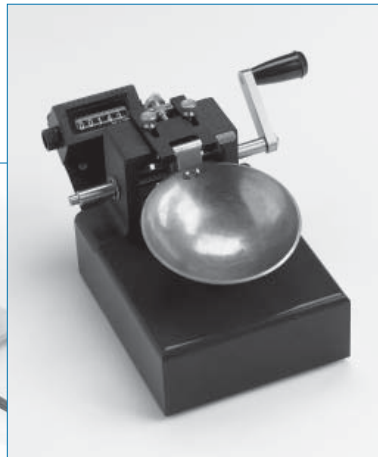
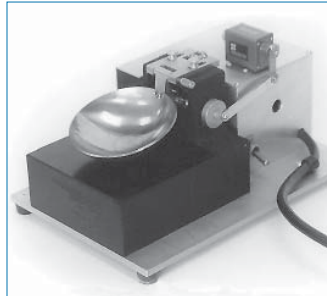


## Liquid Limit Device

**ASTM\* D 4318**  
**AASHTO\* T 89**

\* See Standards Buyer's Guide at  
[www.DGSI.info/3000](http://www.DGSI.info/3000).



Motorized Liquid Limit Device,  
S-272

Manual Liquid Limit Device, S-271

The Liquid Limit Device aids in determining the amount of water needed to liquefy a soil sample. DGSI offers two models of this device, a manual and motor driven model.

- Manual with hand crank for right or left hand use **without** drop counter, S-27100.
- Manual with hand crank for right or left hand use **with** drop counter, S-271.
- Motor driven with gear for proper operating speed, with automatic drop counter and switch, S-272.

Both models are made in accordance with the specifications of ASTM D 4318 and come with grooving tools as specified in the adjacent table.

## Liquid Limit Set



Liquid Limit Set, Model S-270

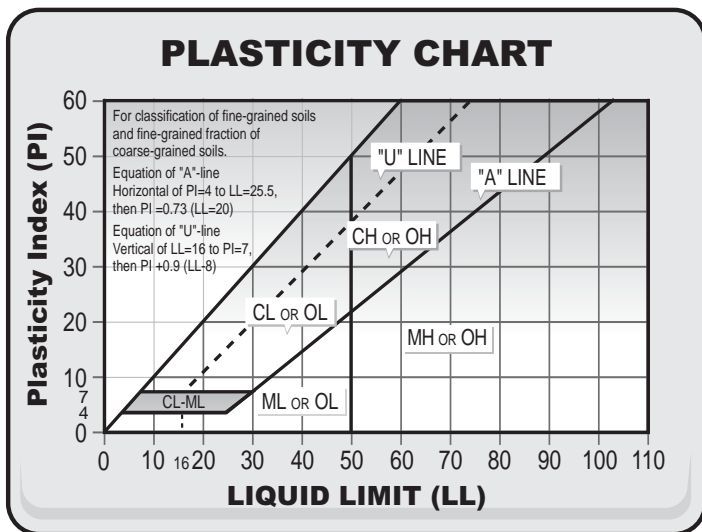
Liquid Limit Devices and Set		
S-271	Liquid Limit Device with counter w/ plastic flat grooving tool, pkg. of 10	9 lb
S-27100	Liquid Limit Device without counter w/ plastic flat grooving tool, pkg. of 10	9 lb
S-272	Liquid Limit Device, motor driven w/ flat grooving tool, 110 V, 60 Hz	14 lb
S-27210	Liquid Limit Device, motor driven w/ flat grooving tool, 220 V, 50 Hz	14 lb
S-270	Liquid Limit Set Includes:	14 lb
	S-271 Liquid Limit Device w/ counter	
	G-340 Plastic Dispensing Bottle	
	G-386 Evaporating Dish	
	G-29301 Flexible Spatula	
	G-36110 Graduated Cylinder, 100 ml	
	G-31510 Alum. Sample Boxes (12)	

### Related Items

S-274	Buchner Decant Assembly
S-276	Wedge Grooving Tool, steel, (AASHTO T-89)
S-275	Flat Grooving Tool, steel, w/ Measuring Block
S-27510	Flat Grooving Tool, Plastic, pack of 10
S-293	Dessicator
C-285	Durometer, Type-D, for testing hardness of the base of the Liquid Limit Devices for compliance with ASTM D 4318
C-286	Durometer, Type-A, for testing feet on LL Device
S-27150	Resiliency (Rebound) Tester
PCF-80040	Brass Sieve, 8-in, SS mesh #40

### Repair Parts

S-27140	Counter Assembly
S-273	Brass Cup with Holder and Follower
S-27101	Rubber feet for liquid Limit Device



