

cmlabs (

# **Motor Grader Training Pack**



### Simulated Equipment Specs

Operating weight: 20,303 kg (44,760 lbs) 275 variable horsepower 8-speed power shift transmission 6-wheel drive On-demand locking differential Blade pull: 17,913 kg (39,491 lbs)

## Key features & benefits /

## **Overview** /

CM Labs' Motor Grader Training Pack is the most advanced grader simulation available today. From controls familiarisation and grader positioning, to windrow management, material spreading, and V-ditch creation, operators who train on Vortex<sup>®</sup> simulators develop the aptitude and skills they need to master efficient motor grader operations.

CM Labs' Motor Grader Training Pack is a complete learning solution for grader operations. It gives trainees the distinctive feeling of pushing soil, essential for an immersive motor grader training experience. It is also the only training solution on the market that allows trainees to learn how to operate a high-precision blade and manage real-life advanced effects such as side-draft, which require specific skills. The training pack also incorporates self-guided learning features, including previews of each training exercise, and best-practice hints.

#### A progressive learning

**program** covering skills ranging from controls familiarisation to windrow management, material spreading, V-ditch operations, side-draft, and more.

#### Performance metrics and

**reporting** that provide trainers with objective feedback on operator habits and skills, along with an overall score. Best-of-class tower crane simulation that ensures trainees understand how a grader works and learn by feel, as on the real equipment.



# Motor grader simulation

The Motor Grader Training Pack provides a complete engineeringgrade simulation that has been rigorously field-tested by experienced operators and instructors from equipment manufacturers and top training schools. The complete grader is simulated, from powertrain to blade — the blade can be manipulated and positioned in the same way as on the real machine, including a functional saddle locking bar and automated cross-slope control.

The operator touchscreen displays key operating indications for cross slope, saddle locking bar, differential lock, hydraulic lock, and more. It also includes indicators for transmission, coolant, and hydraulic temperature, as well as a fuel gauge and articulation and slope indicators updated in real time.

CM Labs' Motor Grader Training Pack is unique in its simulation of a completely open training environment — you'll never be locked into fake game-like scenarios with easy wins. All challenges have multiple possible solutions, leaving it to the operator to exercise skills, creativity, and good judgment — just as in the real world.



# Supported Vortex Hardware Platforms

The Vortex Motor Grader 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

## Learning program

The Motor Grader Training Pack features progressive learning exercises—from beginner to advanced—designed to gradually build skill and confidence:

- Control familiarisation
- Loading & unloading from lowboy trailer
- Stuck in mud
- / Windrow management
- / Material spreading
- Leveling with obstacles
- V-ditch operations

Trainees learn the fundamentals of motor grader work, including working with the machine interface panel, accurate maneuvering and operation and materials management.

## **Performance measurement**

Motor Grader Training Pack exercises can be played back for after-action performance review. The software also records objective performance metrics such as:

- ✓ Blade efficiency
- Blade contacts with wheels or obstacles
- Grade quality
- Idle time and cycle time
- Fuel consumption
  - ... and more

With the optional instructor operating station, instructors can generate reports from training sessions, and review current and past performance.

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