

# Driving Robot

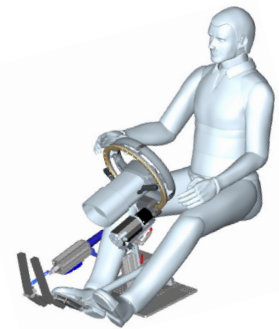
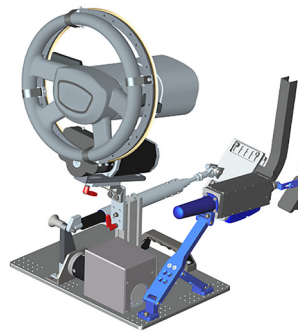
## Self-steering/throttle & braking robot

The Driving Robot allows for accurate and reproducible testing without the human-factor variability in autonomous test maneuvers.

The unique built of the Driving Robot is characterized by its space-saving, compact design that enables quick and hassle-free installation. The steering and throttle/brake robots are interconnected to provide ample room for electronics and data acquisition systems as well as easy access for test engineers. In addition, the all-inclusive driving robot box, containing all electronic components can be easily installed with ISOFIX in the rear seat or with a click-in connector into the trunk.

The Driving Robot can be installed without interfering with the original steering wheel, airbag or the seating position of the operator; the seating knee area is also kept clear so the safety of the occupant is not compromised. The Robot turntable simulates the original grasp of the car steering wheel for ease of use when needed and is free of any support-arm structures to the windshield or passenger side window.

In addition, the Robot contains a built-in safety feature that



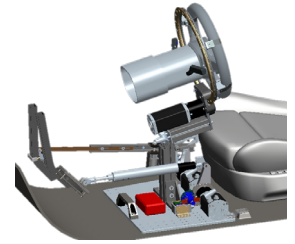
allows the operator to take control of the vehicle any time by pushing a release button.

The Driving Robot is the perfect complement to the Ultra Flat Overrunable platform (UFO) and shares the same HMI.

### ADVANTAGES

- **Fast and easy installation**
- **Ultra-compact design for space saving**
- **No modification to the test car required**
- **Original (OEM) steering wheel remains intact**
- **Free of obstacles in front of the steering wheel**
- **No rigging/support needed on windshield or side windows**





# DRIVING ROBOT

## Self-steering/throttle & braking robot

### SPECS

Use of original (OEM) steering wheel	Yes	No modification of test car required (i.e. airbag unaffected)
Free of obstacles in front of steering wheel	Yes	Safety of occupant unaffected
Steering wheel remains functional	Yes	Easy overtake by operator
Removable electronic unit	Yes	Ease of maintenance
Autonomous power supply	> 8h	Failsafe (power supply independent of power supply of test car)
Redundant safety precautions	Yes	Minimize injury risk of the operator
No rigging/support on windshield or side windows	Yes	Unobstructed view
Single unit steering and pedal robot	Yes	Fast and easy installation
Separate installation for steering and pedal robot	Yes	Flexibility during testing
Interior and exterior placement of controller	Yes	Flexibility in control
Maximum torque	75 Nm at 800 °/s	Holding time for max torque level is limited by motor's thermal capacity
Rated torque	50 Nm at 1300 °/s	Holding time for rated torque level is limited by motor's thermal capacity
Maximum velocity	1800 °/s at 10Nm	-
Maximum pedal force	1000N	-