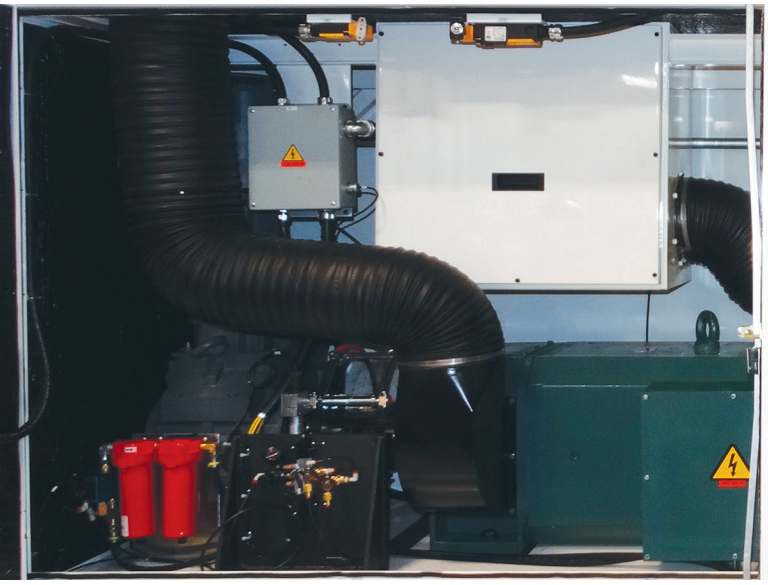
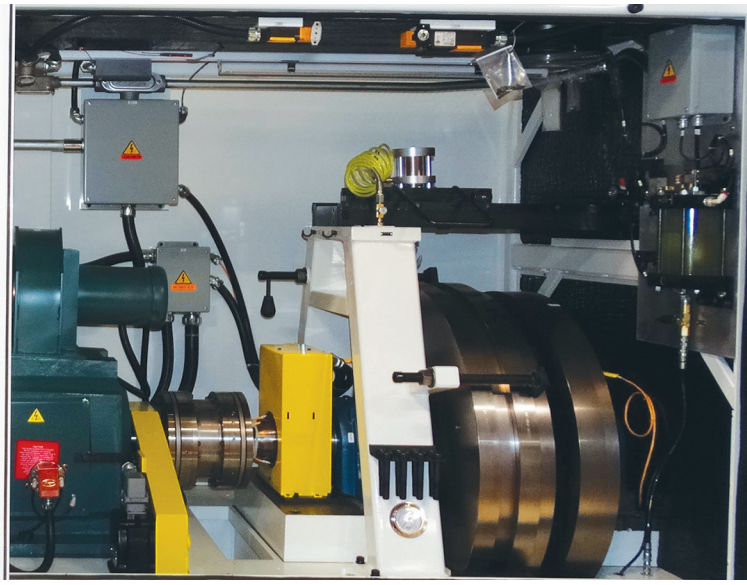
Model 3000

Performance Brake Dynamometer





LINK

Model 3000

Key Benefits

- Latest technology software and controls
- Proven components with low maintenance
- Highly configurable with many options
- Controls and power cabinet integrated onto machine as a single unit
- Ease of installation (no concrete foundation required)
- Safety interlocks on all guard doors
- Fold-away brake chamber for ease of technician test part setup

