

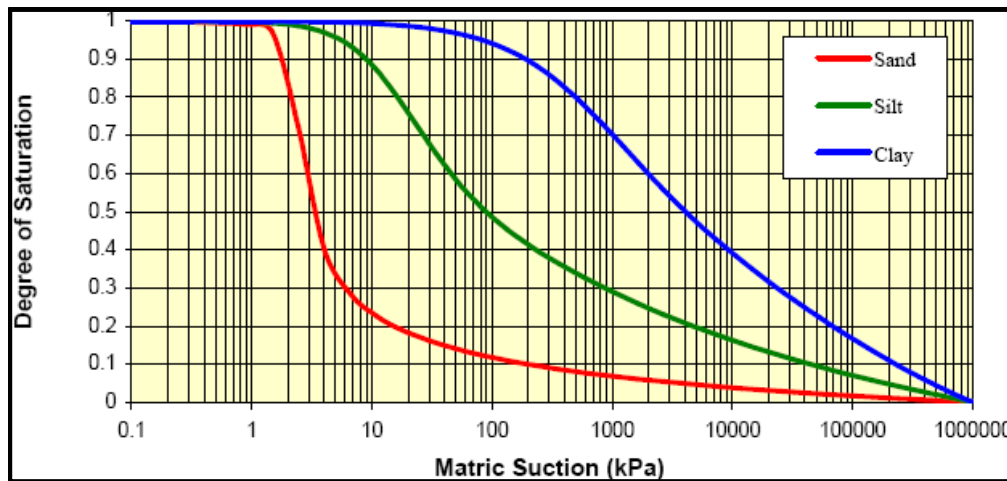
Soil-Water Characteristic Curve System

**EXCEEDING TODAY'S STANDARDS,
READY FOR TOMORROW'S
CHALLENGES**

- Pressure Panel with Dual Gauges and Regulators
- Applies In-Situ Overburden Pressure
- Produces Full Soil Water Characteristic Curve
 - Measures Desorption (Drying Curve)
 - Measures Adsorption (Wetting Curve)
- Manually Flush and Measure Diffused Air
 - Automation Upgrade Available



SWC-150



Model	Measurement of Water Content	Suction Pressure (kPa)	Simultaneous Specimen Testing
SWC-050	Gravimetric	500	3
SWC-150	Volumetric	1,500	1

System Requirements		
Air Pressure	SWC-050	5 BAR
	SWC-150	15 BAR (6 BAR and Pressure Booster)

PRODUCT ADVANTAGES

Precise Pressure Control at Any Range:

By integrating dual gauges and regulators, the SWC-150 provides more stable and accurate control of matric suction, which is key for producing reliable SWCC data. This ensures that even small pressure adjustments can be made accurately, which is crucial when working with low suctions.

Accurately Analyze Unsaturated Soil Behavior:

Unsaturated soils exhibit complex hydraulic and mechanical properties that influence their strength, permeability, and volume change characteristics. The SWC-150 is specifically designed to address these complexities with advanced features that improve accuracy, efficiency, and real-world applicability.

Flexible and Easy-to-Use Setup:

Made of stainless steel, the SWC-150 is durable and corrosion-resistant. Simple knobs and screws allow for quick specimen setup. It also includes interchangeable HAEV ceramic stones (100, 300, 500, and 1,500 kPa) for various soil types.

Comprehensive Volume Change & Water Content Monitoring:

It measures water volume changes continuously without the need to dismantle the chamber, saving time and reducing errors. It tracks soil deformation (axial compression or expansion) for accurate saturation calculations.

COMMONLY USED ACCESSORIES



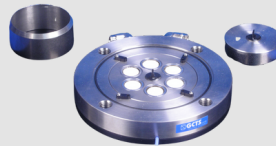
PRESSURE BOOSTER



TEMPERATURE STABILITY



ULTRASONIC VELOCITY MEASUREMENT SYSTEM



PLATENS WITH BENDER ELEMENT SENSORS



PNEUMATIC LOAD FRAME



AUTOMATIC FLUSHING



HANGING COLUMNS

DON'T SEE WHAT YOU NEED? LET OUR ENGINEERS SOLVE THAT

Soil-Water Characteristic Curve System

Apparatus	Conforming to ASTM Standard D6836
SWC System	ASTM D6836-16 - Standard Test Methods for Determination of the Soil Water Characteristic Curve for Desorption Using Hanging Column, Pressure Extractor, Chilled Mirror Hygrometer, or Centrifuge
Chamber	ASTM D6836-16: Section 6.2 - Pressure rated for the maximum pressure to be applied to the vessel during testing
Regulated Pressure Source	ASTM D6836-16: Section 6.3 - Pressure source and associated regulators are capable of maintaining desired pressure with accuracy of $\pm 0.25\%$ or better
Pressure Indicators	ASTM D6836-16: Section 6.4 - Applied suction in pressure chamber has accuracy of $\pm 0.25\%$ of the applied matric suction
Porous Plate	ASTM D6836-16: Section 6.5 - Porous plate fabricated from hydrophilic material with an air entry pressure greater than the maximum matric suction to be applied during testing
Capillary Tube	ASTM D6836-16: Section 6.7 - Resolution of volume expelled to 0.1 mL
Specimen Rings	ASTM D6836-16: Section 6.8 - Wall thickness sufficient to retain the soil without visible distortion. Stainless steel rings provided with system

FULLY AUTOMATIC TESTING OPTION



- **Automatically flush, reach equilibrium, and plot the full wetting or drying curves**
- **Easily run tests with the push of a button and get notified when it is complete**

Quote Now!

