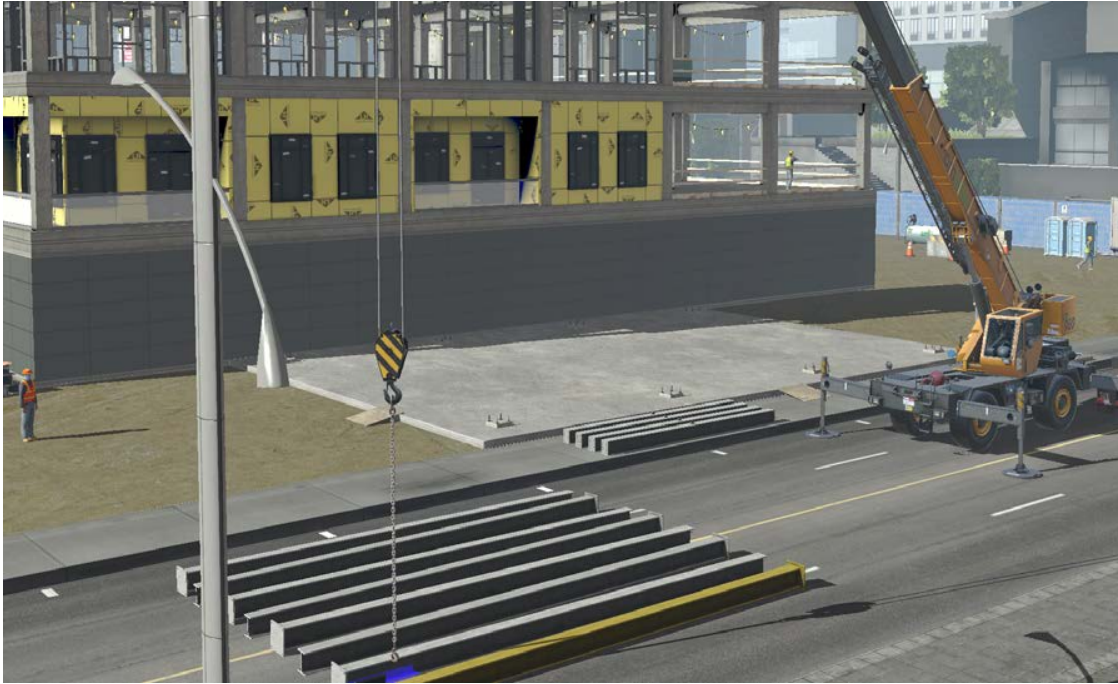


Steel Structure

This exercise is designed to help the operator practice techniques for handling long loads. The operator must lift steel beams and place them in specific positions to assemble a steel structure next to the building.



To successfully complete the exercise, the operator must:

- Efficiently lift, tilt-up and position beams.
- Ensure the hoist line remains vertical during lifting operations.
- Minimize pendulum and shock-load.
- Avoid collisions with any objects in the work site.

Students Learn To ...	Methodology
Demonstrate advanced lifting techniques, such as lifting beams and tilting them up to positioned vertically.	On-screen tips encourage proper lifting techniques.
Maintain a vertical hoist line while tilting up the load, by hoisting and swinging at the same time.	Operators can observe the pendulum swing of the load when they do not use proper lifting technique.

Students Learn To ...**Methodology**

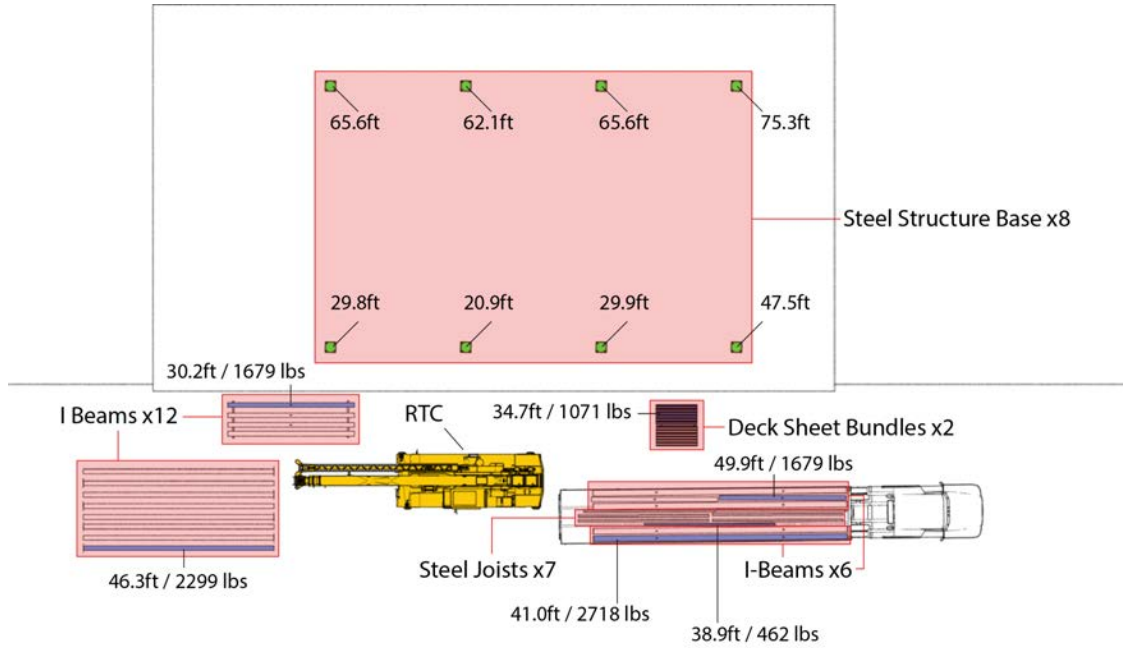
Place beams in challenging positions with precision, avoiding any collision.

