



CARROLL A. CAMPBELL JR. GRADUATE ENGINEERING CENTER AUTOMOTIVE TESTING EQUIPMENT



Renk Labeco 4-Wheel 500 HP Chassis Dyno and Faist Semi-Anechoic Chamber

The Renk system is a low-noise chassis dynamometer housed in a semi-anechoic chamber which provides capability to perform driveline noise studies, mileage assessments and miscellaneous sound measurements.

Renk Labeco Chassis Dyno Features and Specifications:

- Four-roller design for testing of FWD, RWD and 4WD vehicles
- Road load driving mode
- Noise and vibration optimized design
- Max. speed: 200 kph
- Max. power per roller: 95 KW 127 hp
- Roll diameter: 1,274 mm
- Roll width: 650 mm
- Wheel base of vehicles under test: 2,100-3,500 mm

Industry Rates (including technical staff support)

Chassis Dyno/Anechoic Chamber
Combo:

\$1,500/day

Chassis Dyno Only:
\$1,000/day

Anechoic Chamber Only:
\$750/day

Faist Sound Room:

- Broadband compact absorber design
- Conforms to ISO 3745
- Frequency range 50-10,000 Hz
- Room size: 9,350 mm long by 8,230 mm wide by 4,570 mm high
- Door size: 3,480 mm wide by 3,000 mm high



MTS 320 Tire Coupled Road Simulator and Weiss Climate Test Chamber

This system consists of an MTS 320 (4-Post) road simulator coupled with three downforce actuators which simulate aerodynamic forces and roll and pitch moments. The Weiss climate chamber is capable of -40C to +85C operation and a relative humidity range of 15% - 95%. This test facility supports activities such as squeak and rattle testing, vibration testing, structural durability testing, suspension characterization testing and fastener testing. The combination of the road simulator and the environmental chamber allows for many unique testing possibilities.

Industry Rates (including technical staff support)

7-Post Road Simulator:
\$4,500/day

4-Post Road Simulator:
\$3,000/day

4-Post Road Simulator/Environmental
Chamber Combo:
\$4,500/day

Weiss Environmental Chamber:
\$1,500/day

MTS 320 System Features and Specifications:

- "Large Car" system: max vehicle mass of 3,500 Kg
- Wheel base range from 2,450 to 3,300 mm (Mini-Cooper to Humvee)

Weiss Environmental Chamber:

- Chamber dimensions: 8,750 mm long, 6,475 mm wide and 3,350 mm high
- Door opening: 3,023 mm wide by 2,438 mm high
- Temperature range: -40C to +85C
- Humidity range: 15% to 95%

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Zeiss Pro T Select Dual Column Full Vehicle CMM

This is a “drive on” CMM facility to allow full-vehicle, body-in-white and other large-item coordinate measurements.

Zeiss Pro T Select Features and Specifications:

- Pro T Select system, each column with an X range of 7300 mm, a Y range of 1,600 mm and a Z range of 2,500 mm
- Measuring plate dimensions of 8,000 mm x 3,000 mm x 450 mm with T slots

Industry Rates (including technical staff support)

Zeiss Coordinate Measuring Machine:
\$1,500/day



FEV 580 HP Engine Dyno Test Cell

This is a state-of-the-art transient engine dynamometer with capabilities for performance testing, durability testing, transient testing and combustion analysis.

FEV 580 HP Engine Dyno Test Cell Features and Specifications:

- Rated Power: 428 kW (580 HP)
- Rated Torque: 950 N-M
- Rated Speed: 4,300 rpm
- Maximum Speed: 9,000 rpm
- Inertia: 0.81 Kg m²
- Speed Gradient: 9,000 rpm/sec
- Modular Data Acquisition

Industry Rates (including technical staff support)

FEV 580 HP Engine Dyno:
\$1,200/day

Additional Equipment Available for Commercial Use

SoMAT Edaq In-Vehicle Data
Acquisition Instrumentation:
\$200/day

Mueller-BBM NVH Measurement/
Analysis System:
\$200/day



ETS Lindgren Electromagnetic Compatibility Chamber

An ETS Lindgren FACT-3-2.0 PREMIUM high-performance, RF-shielded, 3-meter, semi-anechoic chamber for EMC testing. The chamber includes a turntable.

Other specifications include:

- Chamber size: 8,530 mm x 6,100 mm x 5,490 mm
- ANSI C63.4 (2003) acceptance tested

Industry Rate
(including technical staff support)
\$1,200/day

For more information,
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