

# Chassis Dynamometer

for climatic, environmental & wind tunnel testing



- Passenger car, commercial vehicle and motorcycle range
- Available for insulated or uninsulated test cell pits
- 4x2, 4x4 and independent versions
- Temperature controlled load measurement system
- Remote, close coupled or center mounted motor designs
- Real time control with graphical user interface
- Data acquisition and monitoring
- Host file server and networking facility
- Global service support

fact sheet:

## Chassis Dynamometer

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Hofmann TeSys chassis dynamometers for climatic testing are available as standard single roller, 4x2, 4x4 or fully independent configurations. The precision manufactured rollers are available from 0.5m to 2.5m diameter, running in rolling element bearings that may be temperature controlled according to the application. Insulated floor plates and roller covers protect the motors from extremes of temperatures.

### Applications

- ✓ Passenger vehicle testing
- ✓ Commercial vehicle testing
- ✓ Motorcycle testing

### Features

- ✓ Self-compensating frictionless design
- ✓ Thermally stabilized load measurement system
- ✓ Twin encoders for increased accuracy
- ✓ Isolated floor plate area to protect dynamometer pit
- ✓ Real time control processor and distributed I/O architecture
- ✓ Graphical user interface with Windows 10 operating system
- ✓ IGBT 4 quadrant AC drive with power recuperation
- ✓ Vehicle restraint system
- ✓ 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 via VPN
- ✓ Technical helpline support

### Options

- Throttle actuator or full Robot Driver
- Roller surface coatings
- Single, 4x2 or 4x4 independent
- Available rollers from 0.5m to 2.5m
- Vehicle positioning devices
- Automated wheel guards/roll covers
- Drivers-aid laptop/PC
- Rigid link retention system
- Test facility host computer system
- Data acquisition with powerful graphical presentation and analysis package

### Typical passenger vehicle specification

|                          |                 |
|--------------------------|-----------------|
| Temperature range        | -40°C to + 60°C |
| Absorption power         | 5 to 95% RH     |
| Altitude range           | -100m to 4000m  |
| Speed range              | 250km/h         |
| Absorption power         | 150kW (axle)    |
|                          | 65 – 250km/h    |
| Force per axle           | 8,300N          |
|                          | 0 – 65km/h      |
| Inertia simulation range | 700 – 5500kg    |
| Wheelbase adjustment     | 4000mm          |
| Roller diameter          | 1600mm          |
| Width                    | 1000mm          |
| Spacing                  | 750mm           |

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