To achieve each goal, the operator must position beams with a high level of precision. Since objects are placed close together, the operator must be especially careful to avoid collisions.

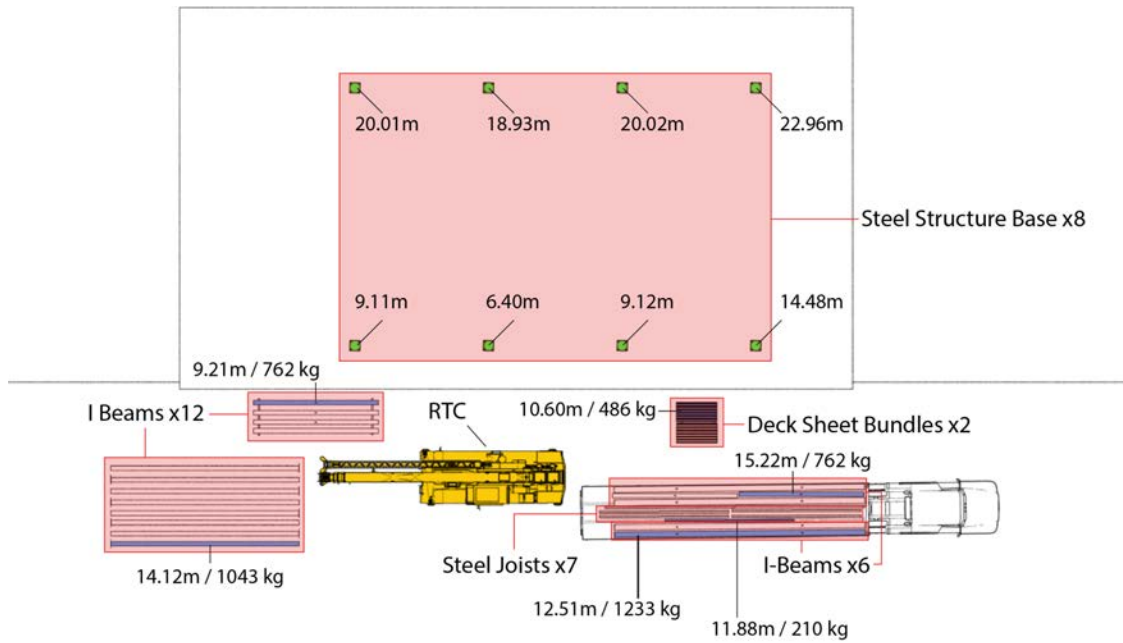
Lift Planning Information

For lift planning, refer to the following diagrams:

