



Cleat Testing & High-Speed Uniformity



LINK





Cleat Testing & High Speed Uniformity

Product Overview

Link Engineering Company's Cleat and High-Speed Uniformity Testing machine showcases LINK's incomparable attention to detail and quality engineering. Cleat and HSU procedures represent the most demanding tests seen by a drum machine due to the exceptionally high stiffnesses required to achieve accurate data. Our build quality and operational performance have made LINK one of the only third-party suppliers of cleat testing in the United States to be approved by major modeling software producers.

One of the most important features of cleat and HSU testing is the natural frequency of the machine. LINK's system features robust design and construction techniques to maximize stiffness and minimize load paths. In addition, the moving tailstock is fitted with an automated locking mechanism that engages once the test load is reached. This mechanism allows automated load variation without manual operator intervention, eliminating the need to enter the test area during testing. The result is a safe, efficient operation of the machine with minimal operator involvement.

Key Features

- Kistler P530 piezoelectric instrumented spindle for measuring highly dynamic forces
- Automated tailstock locking mechanism
- Variety of test drum sizes (1.7m, 2.0m, 2.44m, and custom sizes)
- Drum velocities up to 160 kph (100 mph), higher speed options available
- Minimum operator intervention during tests
- Flexible spindle fixturing allows OEM wheels or lab wheels
- Electric planetary roller screw actuators provide efficient, clean, and powerful actuation without need for external hydraulic power units
- Customizable ProLINK graphical user interface with flexibility and intuitive test programming tools

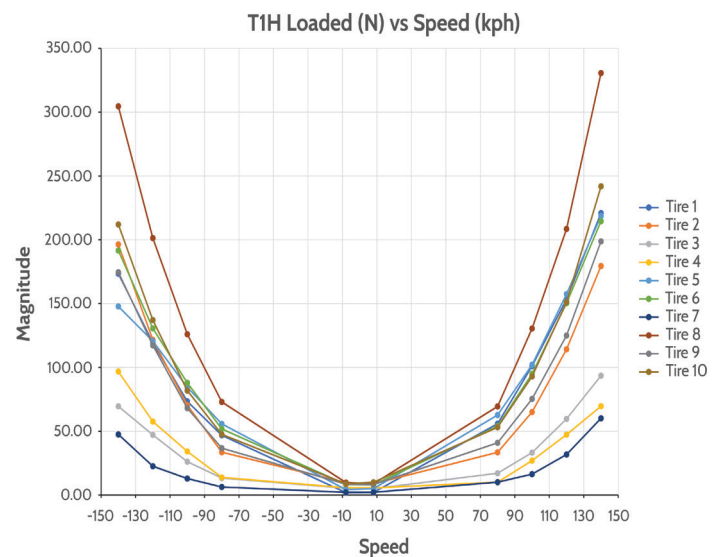
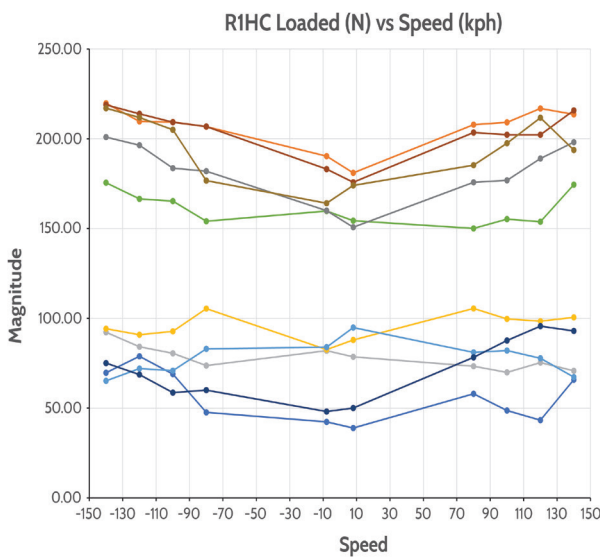


Applications

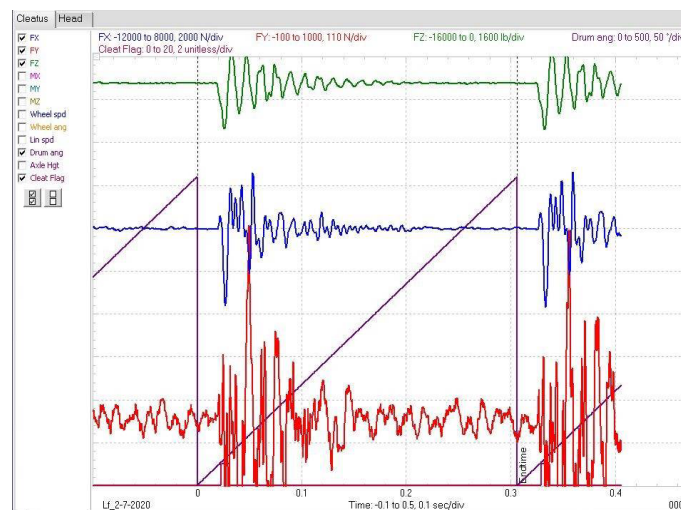
The Cleat and High-Speed Uniformity Testing machine comes ready with preprogrammed applications for both cleat and HSU tests. Preprogrammed tests allow testing according to standards such as SAE J2730, SAE J2731, and SAE J332. Additional features can also easily be added by the operator using Pro-LINK's fully functional software.

