

# FALL CONE APPARATUS

Model G-200

## APPLICATIONS

The Fall Cone apparatus provides a rapid, simple and accurate method for determining the undrained shear strength and the sensitivity of both undisturbed and remoulded clays. The relationship between the depth of penetration of the fall cone and the undrained shear strength has been determined after many years of research. The equipment is also used for determination of liquid limits (fineness number).

In the new model, designed by the Norwegian Geotechnical Institute, the fall cone is suspended by a permanent magnet, and the testing capacity covers a range of shear strengths from 0.01 to 20 t/m<sup>2</sup>.



## DESCRIPTION

This table shows the different pieces of the Fall Cone apparatus and their specifications.

## TECHNICAL SPECIFICATIONS OF CONES

| Penetration (mm) | Apex angle | Weight (g) | Undrained shear strength (kPa) |
|------------------|------------|------------|--------------------------------|
| 5-20             | 60°        | 10         | 1-0.063                        |
| 5-15             | 60°        | 60         | 6-0.67                         |
| 5-15             | 30°        | 100        | 40-4.5                         |
| 4-15             | 30°        | 400        | 250-18                         |

The diagram on the right shows the relation between cone tests, vane tests and unconfined tests. (Published by the Norwegian Geotechnical Institute).

The test is fully discussed in "New Approach to the Determination of the Shear Strength of Clay by the Fall Cone Test" by Sven Hansbo. Proc. Royal Swedish Geotechnical Institute Nov. 14, 1957.

## FEATURES

- Fast and accurate measurement
- Portable and easy to use

