Overview /
The Vortex® Backhoe Loader Training Pack is part of the Vortex construction equipment training product suite. From excavating and trenching to stockpile management and truck loading, operators who train with Vortex simulators develop the coordination and digging techniques they need to master safe, efficient operations.

Key features & benefits /
With the Backhoe Loader Training Pack, operators gain valuable experience in safe, efficient operations, with no wear and tear on the machine, and no risk to themselves or others. Operators build real machine skills faster than traditional training alone, and learning organizations save instructor time, increase student seat time, and reduce equipment costs.

Simulated Equipment Specs

<table>
<thead>
<tr>
<th>Rated net power: 81 kW (108 HP)</th>
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<tr>
<td>Operating Weight: 7,729 kg (17,040 lbs)</td>
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<td>Transmission: 4-speed, all-wheel drive</td>
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<tr>
<td>Telescopic digger</td>
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<td>Quick-connect buck</td>
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A progressive learning program covering basic operating skills ranging from maneuvering and controls handling, to trenching, bench loading, and truck loading.

Performance metrics and reporting that shows how to safely handle equipment and perform efficient excavation and earth-moving operations.

Best-of-class backhoe and earthmoving simulation that ensures real skills development and behaves like the real machine.
Machine and earth-moving simulation

The Backhoe Loader Training Pack provides the most realistic simulation-based experience on the market. This ensures that students can transfer their skills directly from the simulator to the real world — there is no risk of negative training as with other game-based simulators.

Precise simulation of the loader’s hydraulics system, transmission, and tire deflection ensure that trainees feel like they are driving the real thing, with realistic machine feedback at all times.

Simulation of soil digging and dumping is powered by decades of research into earthmoving simulation, and hundreds of peer-reviewed academic research papers. This means bucket forces, trenching, and loading are accurately simulated, and digging feels like the real thing.

The functional in-cab monitor displays key operational information as well as additional controls and machine configuration. It includes a rear-facing camera that helps trainees acquire the situational awareness required to maneuver in confined locations.

Performance measurement

The Backhoe Loader Training Pack gives trainers objective insight into student performance and abilities. Trainers can measure key student performance metrics such as:

- Movement efficiency and accuracy
- Collisions and shock loads
- Fuel consumption, cycle time, and idle time
- Volume of material excavated per bucket load and in total

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

Supported Vortex Hardware Platforms

The Vortex Backhoe 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 Trainer portable single display trainer
- Vortex Advantage with one, three, or five immersive displays