

## VS600M Truck Simulator

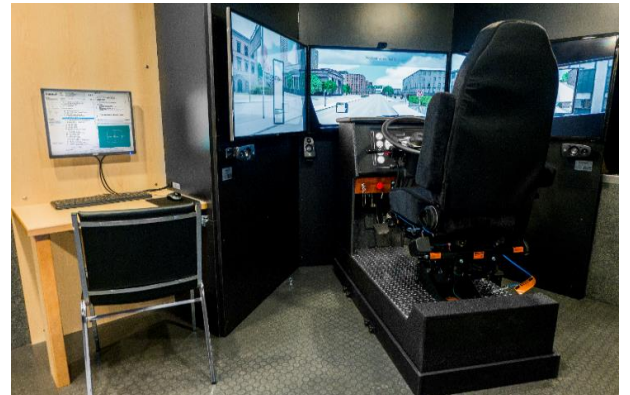
### The Best-Built Trucks Deserve the Best-Trained Drivers

Today, vehicle manufacturing quality control is so advanced that accidents due to equipment failure are rare events. However, human error continues to be the major contributing factor to motor vehicle accidents. Thanks to the recent development of superior and affordable driving simulation technology, quality-controlled driver training is now available. Better-trained drivers reduce operating costs and crash risk.

### The VS600M Truck Simulator

Virage Simulation uses the most advanced simulator hardware and software, mechanical and electrical components and high-quality graphics to enhance the realism and the efficiency of its training programs. The VS600M truck simulator includes the following key features

- Simulation of any type of vehicle from recycling and dump trucks to highway tractor-trailers
- Simulation of virtually any type of road configuration, e.g. city, rural highway, expressway, mountain roads, alleys
- Simulation of all weather conditions, e.g. snow, rain, fog, with matching road surface coefficients of friction
- OEM truck parts
- High-fidelity visual scenes with a 180-degree forward field of view and rear-view mirrors and cameras, using the latest LCD high-resolution display technology
- A high-performance, compact three-axis motion / vibration system
- A multi-function touch display for a wide range of truck driver controls and applications
- Realistic vehicle handling and performance
- A complete driver training and evaluation package including specific program for the Automated Side Loader



The VS600M truck simulator can be installed in any standard-size office without structural changes to the flooring or special electrical adaptations. The VS600M can also be installed in a trailer. A mobile version can be transported in customized cases to any training site.

# Virage Simulation Training with the Labrie Automated Side Loader

In consultation with Labrie and the City of Calgary, Virage Simulation developed a comprehensive training program for the operation of the automated side loader. The program includes the following scenarios

## 1. Basic operation

The operator can access external views of the vehicle, allowing him to observe the movements of the automatic arm as he manipulates the controls. The exercise is repeated until the operator develops a feel for the smooth operation of the side loader.



VIRAGE		Messages	
	Current	Average	
Initial Alignment	20 /20	16 /20	
Grabbing	12 /20	16 /20	
Discharging	20 /20	20 /20	
Return Position	13 /20	12 /20	
Duration	20 /20	16 /20	
Contact	n/a %	-0 %	
Scanning Error (Minor)	n/a %	-10 %	
Scanning Error (Critical)	n/a %	-4 %	
Total:		86 %	63 %
		7 /30	

## 2. Exercise - Residential Area

The operator drives a route where he must empty 30 recycling bins. Each loading maneuver is analysed and scored in real time by the simulator according to the following criteria: alignment of the arm with the bin; smoothness of the grabbing and emptying actions, accurate return of the bin to its initial position and, most critically, the operator’s visual surveillance of the area around the truck before setting it in motion after each loading maneuver.

## 3. Advanced Exercises

The operator encounters different situations where recycling bins are placed in difficult-to-reach positions or where performing the manoeuvre could be hazardous. The operator must decide whether to empty the bin or leave it.



## 4. The Winter Challenge

The operator must work in an urban environment in difficult winter conditions with snow-covered, icy roads, reduced visibility and obstructed views due to snow on the windshield.

## 5. Difficult Conditions – The Alleyway

The operator must work in an alley with obstacles on the ground (parked vehicles, pedestrians, cyclists etc.) and at the height of the truck (overhanging roofs, electric cables, tree branches, etc.).



“Operating our vehicles safely and efficiently is our primary concern” says Christy Lyon, manager of Waste & Recycling Collection Services at The City of Calgary. “We needed a tool to raise the level of proficiency and awareness of our drivers. With its ergonomics and realistic scenarios, Virage’s simulator is a valuable tool in our training program.”

“I was very impressed with the realism of the Side Loader dynamic`s” said Michel Collet, Technical Representative and Chief Instructor at Labrie. “Operating the simulator is just like the truck. I could even feel the gentle rocking of the truck as I picked up the bin. What a great training tool ! ”

**The Virage Simulation VS600M, a professional tool for professional driver!**