

SLOPE METER, INC.

Manufacturers of Instruments That
“Help You Make The Grade”

For Over 50 Years

ABOUT THE PRODUCT

- Durable and Rugged
- Easily Read
- Wide Range of Applications
- For Contractors and Engineers
- Economically Priced
- Next Day Delivery
- Used Worldwide

APPLICATION



Maintenance & Finishing



Crown Work



Slope Work



Paving (Photo courtesy of Cedarapids, Inc.)

A **SLOPE METER** JUST RIGHT FOR EVERY USE

SLOPE-METER NO. 1



Used for all slope and crown construction. The figures represent slope. For instance, when the indicator ball is over number "8", it indicates an "8-to-1" slope. The small triangles represent degrees, for reference purposes. Slope-Meter No. 1 is widely used on motorgraders, bull-dozers and similar equipment.

SLOPE-METER NO. 2



Slope-Meter No. 2 is calibrated in hundred .01-.16. A major use is on crown work, but it is also used to determine "percent of grade". It aids the operator and speeds work on motor graders, asphalt pavers, wheel ditchers, tunneling machines and other equipment where exacting specifications are required. It is installed at the factory by three leading asphalt paver manufacturers.

SLOPE-METER NO. 2 NS



Slope-Meter No. 2 NS has a larger indicator tube and larger numerical scale for easier reading with a quick glance. It is desirable for applications where the Slope-Meter is mounted at some distance from the operator. It is largely used for the same purposes and on the same types of equipment as Slope-Meter No. 2.

SAFE "CURVE SPEED" INDICATOR



The safe driving speed for any curve is quickly & accurately determined with the Safe "Curve-Speed" Indicator mounted in the engineer's car. The scale reads zero when the car is level, and shows "tilt" up to 25° each side. The scale is red beyond 10° each way, to denote danger zones. Designed by Slope-Meter to the specifications of the Minnesota Highway Dept. Traffic Division. Used nationwide by highway & traffic engineers.

STEEP SLOPE-METER



The Steep Slope-Meter is calibrated in percentage of grade from 0 to 50%. A major use for this meter is in all areas where a steeper slope reading is needed. This product works well on bulldozers and similar equipment.



Here's the Original

The original circular Slope-Meter model was mechanically constructed with a 4-to-1 gear ratio. It was cumbersome and quite costly to build, but it worked!

SLOPE METER Has "Made The Grade" **For Over 50 Years**

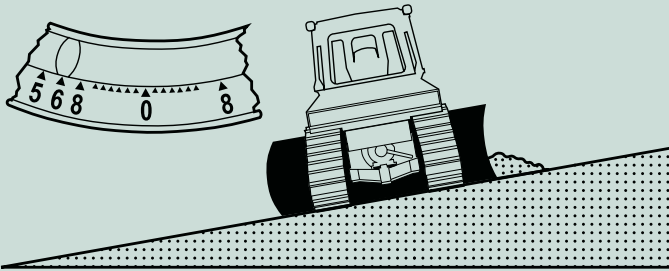
It is used nationwide and in many foreign countries. It is mounted on the dash in the operator's view and gives fast, accurate readings for any slope. The Slope-Meter enables the operator to construct true slopes without waves, and do night work just as accurately as in daylight. The hermetically sealed Slope-Meter is not affected by rain, dust snow or sleet.

FASTER, BETTER WORK ON CROWNS AND SLOPES

With Motor Grader

A motor grader working on a "6-to-1" back slope may be used either to true or finish the slope, or to spread topsoil in a uniform layer.

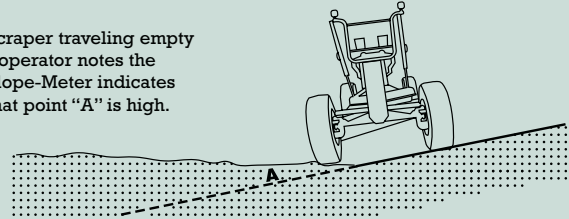
The Slope-Meter will indicate true slope as long as the blade clears the entire surface on which the back wheels travel. When the windrow is between the back wheels, or when the back wheels are rolling on the windrow, a Slope-Meter mounted in the cab or on the frame will not be able to indicate the slope the blade is cutting.



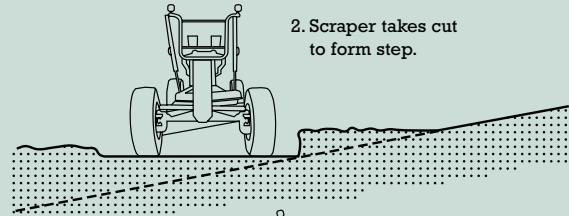
Scraper Cutting Back Slopes

The Slope-Meter can be mounted any convenient place on a scraper, that maintains a fixed "side-tilt" relationship with the cutting edge.

