

# Automated Vehicle Evaluation using Driving Robots

Driving Robots will automate Vehicle Performance Evaluation on Test courses and Chassis dynamometer (Long-Duration Driving and Reproducibility)

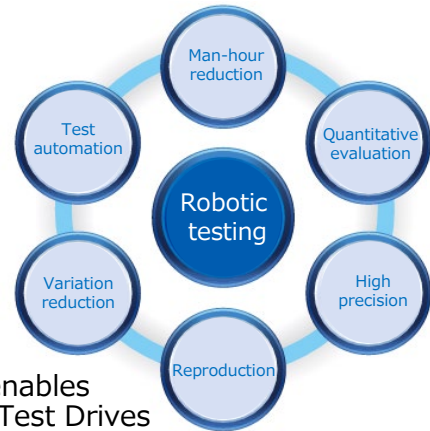
## Problem

- ◆ Increase in Evaluation of Next-Generation Technologies for CASE
- ◆ Increase in Burden on Test Drivers such as Long-Duration Driving of BEV

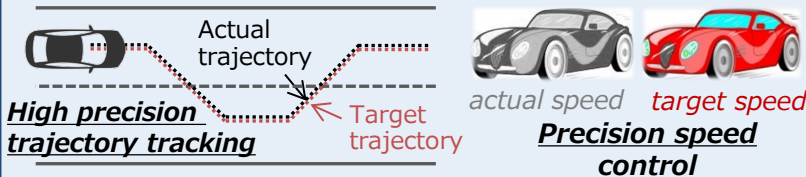
## Solution

- ◆ Realizing Driving Operations equivalent to Skilled Drivers through the Driving Robots

⇒ Automated Driving contributes to Evaluation Efficiency and enables Long-Duration Driving and High Reproducibility in Repeated Test Drives



**Test course** : Steering stability test  
Sensory evaluation



Automatic driving on target trajectory and acceleration. Contributing to Quantitative Evaluation of Handling Performance, Sensory Evaluation, and more

**Chassis dynamometer** :  
Electricity and Fuel consumption  
Exhaust emission test



Automated Driving at Target Speed  
⇒ Reduction of driver variability

## Function/Performance/Spec

### ◆ Features

- ① Driver model automates targeted driving
- ② Compact (compact, lightweight), low cost
- ③ Quick Installation (30 minutes to 1 hour)
- ④ Customizable (Link with LA system, etc.)

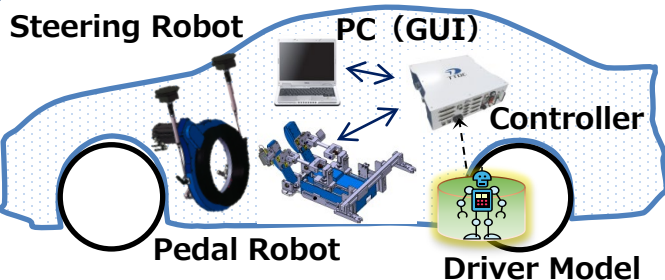
### ◆ Main spec

Type	Steering Robot	Pedal Robot
Operating force	12 Nm (instant 45 Nm)	180 N (instant 360 N)
Stroke	—	80 mm
Operation speed	720 deg/s	500 mm/s
Weight	11 kg	13 kg

### ◆ Content under development

- Steering Robot
  - Improved Steering Torque : 12→24N
  - Expansion of applicable tests (emergency avoidance tests, etc.)
- Pedal Robot
  - Higher precision with 2 actuators
  - Reduced installation time (less than 10min)

### ◆ System configuration



## Contact information

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