# VOLVO CONSTRUCTION EQUIPMENT ADVANCED TRAINING SIMULATOR





# WALK AROUND AND EXPERIENCE THE VOLVO SIMULATOR ADVANTAGES

### **REAL-LIFE**

The details create the experience. That is why the Volvo simulator uses inputs from real life. The simulation is based on a Volvo excavator, with all measurements, weights, specifications and sounds from the real one. All objects included in the simulation also have real physical values.

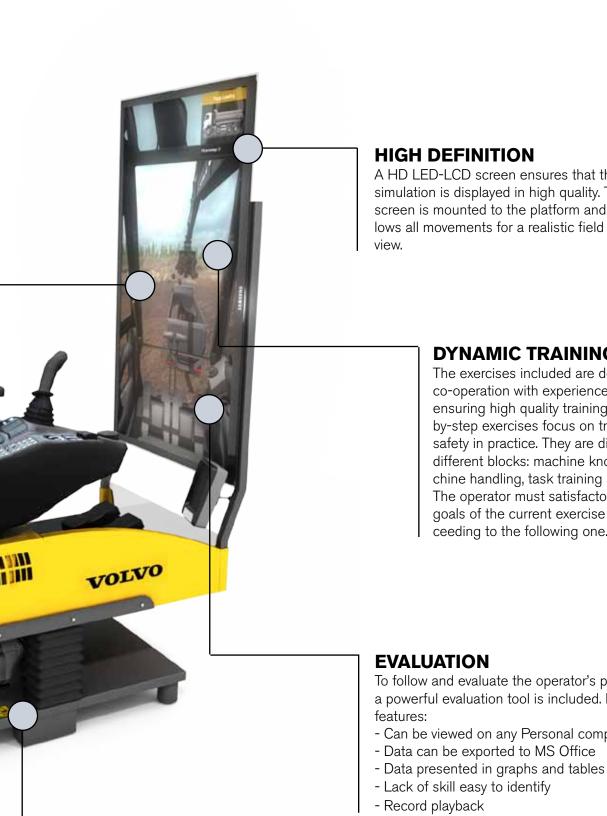
#### **VOLVO ENVIRONMENT**

To obtain a realistic operator experience requires more than extraordinary software. A Volvo original operator environment enables the operator to develop correct instinctive behaviour.

## **FEEDBACK**

An electric motion platform recreates all movements taking place in the simulation. Adding one further sensory perception enables the operator to achieve even better training results. The fact that you can actually feel the machine's movements while working in sloping terrain is an essential factor when training risk management.





A HD LED-LCD screen ensures that the simulation is displayed in high quality. The screen is mounted to the platform and follows all movements for a realistic field of

#### DYNAMIC TRAINING

The exercises included are developed in co-operation with experienced instructors ensuring high quality training. These stepby-step exercises focus on training skills and safety in practice. They are divided into four different blocks: machine knowledge, machine handling, task training and risk training. The operator must satisfactorily achieve the goals of the current exercise before proceeding to the following one.

To follow and evaluate the operator's progress, a powerful evaluation tool is included. Key

- Can be viewed on any Personal computer

# WHY USE SIMULATORS IN OPERATOR TRAINING

Using a simulator in training is not just about optimising and improving operator training. It is also about health and safety at work and caring for the environment. Simulator-based training is good for your business and the environment. By helping to eliminate costly mistakes and pollution, you are contributing to a better environment. Your operators can train on dangerous and uncommon situations, without risk of injuries. When facing the hazards of real life, they are well prepared to meet them.

## Training with an environmental awareness

Every hour using the simulator instead of the machine, means less impact on the environment. Besides that, the operator learns how to operate the machine in an ECO-efficient manner. Data such as fuel consumption and emissions are constantly being measured for evaluation.

#### Safety and risks

Experience comes from a previously perceived situation or event. Imagine the possibility of providing your operators with that experience, in a classroom environment, without exposing them to risks. Such care for human resources is invaluable. The operator also learns the elements of risk that come with the job and how to handle them.

#### **Efficient**

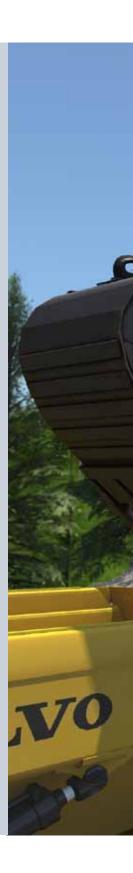
The fact that the operator trains in a classroom environment, knowing that there are no risks or external distractions, enables a fast learning process. The operator can focus more on learning the skills instead of worrying about what might happen.

## Simplify and focus instructor's work

The training simulator is designed to simplify day-to-day operations and enable the instructor's main focus to shift to providing training on the actual machine. In the simulator the operators train all by themselves while the instructor focuses on training them on the machinery itself. Later on, the instructors can see the operator's performance and progress using an ordinary PC. It is also a very good tool to integrate with group dynamics. The inexperienced operators can train more in the simulator than the experienced ones.

#### **Economy**

With the simulator care is translated into action. Care about your operators and the environment. The economic benefits are a by-product of this approach - but what a by-product! Using the Volvo training simulator decreases wear and tear, fuel costs and machine damage. Add to this a more efficient use of resources and the invaluable experience given to the operators. Can you afford not to use the Volvo simulator in your training?





# TRAINING FOCUSED ON SKILLS AND RISK MANAGEMENT

The training focuses on learning the skills and safety in operation that an excavator operator needs to know. A step-by-step training program, developed in cooperation with experienced instructors, ensures that the operators learn the right things - the right way. An evaluation module is included in the training programme, all to simplify and help the intructors in their daily work.

### **Machine knowledge**

Before even operating the simulator, it is important to know the different components and check points of the machine.

#### Machine handling

Basic exercises where the operator, for example, learns to use functions simultaneously, moving and placing the machine and connecting attachments.

#### **Executing real tasks**

Step-by-step, the operator learns how to execute a specific task, including safety and risk assessments that may arise. The operator learns the skills and risks involved in digging a trench in the country or in a city environment.

### Safety and risk training

All exercises are developed to focus on skills and safety which is why each session offers different elements of safety in operation. Laying cable in the ground, looking out for colleagues and people crossing the worksite.

There is also a dedicated risk "block" where the operator faces dangerous and risky situations.

#### **Evaluation**

Trainees are prompted to log in when using the simulator, enabling a powerful evaluation module. During all training, extensive data collection is carried out (e.g. fuel consumption, tyre wear and tear, collisions, mistakes) to help the instructor in the work of evaluation.

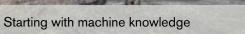


Loading onto a low-boy

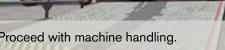
The advanced training simulator focuses on safety at all levels. All exercises include potentially risky and dangerous situations which can occur while executing the job. Different tasks and environments mean different risks.

There are also exercises dedicated to common risky situations e.g. loading excavator onto a lowboy trailer or how to react to a landslip.











Then, learn the skills.



An operator in training

# **VOLVO CONSTRUCTION EQUIPMENT**

