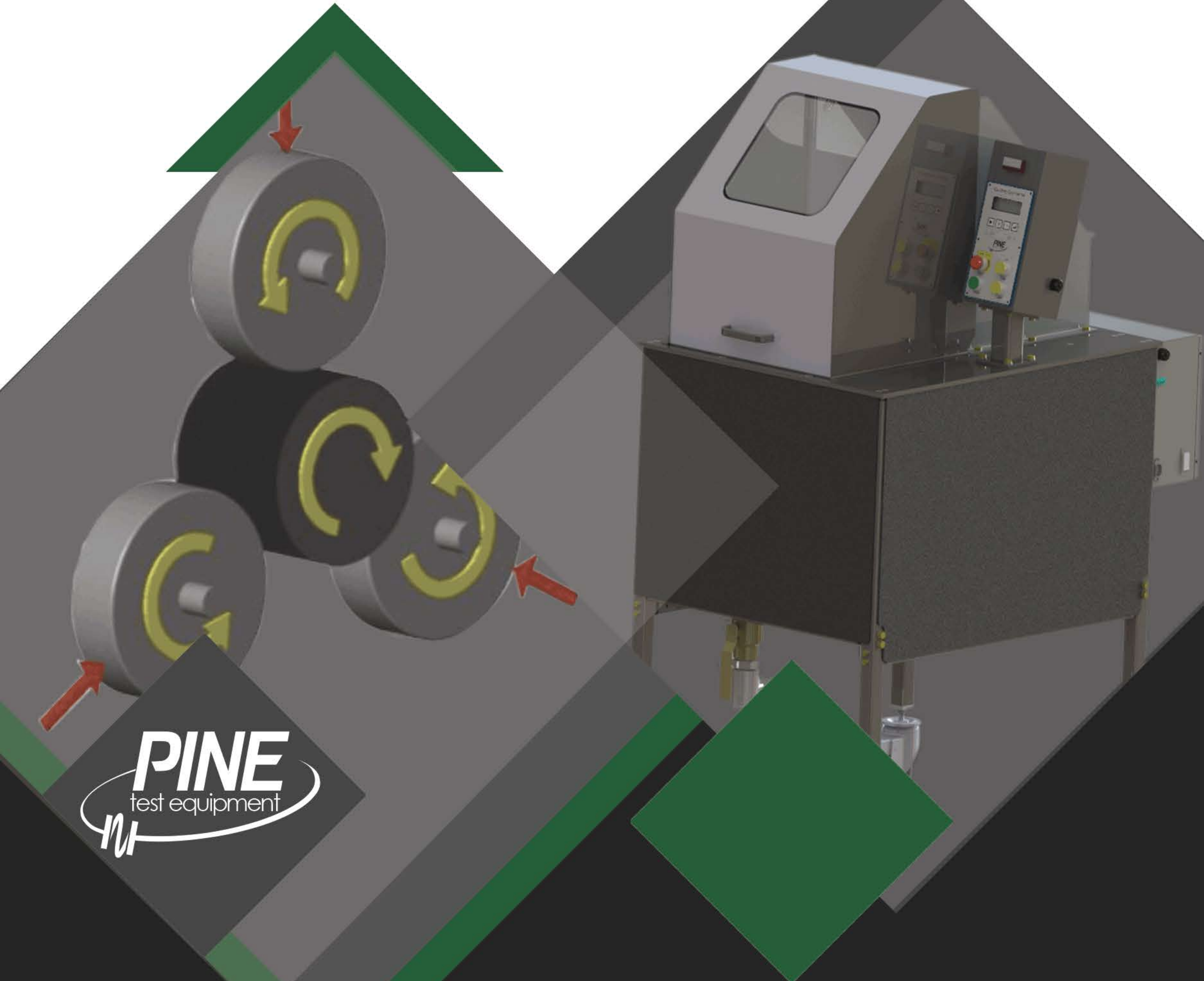# ROTARY WHEEL TESTER

PINE
test equipment

Real World Tests

With more than 10 years of real-world testing on the City of Los Angeles roads, the RWT produces consistent and repeatable data to determine rutting. Fast and simple, the RWT uses an unmodified standard gyratory specimen. It measures rut depth as a function of applied load cycles, applied load, loading rate, and temperature. This effectively allows for the calculation of Creep Slope, Stripping Slope, and the Stripping Inflection Point. The results are repeatable and have correlated well with field results for the City of Los Angeles. The test has been written into their specifications.

ROTARY WHEEL TESTER

PINE test equipment

Specifications

Power:
- 115 V, 13 A, 60 Hz
- 220 V, 8 A, 50/60 Hz

Dimensions: 28.5" W x 44" D x 65" H

Weight: 450 lbs

Load Rollers:
- 47 mm W x 229 mm OD
- Flat face, hardened stainless steel

Drive System: ¼ Hp motor

Waterbath: 15 gallons, ambient to 60°C (140°F)

Applied Force: 75 to 110 lbs

Loading Rate: 60 to 90 Load Cycles/Minute

Load Cycles: 300 to 30,000

Test Specimen: 150 mm D; 75-120 mm tall

Data:
- Rut Depth, Temperature & Loading Rate
- Output: 2-USB Ports, 1 RS232 Serial Port
- Internal storage for 20 tests

Features

- Small Footprint
- 10+ Years Real-World Application
- Test time <4 hours
- Uses a standard gyratory specimen
- Specimen modification not required

Tests

ASTM WK64299 for rutting and stripping

"What we liked most about the Pine system was that it's fast, easy to use and accurately predicts field performance of the HMA. In addition, it correlates with two other tests we use to evaluate HMA, the Modified Marshall Stability and Indirect Tensile Strength Tests.

We use the system daily in our Pavement Preservation Program, which has been instrumental in predicting pavement performance.

This simple and accurate test can represent millions of dollars in savings to any resurfacing program at the state or municipal government level."

~Richard Villacorta
City of LA, Roads and Highways Section Head