

Heavy Duty Chassis Dynamometers

to test buses and commercial/heavy duty vehicles for emissions, performance, climatic and NVH applications



- Available as 72" (1.82m), 75" (1.90m) and 2.5m roller sizes
- Exceeds International legislation for performance and accuracy
- Precise, reproducible mass simulation
- Clean power IGBT AC drive technology
- For tandem axle application
- Flexible restraint systems for a wide range of vehicles
- Data acquisition and monitoring system
- Low maintenance and lifecycle costs
- Global service support

fact sheet:

Heavy Duty Chassis Dynamometers

for emissions, performance, climatic and NVH testing

This all wheel drive chassis dynamometer is suitable for testing heavy-duty multi-axle commercial vehicles. Each individual side mounted AC motor is coupled to a 48" roller and is capable of delivering accurately controlled high tractive forces. The axles can be configured and adjusted automatically to suit a wide range of vehicles with an innovative rack and pinion traversing system. The unique control techniques and software algorithms ensure highly accurate synchronization of the individual roll sets.

Applications

- ✓ Heavy-duty commercial vehicles

Features

- ✓ Twin encoders for increased accuracy
- ✓ Automatically adjustable axles to suit a wide range of vehicles
- ✓ IGBT 4 quadrant AC drive with power recuperation
- ✓ Vehicle axle weighing system
- ✓ Real time control processor and distributed I/O architecture
- ✓ Unique control techniques and software algorithms ensure highly accurate synchronization of the individual roll sets
- ✓ Graphical user interface with Windows 10 operating system
- ✓ Central server function and host computer interface to enable data and test information to managed effectively
- ✓ Vehicle restraint systems
- ✓ Personnel safety protection

Services

- ✓ Facilities planning and installation services
- ✓ Comprehensive in-house and/or on-site training for customer engineering, operator and maintenance personnel
- ✓ Tailored preventative maintenance contract
- ✓ On-line diagnostics and support
- ✓ Technical helpline support

Options

- Throttle actuator or full Robot Driver
- Portable Exhaust Emissions Testing (PEMS)
- Vehicle cooling fan (heavy duty)
- Climatic design (typically -40°C to 60°C)
- Pull down system for simulate load
- Supplementary brake device
- Single point restraint system
- Rigid tow hitch rear restraint
- Wheel guards/roll covers
- Vibration sluts
- Road surface simulation shells
- Low noise roller surface coating
- Drivers-aid laptop/PC
- Data acquisition with powerful graphical presentation and analysis package

Typical specification

Roll size	72" (1.8288m)
Tractive force	100,000 N
Continuous power	1398 kW
Vehicle speed	130 km/h

at up to 4m/s ²	2WD	4WD
Transient force	±30 N	±5 N
Steady state force	±50 N	±4 N
Load repeatability	±10 N	±3 N
Speed control	±0.01 km/h	±0.01 km/h
Inertia simulation	<50 ms	<50 ms
Front/rear roll sync	N/A	±0.02 km/h

Hofmann TeSys Prüftechnik GmbH

Heilswannenweg 50
31008 Elze, Germany
Tel +49 (0) 5068 462-103
Fax +49 (0) 5068 462-129
Email sales@hofmanntesys.com
Web www.hofmanntesys.com

Hofmann TeSys UK Ltd

Evesham House, Whittington Hall
Worcester, WR5 2RZ, UK
Tel +44 (0) 1905 357282
Email sales@hofmanntesys.com
Web www.hofmanntesys.com

