



2800K1 GUELPH PERMEAMETER KIT

**The fastest way to get Field Soil Hydraulic Data in 3D,
the data of natural flow patterns**

Too often measurements of hydraulic properties have been confined to vertical parameters only, take hours of time and are not related in many ways to the reality of 3 dimensional flow in nature. The Guelph has been a break through in the science of soil permeability allowing for multiple depth, multiple head heights all in the same bore hole. Measurements are based on both vertical (gravity) and lateral (capillary) flow from a point source of known head height forming saturated flow patterns as would be the case in nature. The ideal instrument obtaining in-situ hydraulic conductivity data, when designing a Landfill Site for Monitoring Hazardous Waste Disposal or Hydrological Investigations in Drainage or Soil Erosion Studies. The model 2800K1 Guelph Permeameter is an easy to use instrument for quickly and accurately measuring in-situ hydraulic conductivity, generally less than 20 minutes. These quick measurements, at various depths will provide efficiency of irrigation and drainage, optimizing the availability of water for plants, improving the yield of crops and minimizing erosion. This instrument with accessory items 2805D Pressure Infiltrometer attachments can also be used to check clay liners in water and solution holding farms. Constructed of tough polycarbonate and acrylic, it has no items to corrode or get plugged over years of use. The stand included with the unit allows for easy setup and take down in a matter of minutes. The valve at the base of the reservoirs allows you to choose an inner (for very low flow soils) and larger outer reservoir capacity (for moderate and high flow soils). Measurement with the Guelph Permeameter may be made from 0 to 20-ft (610-cm) depth. Meeting the requirements of ASTM – 5126, our permeameters and infiltrometers are rugged field ready kits that are lightweight and durable, and can be operated by one person.

SPECIFICATIONS:

2800K1 GUELPH PERMEATEER KIT, complete in carrying case, with auger, filling bottle, dual reservoirs, hand vacuum pump, stand and instructions.
50" L X 17.5" W X 6" H (132.1x44.4x15.2 cm)
Weight 44 lbs. (19.9 kg)
Operating Range 10^{-2} cm/s to 10^{-6} cm/s.
Operating Depth 6"-15" (15-38 cm) (standard) or 6"-20" (15-610cm) (extended)
Volume.0.9 gal (3.5 liter)
Water container 2.9 gal (11 liter)



2805D PRESSURE INFILTRMETER ATTACHMENT

**The easy way to measure permeability in ponded
situations, soil liner capabilities**

The 2805D series provides a confining vertical element to assess the integrity of clay liners or other soil barriers to solution impoundments. If the specifications for a clay soil liner having a maximum flow value it's important to be able to test the actual constructed liner. With the 2805D and a 2800 Guelph you can do just that. The Pressure Infiltrometer comes in 10 cm (3.93") Diameter or 20 cm (7.87") Diameter version for your needs. Constructed of steel and nickel plated it's meant for years of use in the field. The attachment is driven into the liner and the Guelph attached and a reasonable head height established and the permeability determined for several head heights at the site. Done at several points within the liner or containment area the overall permeability is established using standard calculations.

SPECIFICATIONS

2805D10 PRESSURE INFILTRMETER ATTACHMENT,
10 cm diameter Length 10" L X 10" W X 10" H (25.4cm L X 25.4cm W X 25.4cm H)
Weight 4.4 lbs. (1.9 kgs)
2805D20 PRESSURE INFILTRMETER ATTACHMENT,
20 cm diameter Length 10" L X 10" W X 10" H (25.4cm L X 25.4cm W X 25.4cm H)
Weight 9.6 lbs. (4.3 kgs)

