

Dynatest 6875 Runway Friction Tester

The Dynatest 6875 Runway Friction Tester is an accurate and repeatable, self-contained continuous friction measuring equipment (CFME) that provides continuous self-wetted coefficients of friction on airport runways.

The 6875 is designed for both maintenance and operational testing to evaluate surface friction changes due to weather, high usage, aging, and contaminants such as rubber buildup in touchdown zones. Operational friction testing can be performed during such adverse weather as heavy rain, ice, slush or snow.

Advantages

The 6875 is a fully instrumented pickup truck available in either two wheel or four wheel drive. It uses a Dynatest Two-Axis Force Transducer mounted on a retractable fifth wheel assembly mounted under the rear truck bed.

The test assembly provides real time vertical load and horizontal tractive force measurement. As a runway measurement system, it meets all the FAA and ICAO specifications for friction measuring devices.

System electronics include a laptop computer and inkjet printer.

User-friendly Windows XP (r) software allows the operator to control the entire test procedure including test speed, self wetting or dry testing, test method (FAA or ICAO), test type (manual or automatic) and annotate airfield test conditions for later reference.

Data is presented in either the ICAO or FAA format with all data being stored for further processing in user determined formats. Data stored includes the raw load and traction data, speed, water flow, optionally GPS coordinates and texture (MPD) data. Friction numbers can be printed at every foot, meter or other desired interval. Mu data and speed are visible real time during the tests on both the laptop computer and the dash mounted information display.

The system includes the industries largest 250 U.S. gallon (1000 litre) built in, aluminum, fully baffled water tank, positive displacement water pump and laminar flow water nozzle for self wetting testing of up to 36,000 ft.+ (11000 m+) of runway without refilling.

- References:
- 1) FAA Advisory 150/5200-30A
 - 2) FAA Advisory 150/5320-2C
 - 3) ICAO Standard 9137-AN/898 Part 2 Airport Services Manual
 - 4) ASTM Standards: E1551
 - 5) Calibration – ASTM E-556 Calibrating a Wheel force or Torque Transducer Using a Calibration Platform



Assembly

- ASTM E -1551 standard test tire or Aero tire
- Hydraulic raise/lower system
- Dynatest two-axis force transducer
- Laminar flow water nozzle

Specifications

Test Principle: **Continuous Slip Friction Testing**

Test Vehicle: **Pickup Truck with 2x4 or 4x4**

Fifth Wheel: **Dynatest Design**