**Vacuum Desiccator**

**ASTM D 4318**

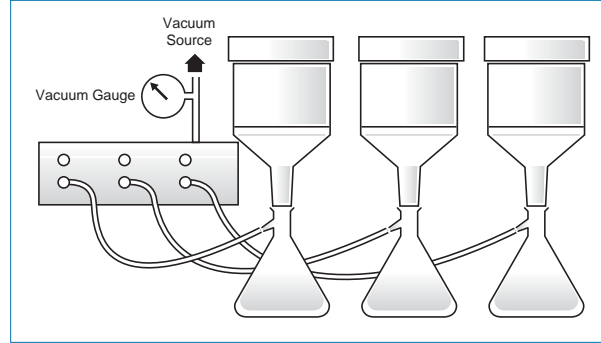
The S-274 consists of a 178 mm Buckner funnel and a plastic flask. Filter paper is included.

A source of vacuum — such as a vacuum pump or aspirator — is required.



S-274

S-274	Vacuum Desiccator
600246	Filter paper, coarse
S-27405	6-position Manifold for multiple S-274 (not shown)
<b>Accessories:</b>	
G-400	Vacuum pump
G-40911	Vacuum tubing, 1/4" ID x 1/2" OD



The use of a manifold allows multiple S-274 to be connected to one vacuum source. Connect up to six flasks with manifold S-27405 and tubing G-40911.

**Plastic Limit Set**

**ASTM\* D 4318 AASHTO\* T 90**

\* See Standards Buyer's Guide at [www.DGSI.info/3000](http://www.DGSI.info/3000).

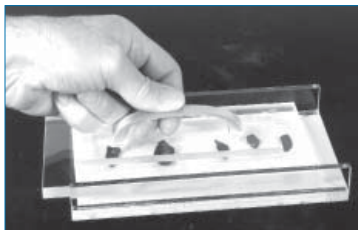
The DGSI Plastic Limit Set includes all the items needed, including the ground glass plate, 12 x 12 x 3/8 in (30.5 x 30.5 x 0.95 cm), and one side sand blasted, as described in the applicable standards.

S-277	Plastic Liquid Limit Set	13 lb
<b>Set Includes:</b>		
S-27710	Ground Glass Plate for Plastic Limit, 12 x 12 x 3/8 in	
G-340	Plastic Dispensing Bottle	
G-386	Evaporating Dish	
G-29301	Flexible Spatula	
G-36025	Graduated Cylinder, 25 ml	
G-315	Aluminum Sample Boxes (12)	
<b>Related Items:</b>		
S-293	Dessicator	
S-278	Plastic Limit Roller	

**Plastic Limit Roller**

**ASTM D 4318 AASHTO T 90**

Top and bottom roller plates are separated by 1/8 in (3.2 mm) side rails. Contact surfaces of the plates are covered by sheets of a special adhesive-backed absorbent paper that will not add fiber to the soil samples. Up to five soil samples can be rolled simultaneously. Made from rigid 3/16 in (4.8 mm) acrylic. It measures 8 x 4.5 x 1 1/4 in (20.3 x 11.4 x 3.2 cm), and is supplied with 50 sheets of adhesive paper.



S-278

S-278	Plastic Limit Roller	4.0 lb
S-27801	Adhesive Paper, pad of 50 sheets	1.0 lb

**Shrinkage Limit (Mercury Method)**

**ASTM\* D 427 AASHTO\* T 92**

\* See Standards Buyer's Guide at [www.DGSI.info/3000](http://www.DGSI.info/3000).

The Shrinkage Limit apparatus is described in detail in the applicable ASTM and AASHTO standards. The Shrinkage Limit Set includes all the items needed.



S-295

**Caution:** Mercury is a hazardous substance which can cause serious health effects from prolonged inhalation of the vapor or contact with the skin. Take proper precautions when using, including gloves, containment and ventilation in the use area.

S-295	Shrinkage Limit Set (Mercury Method)	6 lb
<b>Set Includes:</b>		
G-387	Evaporating Dish, 5-7/8 in dia.	
S-29510	Monel Shrinkage Dish	
S-29520	Crystallizing Dish	
S-29530	Shrinkage Prong Plate	
G-36025	Graduated Cylinder, 25 ml	
<b>Related Items:</b>		
S-29540	Mercury, (3) 1 lb Poly Flasks w/ dispensing tip	
S-29599	Mercury Spill Cleanup Kit	

**Mercury Spill Kit**

Mercury Spill Kit provides a safe and easy way to clean up accidental spills in the laboratory. Includes instructions, dust pan, scraper, safety glasses, gloves, absorbent sponges, absorbent powder, and Ziploc bag.



S-29599

S-29599	Mercury Spill Clean Up Kit
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