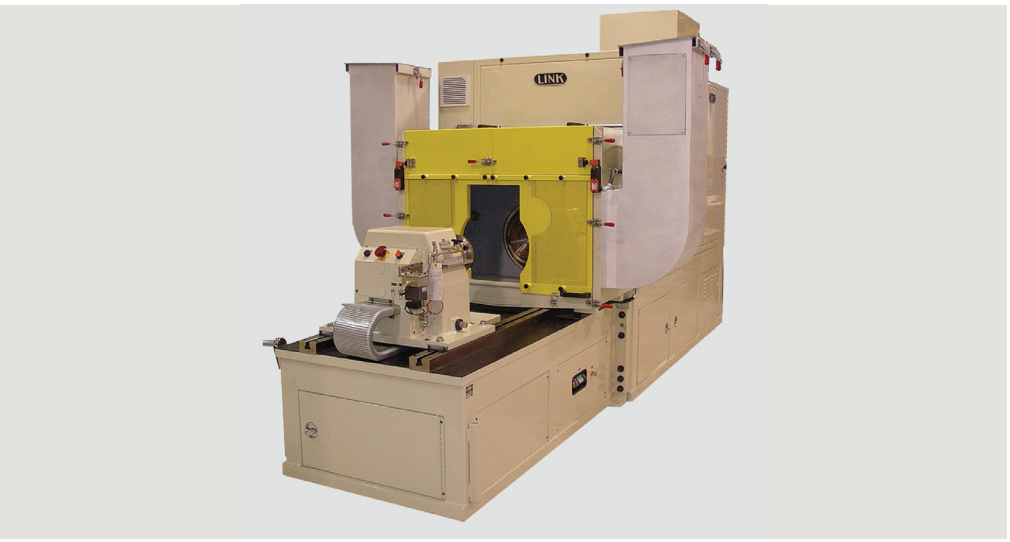
Key Features

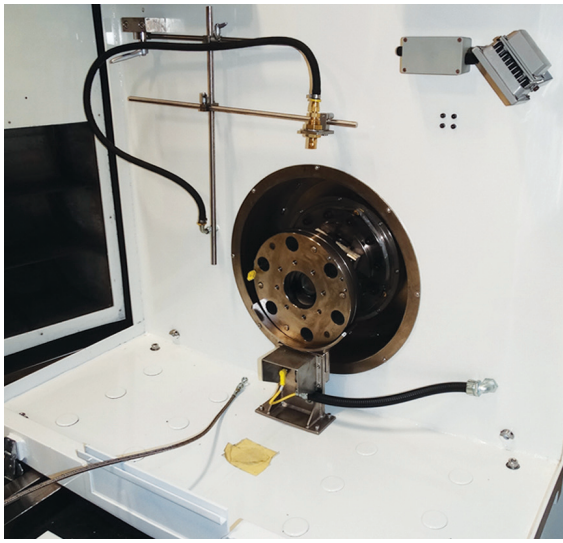
- Tabular step-by-step test script generation
- Customizable graphical data review software (RevDataPlus) for brake engineer
- Automated reporting tools through MS-Excel
- High accuracy electric inertia simulation (I-Sim)
- Servo brake profile control
- Precision sensors for measurement: shaft speed, torque, pressure, fluid displacement, brake temperature, cooling air speed, air temperature and humidity
- Integrated interface to DTV measurement, NVH, water spray and park brake systems
- In-line reaction torque sensor with calibration fixture for torque
- Power brake bleed system
- Brake knuckle test fixture
- Compact pedestal workstation

Product Overview

The Model 3000 Dynamometer (Model 3000) is a full-sized system specifically designed to evaluate braking performance characteristics up to 5650 Nm for automotive and light truck brake assemblies. This state-of-the-art machine incorporates a 2-disc inertia section combined with electric motor Inertia Simulation (I-Sim) capability to replicate actual operating conditions.

The Model 3000 is the perfect machine for running research and development test protocols on brake calipers, friction material, drums and rotors in a controlled test environment that has been proven to correlate with vehicle test data. The ProLINK control and data acquisition system allows manual or fully automatic unattended operation.





