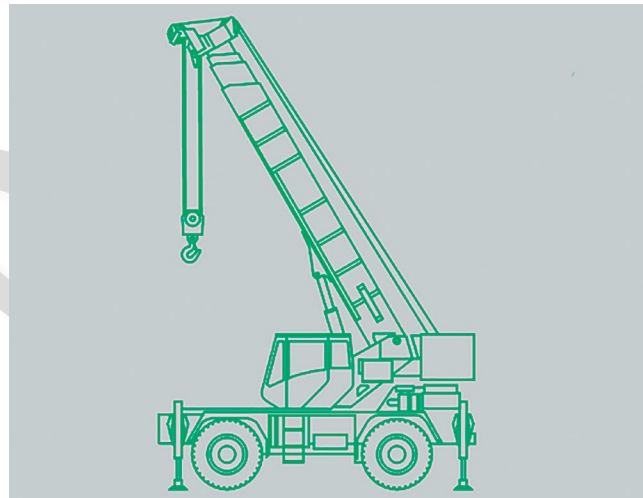


ROUGH TERRAIN MOBILE CRANE TRAINING MODULE

Overview /

The Vortex Rough Terrain Mobile Crane Training Module 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 master safe lift operations.



Key features & benefits /

With the Rough Terrain Mobile Crane Training Module, operators gain valuable experience in safe lifting operations, with no wear and tear to the crane, and no risk to themselves or others. Operators build real skills faster than traditional training alone, and learning organizations save instructor time and reduce equipment costs.



1. **A progressive learning program** covering basic craning skills such as hook and load control to working in confined spaces and more advanced lifts.
2. **Performance metrics and reporting** that provides students with the feedback on their operating and lifting skills.
3. **Best-of-class mobile crane, cable, and lifting simulation** that ensures realistic crane and lifting behaviour and real skills development.

I. Learning program

The Rough Terrain Crane Training Module features progressive learning exercises - from beginner to advanced - designed to gradually build student skill and confidence:

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

Students 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.



III. Crane simulation

The Rough Terrain Mobile Crane Training Module provides the most realistic simulationbased training available. This ensures that students can transfer skills from the simulator to the real world. There's no risk of negative training as with game-based simulators.

Simulation of the crane is built on proven Vortex dynamics. As in real life, the boom and jib bend and torque according to the weight of the load, dynamic movements, and crane characteristics. Stability and overloading/overturning risks are just like the real crane.

All rigging and hoisting cables are simulated from the load to the drum using actual engineering properties, so they behave appropriately as lines are placed under tension or the load is released. This means that all loads pendulum, snag, and collide just as they would in the real world, providing valuable experience to students without endangering them or others. Cables will collide with worksite obstructions and the crane boom.

Vortex simulators provide leading worksite visuals; the view from the cab accurately matches the view inside a real crane. An in-cab touch-screen LMI displays key operational information as well as additional controls.

II. Performance measurement

The Rough Terrain Mobile Crane Training Module gives trainers objective insight into student performance and abilities. Student exercises can be recorded and played back for after-action performance review. Trainers can measure key student performance metrics such as:

- Tasks completed and time
- Pendulums and load or hook collisions
- Rough load handling
- Instructor's comments

The optional student management system allows instructors to generate reports from crane training sessions, and review current and past performance.

