METER

KSAT

Saturated Hydraulic Conductivity in the Lab

Avoid painstaking, complicated setups

Saturated hydraulic conductivity isn't an easy measurement to make, mostly because of the lack of a simple-to-use tool. Many people resort to cobbling together their own contraptions that are either complicated and finicky, or simple and crude. Neither has proven to be effective in terms of accuracy or convenience, which is why we developed the KSAT.

SATURATED HYDRAULIC CONDUCTIVITY—SIMPLIFIED

The ASTM D2434-compliant KSAT is the only easy-to-use automated setup for taking saturated hydraulic conductivity measurements in the lab. In its simplest form, it's an instrument that uses both the falling head (automated) and constant head (non-automated) methods on a soil core. Best of all, it's completely integrated, so you're also assured of software-controlled engineering that's fully tested.

FEATURES

- Accurate
- ASTM D2434 compliant
- Removes human error
- Directly calculates K_{sat}
- Temperature corrections
- Completely integrated package
- Small footprint
- Automated
- Uses both constant and falling head methods
- Easy-to-use software
- Compatible with HYPROP
- Wide range of conductivities
- Complies with DIN 19683-9 and DIN 18130-1

SPECS

Measurable K_{sat} Values (min)	0.01 cm/d (0.004 in/d)
Measurable K_{sat} Values (max)	5000 cm/d (196 in/d)
Hydraulic Conductivity (Ks) of the Porous Plate	K_s = 14000 cm/d (5512 in/d)
Pressure Sensor Accuracy	1 Pa (0.01 cm WC or 0.0001 psi)
Temperature Sensor Accuracy	0.2 °C (0.4 °F)
Typical statistical inaccuracy at constant environmental parameter and constant flow resistance of the soils	approx. 2% (in practice 10%)
Sampling Ring (also fits with HYPROP)	**Volume:** 250 ml (0.066 gal) **Height:** 50 mm (2 in) **Inside diameter:** 80 mm (3.15 in) **With separate adapter: 100 ml sampling rings possible**
GSA	View GSA details

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