LINK provides several cleat profiles and can customize shapes and sizes as requested by the customer. Cleats include both transverse cleats (parallel with drum axis) and oblique (45°) orientations, which can be effortlessly interchanged between tests.

Sample High Speed Uniformity Output Curves



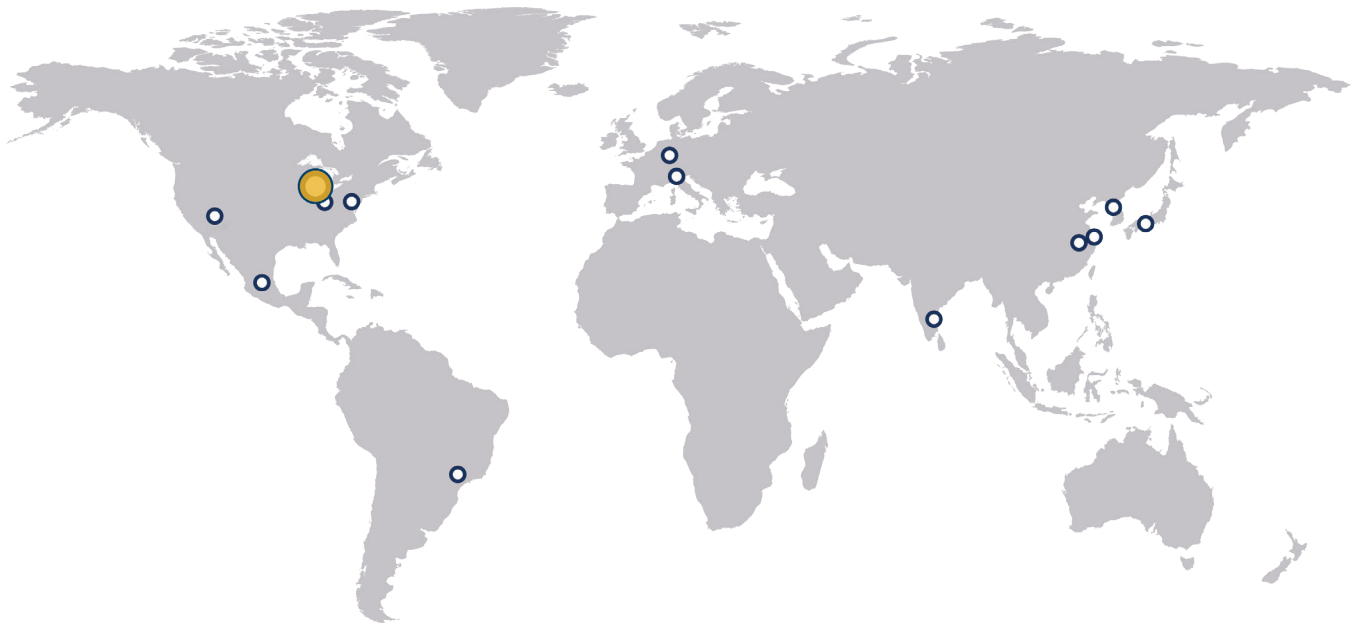
Sample Cleat Graph



SPECIFICATIONS

Tire Diameter Range	500 mm to 1000mm (19 in to 39)
Maximum Radial Load	30 kN (6,700 lbs)
Loading Mechanism	Planetary Roller Screw or Hydraulic options
Loading Mechanism Stroke	914mm (36 in)
Stroke Measurement	1000mm (39 in)
Stroke Transducer Accuracy	± 0.25 % FS
Stroke Measurement Accuracy	± 0.5 % FS
Maximum Lateral Load	20 kN (4,500 lbs)
Maximum Drum Speed	160 kph (100 mph)
Roadwheel Diameter	2.4 m (94.5 in)
Pressure Transducer Accuracy	± 0.10 % FS
Pressure Measurement Accuracy	± 0.20 % FS
Control System	ProLINK Windows-based software
Available Cleat Profiles	
Transverse Cleats	5 x 20, 10 x 20, 20 x 20 (mm). Others available.
Oblique Cleats	5 x 20, 10 x 20, 20 x 20 (mm). Others available.

www.linkeng.com



PROUDLY SERVING THESE INDUSTRIES