Test **Procedures**

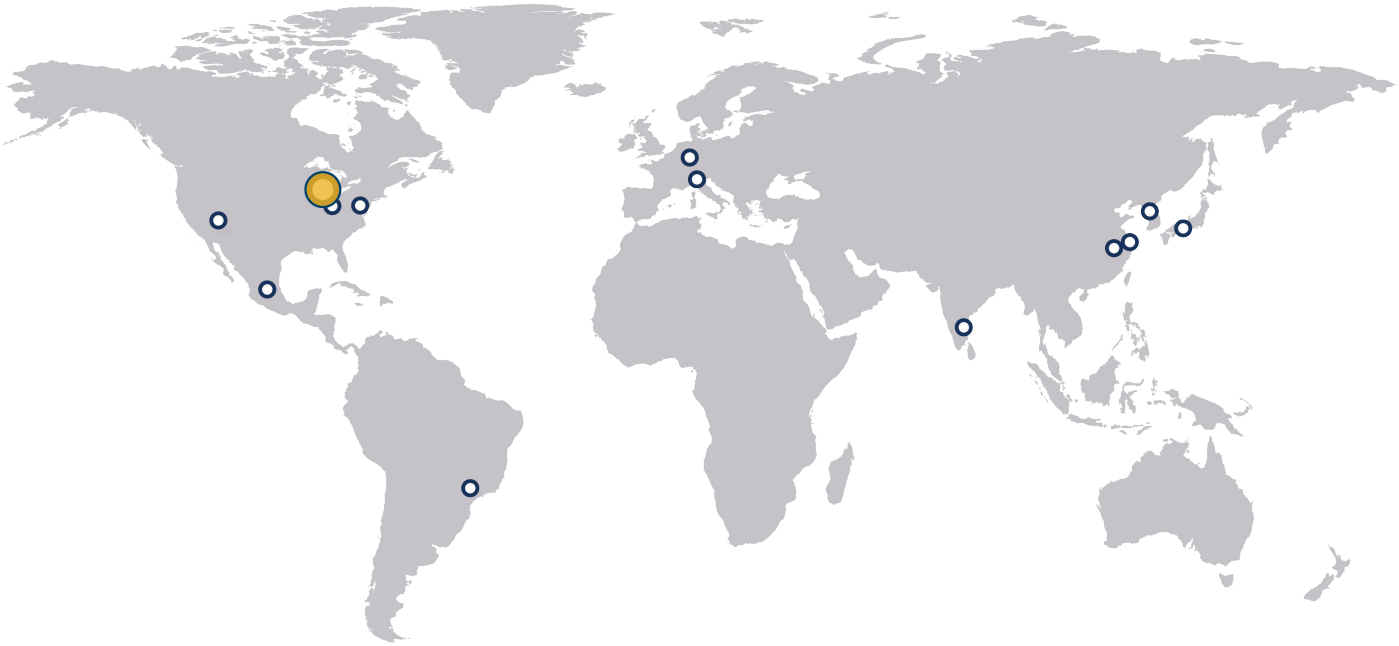
- Performance Wear
- Thermal Roughness
- Lining Wear vs. Temperature
- City Traffic Route Simulations
- Fade and Effectiveness
- Brake Output vs. Temperature
- Rotor Corrosion

Optional **Systems**

- Low speed static torque drive system
- Water spray and brake soak system
- Increased test speed from 2000 rpm to 2500 rpm
- Low drag torque measurement tailstock
- E-Caliper interface and power supply
- NI DIAdem data converter
- Environmental temperature and humidity control system
- Video monitoring camera
- Dual by wire
- Regen sim
- High speed cooling air up to 120 kph
- Brake emission modification ready
- Mechanical parking brake apply
- Disc Thickness Variation (DTV) measurement
- NVH measurement system
- Electric brake fluid apply system
- RegenSim for hybrid vehicle braking simulation
- Thermally insulated test chamber

Specifications

	Model 3000 Dyno (standard)	Model 3000 Dyno (with enhanced options)
Control Software	ProLINK	ProLINK
Sample Rate	5000 samples/sec	5000 samples/sec
Drive Motor	186 kW	186 kW
Shaft Speed	0 - 2000 rpm	0 - 2500 rpm
Brake Torque	5650 Nm	5650 Nm
Drag Torque	n/a	70 Nm
Mechanical Inertia	42.7 - 128 kgm²	42.7 - 128 kgm²
Inertia Range with I-Sim	5 - 260 kgm²	5 - 260 kgm²
Brake Apply Pressure	206.8 bar	300 bar
Brake Apply Rate	689 bar/sec	862 bar/sec



PROUDLY SERVING THESE INDUSTRIES