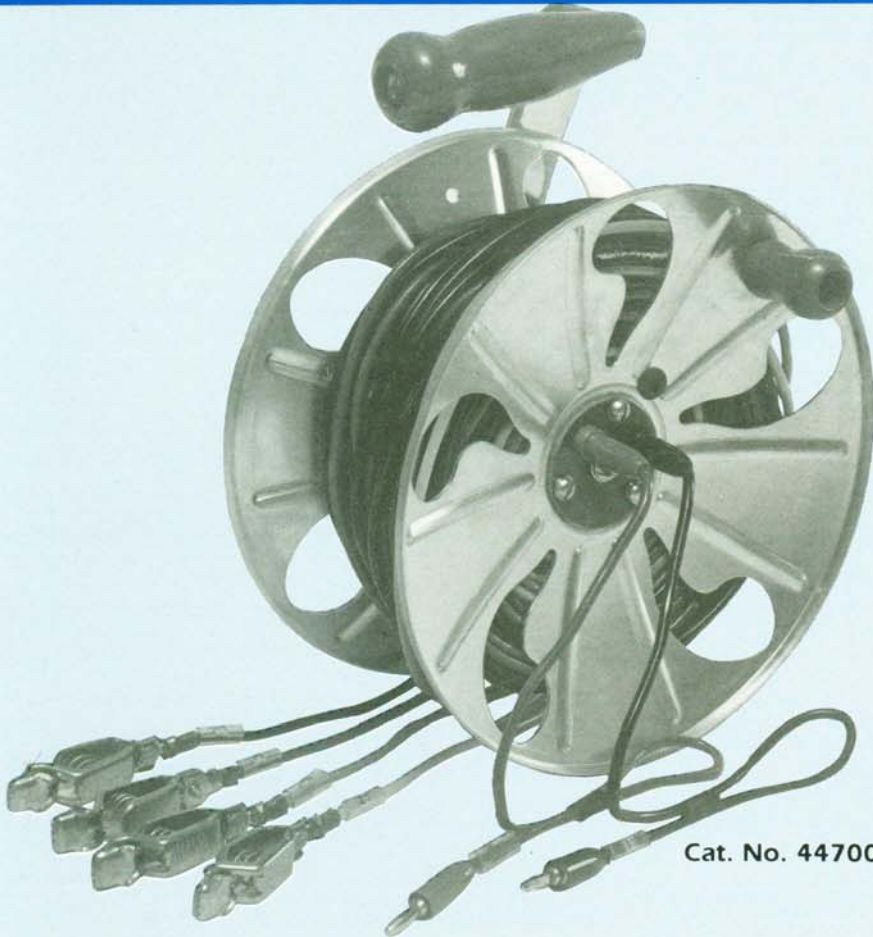
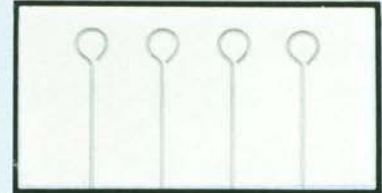


CORROSION INSTRUMENTS & ENGINEERING



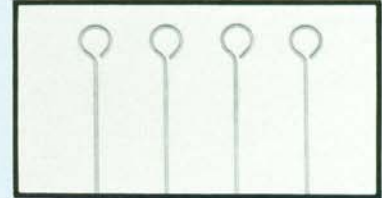
Cat. No. 44700

SOIL PINS



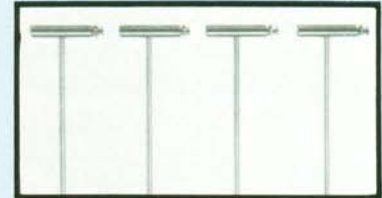
Cat. No. 44707

1/4" dia. x 20" long Stainless Steel



Cat. No. 44701

1/4" dia. x 20" long Copper



Cat. No. 44710

5/16" dia. x 30" long Stainless Steel

4 PIN TEST SET & SOIL PINS

- ADVANTAGES:**
- FOR IN-THE-FIELD TESTING OF SOIL RESISTIVITY
 - MAKES SITE SOIL RESISTIVITY TESTING QUICK AND EASY
 - 1 TO 20 FOOT DEPTH MEASUREMENTS ATTAINABLE

The M.C. MILLER 4 Pin Test Set has been designed and engineered to be used in conjunction with any one of the MCM's multi-combination family of meters, the Nilsson 400 soil resistance meter or similar four terminal soil test instruments.

The test setup utilizes the mechanics of the "FOUR ELECTRODE METHOD," which was developed by the National Bureau of Standards and commonly known as the WENNER 4 PIN METHOD. The resultant resistivity is the average resistivity of the soil (electrolyte) to a depth equal to the spacing between adjacent electrodes (soil pins). The maximum depth (pin spacing) of this standard test set has been designed for 20 feet, which is recommended for standard survey.

The Soil Resistivity Reel is made up of four (4) separate, color coded, lead wires of: 5 foot (yellow), 25 foot (orange), 45 foot (red) and 65 foot (black) lengths. Lead wires are harnessed together and mounted on a lightweight handheld reel. Wire ends at the reel are affixed to female banana plug jacks (mounted in the center hub area) while the opposite ends are terminated with Mueller 27-C clips. Two foot, color coded, jumper leads with banana plug ends are supplied with the soil resistivity reel to facilitate connection between the REEL and your test meter.

All lead wires and jumpers are made of our own No. 16 AWG, 105 strand copper wire with PVC insulation.

In addition to our color coding of the wires, all ends are clearly labeled as to their connection point.

SOIL RESISTIVITY CALCULATIONS

1. Using any one of the MCM meters or equivalent meter setup

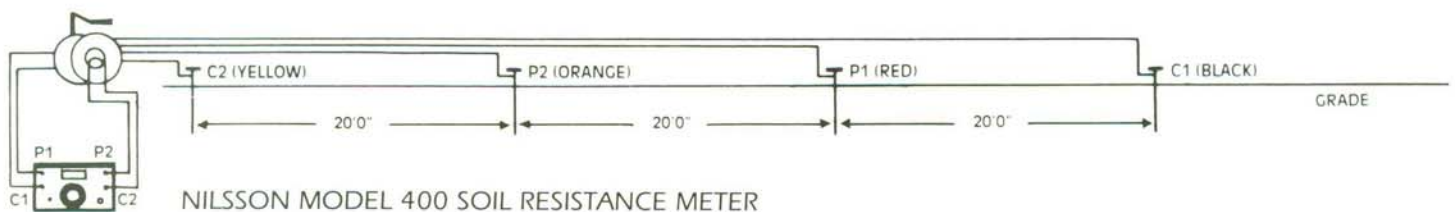
$$\text{SOIL RESISTIVITY } (\rho) = \frac{\Delta V (\text{Change In Voltage})}{\Delta I (\text{Change In Current})} \times \text{Pin Spacing In Feet} \times 191.51$$

2. Using the NILSSON 400 soil resistance meter or equivalent

$$\text{SOIL RESISTIVITY } (\rho) = \text{Dial Reading} \times \text{Multiplier Range} \times \text{Pin Spacing In Feet} \times 191.51$$

TYPICAL SETUP FOR MEASURING SOIL RESISTANCE AT 20' DEPTH

MCM 4-PIN SOIL RESISTANCE TEST REEL



 송암엔지니어링(주)

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