

# MODEL TO-040 & TO-041

## Liquid Limit Device



### Key features

- High quality design that ensures consistent results.
- Compliant with most relevant international standards.
- Motorized version with an integrated counter available.

The liquid limit is the level of water content at which soil changes from liquid to a plastic state. From an instrumentation perspective, the liquid limit is measured as the point where two halves of a soil sample flow together when jolted in a particular fashion.

The equipment consists of a brass cup, which is repeatedly dropped a distance of 1cm onto a hard rubber base.

#### Typical procedure

The soil sample is placed in the cup and a groove applied down the centre of the sample using the Casagrande

grooving tool and gage block. The cup is raised and allowed to fall a distance of 1cm onto a hard rubber base, at a rate of two drops per second, during which the groove closes up gradually as result of the impact. The number of drops required for the groove to close is recorded.

### APPLICABLE STANDARDS

- ASTM D4318; AASHTO T89, T90; BS 1377; IS 9259

### STANDARD FEATURES

- **TO-04102** Grooving tool and gage for BS
- **TO-04101** ASTM grooving tool

### ORDERING INFORMATION

#### BS Standards

- **TO-040-BS-01** Motorized Liquid Limit Device for 110V 60Hz
- **TO-040-BS-02** Motorized Liquid Limit Device for 220V 60Hz
- **TO-040-BS-03** Motorized Liquid Limit Device for 220V 50Hz
- **TO-041-BS** Manual Liquid Limit Device

#### ASTM Standards

- **TO-040-ASTM-01** Motorized Liquid Limit Device for 110V 60Hz
- **TO-040-ASTM-02** Motorized Liquid Limit Device for 220V 60Hz
- **TO-040-ASTM-03** Motorized Liquid Limit Device for 220V 50Hz
- **TO-041-ASTM** Manual Liquid Limit Device

### OPTIONAL ACCESSORIES

- **TO-04102** Grooving tool and gage for BS
- **TO-04101** ASTM grooving tool