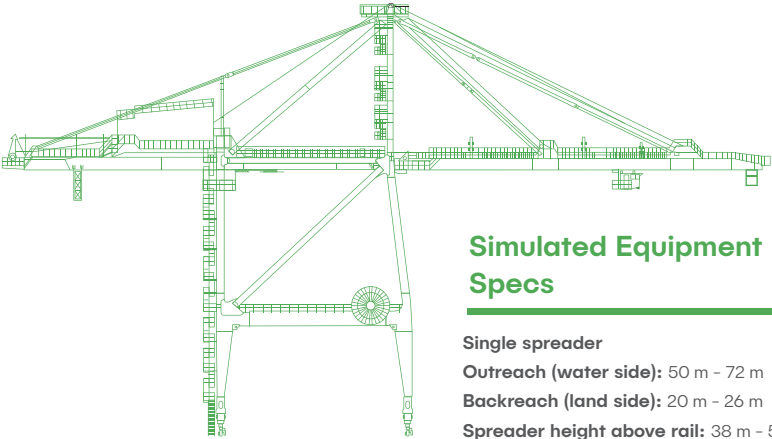


# STS Crane Training Pack



### Simulated Equipment Specs

**Single spreader**  
**Outreach (water side):** 50 m - 72 m  
**Backreach (land side):** 20 m - 26 m  
**Spreader height above rail:** 38 m - 50 m

### Overview /

CM Labs' Ship-to-Shore (STS) Crane Simulator Training Pack is the most effective simulation-based STS crane training solution available today. It's designed to help operators develop the skills they need to master efficient STS operations, from crane set-up and controls familiarization to working with cell guides and blind pockets, and more.

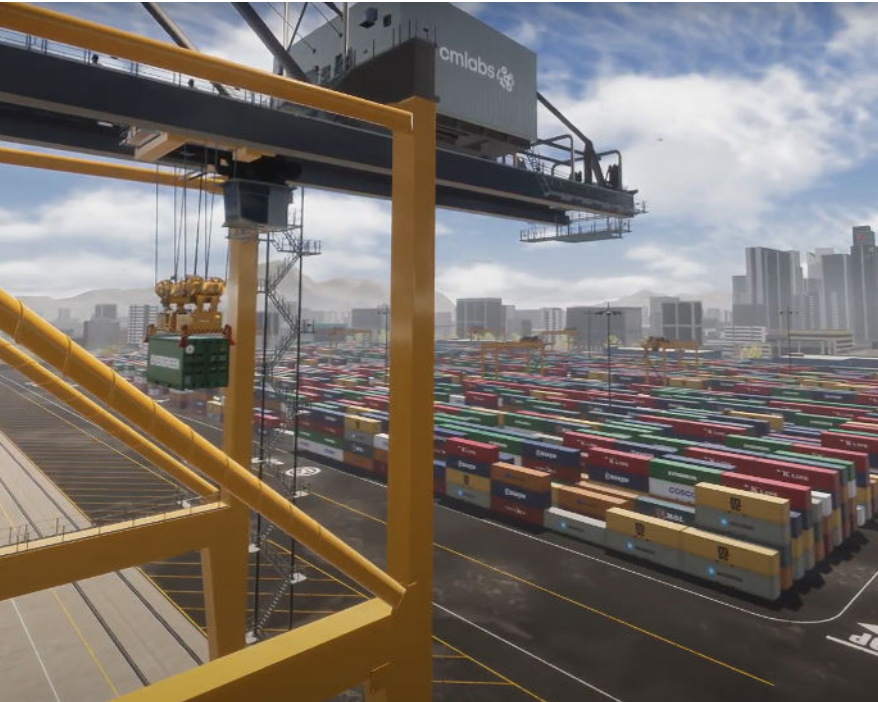
### Key features & benefits /

CM Labs' STS Crane Simulator Training Pack is a complete learning solution. It replicates the challenges of operating in realistic conditions, within a safe and controlled environment. This allows trainees to acquire vital skills that transfer to the real world, without fear of real-world repercussions.

**A progressive learning program** covering challenges ranging from controls familiarization to loading and unloading into blind pockets, and much more.

**Performance metrics and reporting** that provide trainers with real-time feedback on operator aptitudes and habits, along with overall scoring.

**Best-of-class crane, cable, and lifting simulation** that ensures trainees understand how the crane works and what is required for efficient operations.



## Smart Training Technology

Port terminal operator training is often constrained by operational requirements, but the STS Crane Simulator Training Pack provides effective training at any time.

It delivers the most transferable operator skills anywhere, outside the real equipment — like all CM Labs training solutions. That's because they are the only solutions on the market to incorporate CM Labs' Smart Training Technology™.

Smart Training Technology is comprised of CM Labs' proprietary and patented algorithms. Built on a high-fidelity real-time physics engine, it includes a mechanical engineering layer with multi-body constraints, transmission, cables, and other real-time simulation features that are unique on the market. This results in an immersive training experience that's based on real data and real machines.

Rigorously field-tested by experienced operators and trainers, the STS Crane Simulator Training Pack allows trainees to operate a simulated spreader that locks onto 20-foot, 40-foot, 45-foot, and twin-20 containers, as well as manage multiple crane sizes, include Post-Panamax, Ultra Post-Panamax and MegaMax, and port/starboard ship orientation.

It includes operational flippers and twist-locks, and can also manage chain lifts, a personnel platform, and an over-height frame. Operators can use controls to trim, list, and skew the spread, and status lights indicate when the spreader lands on a load, when twist-locks are locked and unlocked.

The controls supplied with the simulator reproduce the experience of operating in an actual crane cabin. The simulator also reproduces crane control systems, the load moment indicator (LMI),

## Supported Vortex Hardware Platforms

The STS Crane Simulator Training Pack can be installed on any Vortex simulator hardware platform, with different configurations to meet your budget, space, and training requirements. Designed for years of 24/7 operator training, Vortex simulators are built to last.

**Trainer: Entry-level desktop training**

**Advantage: Versatile training station**

**Master: Complete trainee immersion**

**Mastercab: Fully Immersive cabin experience**

## Learning program

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

- ✓ Controls familiarization
- ✓ Dual cycle support, loading and unloading cargo
- ✓ Working with cell guides
- ✓ Working below deck
- ✓ Working with confined spaces and blind pockets
- ✓ Working with liquid tank containers, work cages, and breakbulk
- ✓ Working with out-of-gauge containers
- ✓ Moving cargo to various delivery vehicles

Instructors can also use the optional Instructor Operating Station to create unlimited custom exercises, trigger unexpected events, and generate spreader path tracing reports.

## Performance measurement

The STS Crane Training Pack gives trainers objective insight into trainee performance and abilities. Instructors can access key performance metrics in real time, such as:

- ✓ Number of collisions (crane, load, or spreader)
- ✓ Bypass usage
- ✓ Flipper usage
- ✓ Rope slack
- ✓ Gantry, hoist, trolley direction change averages
- ✓ Unsafe operations
- ✓ Aggressive landings
- ✓ Moves per hour
- ✓ And more...

Instructors can also generate reports based on customizable scoring parameters, and review against benchmarks or past training sessions.



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