a high-fidelity real-time physics engine, it includes a mechanical engineering layer with multi-body constraints, transmission, tire models, cables, and other real-time simulation features that are unique on the market. This results in training that's based on real data and real machines.

The Mobile Crane Training Pack is the only solution on the market that provides tandem lift operations. This feature can be deployed in multiple configurations, with operators working at any combination of CM Labs simulators, including the motion-enabled Vortex Advantage simulator, the desktop Vortex Edge Plus simulator, or the Instructor Operating Station (IOS).

Collaborative learning can be further extended with CM Labs' Signal Person Station, which allows a trainee to guide the operation within a challenging virtual jobsite that includes power lines and job site personnel.

The result is a solution that allows trainees to operate in a multimachine environment where they can explore the capacity and limits of the equipment, and safely experience scenarios such as critical lifts that are potentially life-altering in the real world.



## Supported Vortex Hardware Platforms

The Vortex Rough Terrain Mobile Crane Training Pack can be installed on any Vortex simulator hardware platform, with different configurations to meet your budget, space, and training requirements. Vortex simulators are built to last, designed for years of 24/7 operator training.

Vortex Edge laptop-based instructional platform

Vortex Edge Plus portable single display trainer

Vortex Advantage with one, three, or five immersive displays

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#### **Learning program**

The Rough Terrain Crane Simulator **Training Pack features progressive** learning exercises—from beginner to advanced—designed to gradually build operator skill and confidence:

- ✓ LMI configuration and alarms
- ✓ Hook and load management and pendulum control
- Unloading materials on the worksite
- Moving loads within the building
- Working inside a building
- Changing part of line with pulley block
- Practicing CCO test courses
- Skills assessment

Novices learn the fundamentals load charts, complex lifts, and selecting and using different parts-of-line. They'll also learn the fundamentals of safety systems including anti-2-block, outrigger placement, and operating in poor weather conditions.

#### Performance measurement

The Rough Terrain Mobile Simulator **Crane Training Pack gives trainers** objective insight into trainees' performance and abilities. Trainers can measure key student performance metrics such as:

- Tasks completed and time
- Time spent in pendulums
- Load or hook collisions
- Rough load handling
- Load dragging
- Time spent in alarm conditions
- Contact with power lines
  - ... and more

The optional Instructor Operating System (IOS) allows trainers to generate reports from training sessions, and to review and compare current and past performance.





