Product Name : Rapid Chloride Permeability Tester	**Product Code :** CHINAELABC2650065

Description :

Rapid Chloride Permeability Tester

Technical Specification :

Rapid Chloride Permeability Test equipment (RCPT) has multi-port testing facilities is designed to test concrete samples of 100mm diameter with 50mm thickness for concrete ion permeability test.
All the easy connections are ready to use chloride ion permeability test instrument.
Customer can test up to three samples at a time as per ASTM C1202 – electrical indication of concrete's ability to resist chloride ion penetration, AASHTO T 277 – electrical indication of concrete's ability to resist chloride ion penetration (Rapid Chloride Permeability Test) and ASTM C 1760 – standard test method for bulk electrical conductivity of hardened concrete.

All the cells are provided with connecting rubber gasket and washers for achieving leak proof.
Corrosion of reinforcing steel due to chloride ingress is one of the most common environmental attacks that lead to the deterioration of concrete structures.
Concrete contains flying ash or silica fumes are less permeability are less permeable to deleterious elements and thus are more durable than conventional concretes.
Chlorides penetrate crack-free concrete by number of mechanisms: capillary absorption, hydrostatic pressure, diffusion, and evaporative transport.
Mainly diffusion occurs when the concentration of chloride on the outside of the concrete member is greater than on the inside.
This results in chloride ions moving through the concrete to the level of the rebar.
Corrosion-related damage to bridge deck overlays, parking garages, marine structures, and manufacturing plants results huge amount annually on repairs, this durability problem has received wide spread attention in recent years because of its frequent occurrence and the associated high cost of repairs.

When this occurs in combination with wetting and drying cycles and in the presence of oxygen, conditions are right for reinforcement corrosion.
The rate of chloride ion ingress into concrete is primarily dependent on the internal pore structure.