

## CHLORIDE ION PENETRATION

### STANDARD

ASTM C1202, AASHTO T277

### 58-E0052

#### Chloride penetration meter.

110-230 V, 50-60 Hz, 1 ph.



58-E0052 complete set

### General description and specifications

This test method allows evaluation of chloride permeability characteristics of concrete. The test is performed to monitor the amount of electrical current passing through concrete cores or cylinders. A potential difference is maintained across the ends of the specimen, one of which is the negative end and is immersed in a sodium chloride solution, the other (positive end) in a sodium hydroxide solution. The total charge passed, in Coulombs, that is related to the resistance of the specimen to chloride ion penetration is measured.

**Large graphic display:** 256x128 pixel

**Measuring technique:** closed loop maintained 60 V DC potential difference, passed current measured and integrated relative to time

**Accuracy:**  $\pm 0.1$  V,  $\pm 1$  mA

#### Size

- 460x320x150 mm approx. (instrument)

- 165x155x50 mm approx. (cells)

**Weight approx.:** 11.5 kg

## HALF-CELL POTENTIAL TEST

### STANDARD

BS 1881:201, ASTM C876, UNI 9535

### 58-E0065

#### Half-cell digital corrosion meter

### General description and specifications

Corrosion of steel is an electrochemical process involving anodic (corroding) and cathodic (passive) areas of the metal. By measuring concrete - surface electrical potentials relative to a standard reference electrode on a predetermined grid, the presence and location of corrosion and its probable future performance may be assessed. It is possible, by regular measurements, to monitor the behaviour of new and relatively new structures and thus minimise maintenance costs.

**Half-cell:** silver/silver chloride refillable probe (stable and low corrosive)

**Measurements automatically converted and displayed as copper/copper sulphate equivalent potentials**

#### Display:

3½ digit plus sign via 12.5 mm LCD

**Range/Resolution:** +1999 mV / +1 mV

**Battery operated:** giving typically 1000 hours use with low battery indication

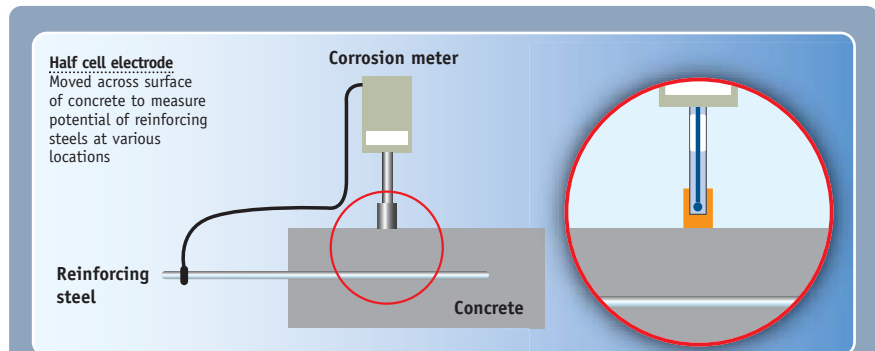
#### Automatic on/off action

**Dimensions:** 400x270x130 mm

**Total weight:** 2 kg approx.

### Spare parts

58-E0065/1 Electrolyte refill



- Rapid response and stabilisation
- Expandable probe holder for remote surveying
- Accurate estimation of corrosion activity



58-E0065 complete set