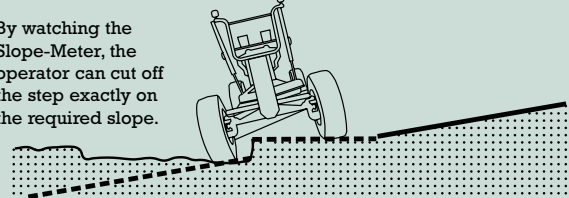
1. Scraper traveling empty - operator notes the Slope-Meter indicates that point "A" is high.



2. Scraper takes cut to form step.



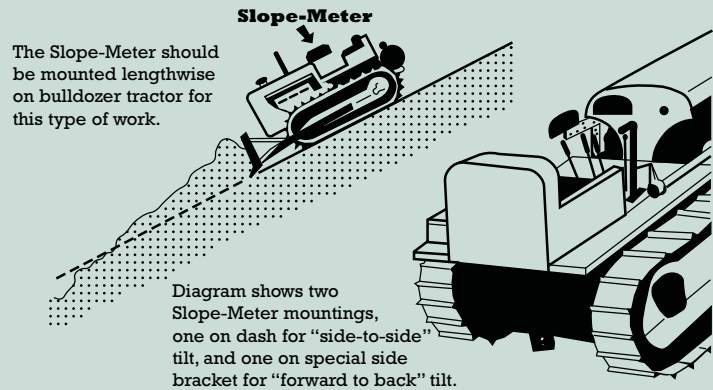
3. By watching the Slope-Meter, the operator can cut off the step exactly on the required slope.



ACCURATE BACK SLOPES - FINISHED QUICKER

Back slopes as well as shoulder slopes can easily and accurately be finished with Slope-Meter equipped scrapers.

Large scrapers take a cut down fast. With a Slope-Meter to guide him, the operator will know where to cut, spread or finish all slopes. You will never be docked for leaving dirt on a long slope. The Slope-Meter reduces operator fatigue and aids him in maintaining quality work in overtime, etc.



The Slope-Meter should be mounted lengthwise on bulldozer tractor for this type of work.

Diagram shows two Slope-Meter mountings, one on dash for "side-to-side" tilt, and one on special side bracket for "forward to back" tilt.

CONSTRUCTING HIGHWAY CROWNS

The Slope-Meter helps to produce uniform crown slopes - low and flat spots are eliminated. This means water cannot settle in low spots and cause trouble.

READINGS FOR SLOPE-METER NO. 1
For road widths, centerline to shoulder slope

	5" crown	6" crown	7" crown
15 feet	1-1/2	2	2-1/4
16 feet	1-1/2	1-3/4	2
18 feet	1-1/4	1-1/2	2
20 feet	1	1-1/2	1-3/4



18"

6"

EXAMPLE: For a 20-foot road width, center line to shoulder slope, with 7" crown (see table) the Slope-Meter indicator ball should be 1-3/4 triangle points (right or left) from center zero mark.



Equipment Leveling and Signing Curves

APPLICATION

When Slope-Meter is correctly installed on a motor grader or other machines, it will accurately and continuously indicate the slope of the ground being graded. This accurate indication of slopes between surveyor's stakes is very helpful, as it enables operators to construct true slopes without waves.

With a Slope-Meter on each of your machines, you can be sure you will not move more yards of dirt than you will be paid for. Night work can be done just as accurately as in daylight. All your work is speeded up when Slope-Meters are on the job. Rain, dust, snow or sleet do not affect the accuracy of the hermetically sealed Slope-Meter.

SPECIFICATION

Range: Degrees 0-28°
Slope 2-24 to 1
Grade 0-12 or 50%

Accuracy: Resolution 1 Degree

Response: 1 Sec.

Material: Aluminum Casting

Size: No. 2NS • 3.5 x 8.5 x 1



No. 2 Reg. • 2.5 x 7.5 x 1



Mounting: Aluminum Backplate

Weight: 1.5 lbs.

No. 1 • 3.5 x 8.5 x 1



No. SCS1 • 3.5 x 8.5 x 1



No. SSM • 3.5 x 8.5 x 1



**SLOPE
METER, INC.**
6066 Shingle Creek Parkway
Box 1172
Minneapolis, MN 55430
(763) 572-0336 (800) 521-7719
Fax: (763) 572-1081
E-mail: grade@slopemeter.com
www.slopemeter.com