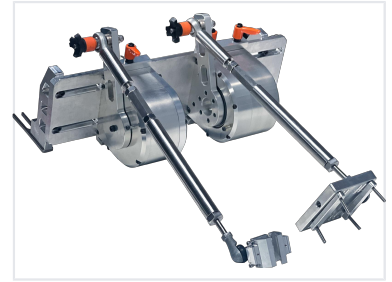


Automated Pedal Actuation Robot for Vehicle Testing

This robot controls the brake and accelerator pedals to replicate driving inputs. It provides precise vehicle speed control through programmable pedal profiles.



Overview

Automated Pedal Actuation for Precision Testing

The Automated Pedal Actuation Robot is a precision instrument designed to replicate typical driving inputs by controlling brake and accelerator pedals. It enables precise vehicle speed control and repeatable testing across a wide range of vehicles, including passenger cars and commercial fleets. With its robust aluminum construction and integrated encoders, it provides reliable performance for automotive research and simulation.

Key Performance

Core Capabilities

2 units

Independently Controlled Actuators

Primary Functions

- Precise vehicle speed control
- Repeatable control of brake and accelerator
- Programmable pedal profiles
- Force feedback simulation
- Data acquisition for performance analysis

Technical Design

Mechanical Interface

- Adjustable linkage rods
- Adjustable mounting brackets
- Central control unit for synchronization

Build Material

High-grade aluminum components

Actuator Technology

Rotary actuators with integrated encoders

Compatibility & Installation

Compatible Vehicle Types

Passenger Cars • Commercial Vehicles • Special-purpose Vehicles

Installation Process

Quick and easy installation with versatile mounting

Applications

Target Applications

Automotive Testing, HMI Research, Driver Simulation