

## RAPID CHLORIDE PERMEABILITY OF CONCRETE

**C378N**

### CHLORIDE ION PENETRATION METER

STANDARDS: ASTM C1202, ASTM C1760 | AASHTO T277

Laboratory test device for the measurement of the resistance of the concrete against the penetration of chloride.

The measurement data can be used to estimate the chloride diffusion coefficient of concrete for the service life prediction and design of concrete structures as well as the durability-based quality control of concrete.


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#### MAIN FEATURES

The following are unique features of this device:

- Stand alone operation.
- Easy-to-assemble.
- Accurate ( $\pm 0.1$  mA)
- Flexible logging interval time (1 to 10 min)
- Automatic temperature control system.
- Four measurement channels.
- User-friendly PC software.
- Customizable setup.
- USB connection to computer.

#### Applications:

The device can be used for testing the durability of concrete exposed to chloride-contaminated environment including:

- Concrete ability to resist chloride ion penetration (ASTM C1202, AASHTO T277).
- Bulk electrical conductivity of concrete (ASTM C1760).
- Performance-based quality control of concrete.
- Estimation of chloride diffusion coefficient of concrete.
- Estimation of chloride migration coefficient of concrete
- Service life design of concrete structures.
- Estimation of the remaining life of concrete structures.

#### Compliance:

- The only instrument in the market that meets the specifications of ASTM and AASHTO Standard for sample cell.
  - Electrical safety certification mark for use in concrete laboratories.
- Supplied complete with set of test cells, temperature sensors, test cables, power cord, USB cable, communication software, user manual.

The METER is supplied complete with VACUUM PUMP + DESSICATOR and accessories to saturate the specimen with water (required by ASTM C1202).

#### Specifications:

Type	Value
Applied voltage (ASTM C1202 test)	60 $\pm$ 0.1 V
Range of current measurement	0 - 500 mA $\pm$ 0.1, $\pm$ 0.2%
Temperature measurement range	0 - 100 $\pm$ 1°C
Operating temperature	15°C - 45°C
Operating humidity	30% - 80%
Measurement channel	4
Short circuit protection system	Yes
Measurement display on LCD	Yes
Remaining time display on LCD	Yes
LCD display area	65 x 33 mm
Operating voltage:	100-240V 50-60Hz 1ph
Dimensions of device	280x240x104 mm
Weight	2 kg