# HYDROTIMER

## Measures Pavement Drainage Capability

***WHERE THE RUBBER MEETS THE ROAD***

**FRICTION CHARACTERISTICS** between tires and worn pavement surfaces deteriorate significantly whenever water is present. Fractional loss of contact increases anytime a tire is rolling on a wet surface, at any speed. The relationship between water film thickness and aggregate protrusion is critical to vehicular wet weather safety.

An **OUTFLOW METER** can be useful in proactive pavement evaluation, or investigating wet weather accident sites. This device measures the ability of the pavement to relieve water pressure from the face of vehicular tires, and thus indicates the degree of hydroplaning potential inherent to the pavement under wet conditions.

The **HYDROTIMER** is a self contained outflow meter. It is a hands-off operation which produces consistently accurate results regardless of the operator as long as the tests are performed in accordance with instructions.

## HOW IT WORKS

The base sealing ring simulates a tire footprint. A measured volume of water is released in the center of the sealing ring while an electronic timer indicates how long it takes the water to pass through texture voids in the pavement under the seal. This test also provides a graphic visual display of escaping water.

Base Sealing Ring (Bottom View)

**MACROTEXTURE** is effective for drainage only when surface voids are connected by water flow channels below the tire contact points. The Hydrotimer shows the effectiveness of the surface voids to channel water from under the tire footprint.

The **HYDRO**TIMER is a precision instrument calibrated to meet the ASTM International E 2380-05 Standard.

**www.hydrotimer.com**


Timer (Top View)