

Chassis Dynamometer

for NVH Testing



- Car, commercial vehicle and motorcycle range
- Unique attenuated roller design
- 4x2, 4x4 and fully independent versions
- Hydrostatic or rolling element bearing designs
- Close coupled or remote motor designs
- Data acquisition and monitoring
- Global service support

fact sheet:

Chassis Dynamometer for NVH Testing

Hofmann TeSys produce specialist chassis dynamometer designs which allow investigation of noise, vibration and harshness levels whilst the vehicle is running under accurate and repeatable road load simulation, speed, force or acceleration control. The rollers are available from 1.8m to 2.5m diameter, running in hydrodynamic or rolling element bearings. The roller assemblies are acoustically attenuated to minimize the effect of noise generation and amplification.

Applications

- ✓ Passenger cars testing
- ✓ Commercial Vehicle testing
- ✓ Motorcycle testing
- ✓ Climatic and environmental testing

Features

- ✓ Twin encoders for increased accuracy
- ✓ Motors installed in isolated areas and connected to the rolls by torsionally tuned couplings and drive shafts
- ✓ Acoustic shaft seals, roll covers and breakthrough seals around the rollers
- ✓ 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
- ✓ 2WD or 4WD 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
- Power inspection hatch between rollers
- 4x2 or 4x4 independent
- Available rollers from 1.8m to 2.5m
- Seismic block isolation material
- Road surface simulation shells
- Low noise roller surface coating
- Vibration slats
- Air simulation fan
- Drivers-aid laptop/PC
- Wheel guards/roll covers
- Low noise wheel hub fixation
- Data acquisition with powerful graphical presentation and analysis package

Typical passenger vehicle specification

Speed range	280km/h
Absorption power	278kW (axle)
	100 – 280km/h
Force per axle	10,000N
	0 – 100km/h
Inertia simulation range	600 – 5400kg
Wheelbase adjustment	2260 – 4700mm
Roller diameter	72" 1828mm
Width	24" 610mm
Spacing	40" 1016mm
Acoustic performance at 100km/h	45dB(A) typical

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