

# Model 7200-A

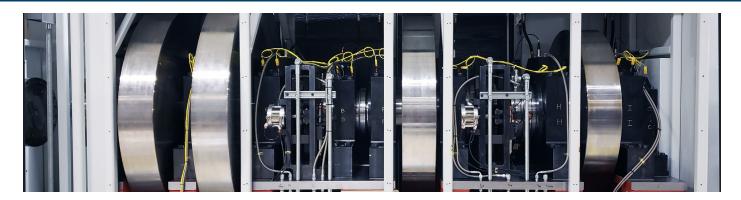
High Speed Rail Brake Dynamometer











#### **Product Overview**

The Model 7200-A High Speed Rail Brake Dynamometer with automated inertia change is an efficient and accurate tool for train brake performance and noise testing. It performs controlled input or output tests on pneumatically actuated brake assemblies, and precisely measures performance, effectiveness, thermal capacity, noise and vibration, and other attributes related to in-service braking. Employing four clutched mechanical discs and electrically simulated inertia, this dynamometer is able to reproduce a wide range of automated inertia values.

The Model 7200-A is specifically designed and fully equipped to meet UIC 548 specifications. All LINK railway dynamometers are UIC compliant and come standard with complete solutions for certification. The Model 7200-A features a tailstock that accommodates many different brake assembly fixtures, including an inverted, overhead Prony; a bearing layout that is identical to UIC standards; multiple duct designs that can be certified for UIC standard cooling rate; plus, a thru-shaft tailstock structure that is available for apply force over 50kN, featuring a single shaft with an independent wheel and tapered friction lock.

LINK has done all of the work to incorporate a precise UIC 548-compliant water spray system into the Model 7200-A. We deeply understand the water spray section parameters of UIC 548, and as such, have developed the most comprehensive system on the market. The water spray system features an 8-18° C temperature conditioning unit, adjustable water jet nozzles, and an integrated auto flow meter and valve in line with UIC specifications.

With automated inertia change, the Model 7200-A covers a multitude of capabilities and inertia values, offering many sought after features. LINK specializes in the integration of data, equipping our machines to function as both software and hardware. We push each element to their fullest potential, developing an intuitive and accurate UIC-compliant machine.















## **Key Benefits**

- Capable of large inertia rotating at high speeds
- Meets specifications of UIC 548
- Simulated inertia offers a wide range of inertia values
- LINK-owned DAS & telemetry system
- Included room layout
- RevData integration
- Local data storage, accessible for UIC audits
- Calibrated annually by LINK under our ISO 17025 quality certification



#### **Options**

- **Environmental control**
- **NVH** measurement system
- Thermal camera
- Video monitoring & playback system
- Spark detection
- Water spray system
- Reinforced foundation or spring feet
- Static torque
- **Emergency brake**
- Disc brake
- Tread brake
- Thru-shaft construction
- Thru-shaft tailstock structure for apply force over 50kN
- **Central Control Unit**

## **Key Features**

- Automatic engaged inertia discs
- Inverted tailstock accommodating a wide range of brake assembly fixtures for both disc brake & tread brake
- Large walk-in enclosure
- Inertia enclosure access panels for easy maintenance
- High speed motor
- Continuous rotation static torque
- Automatically controlled contact force
- Auto-adjusting caliper arm with linear displacement transducer for monitoring clearance
- Integrated force transducer array eliminating measurement chain uncertainty and third-party force measurement system
- Flush chamber floor, convenient for moving parts and ergonomic for operators
- Hydraulic bearing lubrication dissipates heat from the high-speed inertia disc



Specifications	
Software	ProLINK Software Based
Normal Signal Sampling Rate	2,000 Hz
Drive System	AC Motor; 600 kw
Max Rotational Speed	2700 rpm
Static Torque Drive System	AC motor; 56 kw continuous rotation (optional)
Speed Range	0.25-10 rpm, max torque : 15,000 Nm
Maximum Test Inertia (with electric simulation)	6,000 kgm2 (<1,600 rpm) 2,2500 kgm2 (<2,700 rpm)
Ambient Air Speed	0-120 km/h
Temperature Control Range	-40°C to +50°C
Humidity Control Range	10% - 90% RH (5-50°C)
Braking Apply System	Servo-pneumatic
Maximum Pressure	10 bar
Caliper Maximum Force	50 KN max
Tread Maximum Force	120 KN (max 60KN per side)
Maximum Torque	20,000 Nm
Range: Brake Disc Diameter	350 - 1050 mm
Range: Wheel Diameter	600 - 1250 mm



## www.linkeng.com



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