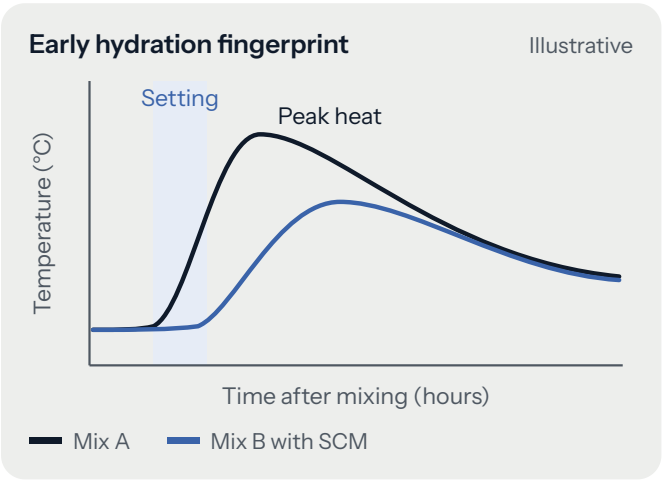
Use case · Concrete labs, QA/QC and R&D

Make your concrete lab smart.

The same sensors and software turn a cement and concrete lab into a continuous data source. Hydration, mix behaviour and strength are recorded automatically and non-destructively.





What the lab measures

- ✓ **Initial and final setting time**
- ✓ **Heat of hydration and temperature profile**
- ✓ **Hydration kinetics**
- ✓ **Early-age strength gain**

Early hydration by thermal measurement per ASTM C1753.

1 Characterise cement

- Setting time and heat of hydration
- Hydration kinetics over time
- Compare cements and SCMs

2 Characterise the mix

- Optimise mixes for early strength
- Compare curing conditions
- Evaluate admixture and cement combinations

3 Monitor strength live

- Track early-age strength continuously
- Cast and crush fewer cubes
- Data for demoulding, loading and dispatch

4 Data-driven QC

- Spot deviations early and correct them
- Check batch-to-batch consistency
- Keep complete digital records

Less effort
Fewer cubes to cast, cure and crush.

Cleaner lab
Smaller curing tanks, less broken-cube waste.

Greener testing
Less water, energy and material.

Better decisions
Continuous data, not samples.

Ideal for QA/QC and R&D labs · Mix designers and consultants · Researchers and faculty · Infrastructure and industrial projects

Standards referenced

ASTM C1074 USA	**ASTM C1753** USA, lab	**ASTM C918** USA	**ASTM C1064** USA	**ACI 228.1R** USA	**EN 12390-3** Europe

C-PROBE TECHNOLOGIES
Concreting with Confidence
C-Probe Technologies Private Limited · C/O GIZMOIOT INNOVATIONS LLP, Bavdhan, Pune, Maharashtra
+91 78880 03666 · +91 88009 31666 · +91 77740 58927
info@cprobe.in · cprobe.in

Measure maturity.
Decide on data.

cprobe.in