Imperial Units



Metric Units

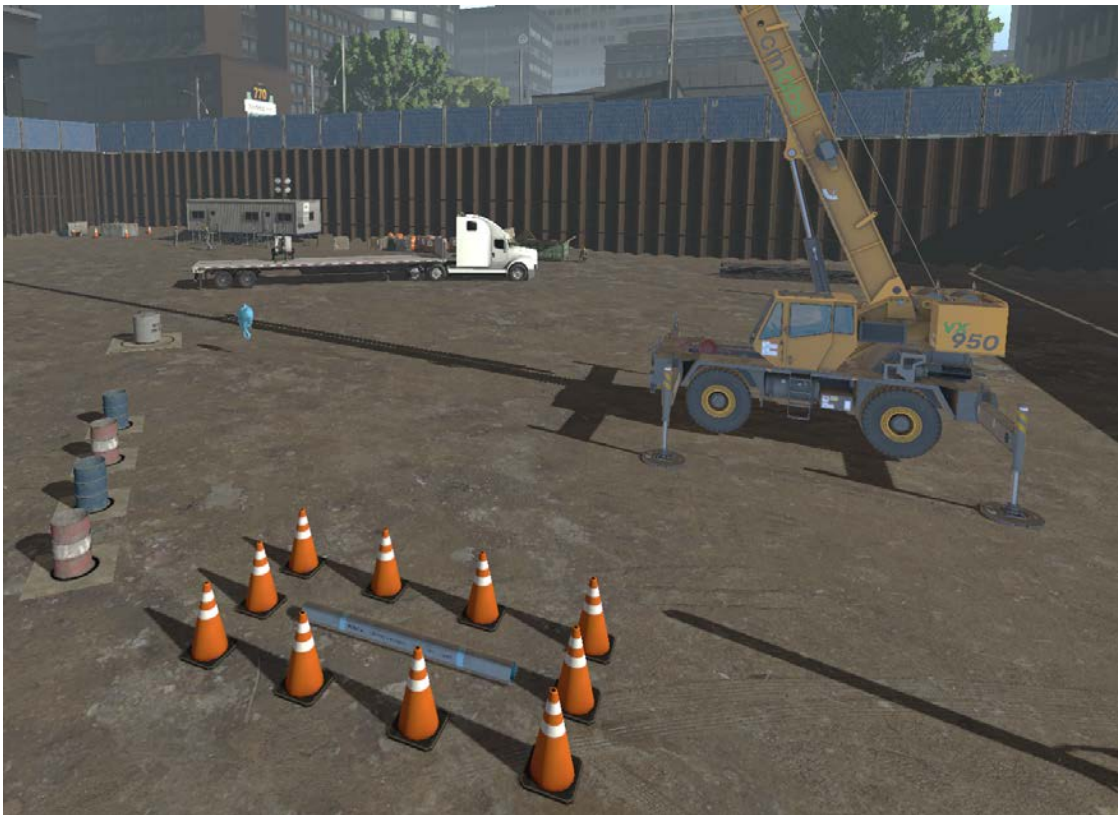


Skills Challenge

This exercise is designed to challenge students and operators in a fun and competitive environment. The exercise features three challenges:

- Lowering the hook into a barrel without touching the edges or surrounding objects.
- Maneuvering a test weight through a slalom course
To successfully maneuver the test weight through the slalom course, the operator must simultaneously swing, boom, and hoist to control pendulum and avoid collisions.
- Vertically lifting and moving a steel pipe without coming into contact with cones around it and placing it inside a drum without touching the drum wall.

On-screen targets show the operator the next object to lift and the target destination. Each time an operator completes a task, an audible bell sounds. The system alerts the user anytime a collision occurs and an on-screen timer encourages the operator to work efficiently.



Learning Outcomes

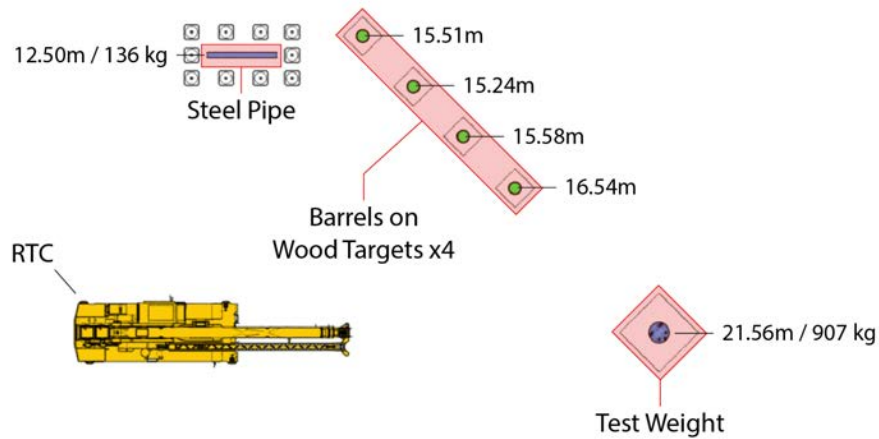
This exercise is designed to help operators:

- Demonstrate precise load handling (boom, swing, and hoist simultaneously to navigate the slalom and minimize pendulum)
- Demonstrate knowledge of the proper way to tit up a long load (the steel pipe)
- Identify and correctly align the boom tip over the Center-of-Gravity for each load (keep the hoist line straight at all times).

Lift Planning Information

Refer to the following diagrams for lift planning:

Metric



Imperial

