VORTEX
Motor Grader training module
vortex.mimbus.com

The motor grador training module teaches your trainees to handle the machine and position the blade. They acquire practical techniques for moving and spreading the soil.
Students trained on the VORTEX simulator benefit from the most realist simulation on the market, thanks to many years of research to perfectly simulate the position of the blade, spreading and grading the soil.

BENEFITS

✔ *Reproduce realistic working conditions*

⏳ *Save time on your initial training and evaluations*

⏱ *Rapidly improve your trainees' real competencies*

🛠 *Place your trainees in a secured environment for training*

$ *Reduce costs related to equipment wear, consumption and damage*

LEARNING STEP BY STEP

Learn the motor grador's controls and to drive the machine	Learn to correctly position the blade	Learn how to move, spread and level the soil	Learn to grade when there are obstacles	Measure precision and acquired competencies

The motor grader module offers a progressive training path, from beginner to confirmed level, to acquire competencies step by step, through practice and confidence reinforcement. The simulation accurately reproduces a real machine in a virtual environment.
Trainees are absorbed in a reality-like environment, where exercises conditions can be adjusted in real time by the instructor, thus influencing the trainees' performances.

TRAINEES' FOLLOW-UP AND MEASUREMENT

The system informs the instructor about:

✔ The time and the objectives completion;

✔ The number of crashes (minor, major, critical);

✔ The position, the inclination and the angle of the blade;

✔ The moving, the spreading and the grading of the soil and the materials

✔ The cycle time of a completed exercise;

✔ The maneuvers' precision and the ability to grade in presence of obstacles.

TECHNICAL CARD

HARDWARE	
Controls	Steering wheel, pedals and joysticks (ISO and SAE standards)
Multi-trade driving station	2m² (21.5 ft²) floor space
Main display	Screen: 1x46 '' or 1x 65''(curved) or 3 x46''
Secondary display	21'' touch screen
SOFTWARE	
Simulated machine	Motor Grader
Engine power	From 157 to 205 KW (from 210 to 275 HP)
Transmission	6 driving wheels
Available languages	French, English, Spanish...
Specific functions	Replay, to re-watch a performed action. Real-time breakdowns, real-time weather conditions changes, integrated tutorial
Recommended option	Instructor station, to analyze the results in detail

THE PEDAGOGICAL OBJECTIVES

The whole learning focuses on 4 main pedagogical axes: familiarization with the machine controls and movements, motor grador handling, moving and spreading of the soil and facing work scenarios.

Through different modules and exercises, practice several times in order to:

- ✔ Familiarize with the motor grader's main controls
- ✔ Move the machine considering the vehicle gauge
- ✔ Correctly position the blade
- ✔ Learn to grade when there are obstacles in restricted spaces
- ✔ Spreading the soil unloaded from a truck
- ✔ Create an embankment and work in various situations
- ✔ Manage a motor grader stuck in the mud.

Practiced with different weather conditions (rain, fog...), these modules and exercises only have one objective: mastering the machine.

High-fidelity real-time simulation, to learn in a completely safe way while recording the results.

Non contractual pictures