



Thermal Evaluation of Mass Pours

TEMP-Q

Evaluation of concrete quality in various locations of mass pours as the curing cement generates heat.

TEMP-Q measures temperatures in various locations of a mass concrete pour, as the curing cement generates heat.

The TEMP-Q system includes a TEMP-Q data logger, a charger, and the TEMP-S analysis software. Thermal Wire® cables are fitted with custom-spaced temperature sensors and are sold separately.

The cable is cast into the concrete, often tied to the reinforcement. Each Thermal Wire cable includes one or more sensors depending on the ideal configuration for the project, and is connected to a single external TEMP-Q data logger.

The external, two-channel TEMP-Q data logger reads and stores temperature measurements and is powered by a rechargeable battery. There are no batteries on the sensors themselves.

Temperature data is uploaded every 15 minutes from the TEMP-Q data logger to the Cloud for quick observation and reporting by the TEMP-S software. An automatic alert can be sent when user-defined parameters are exceeded.

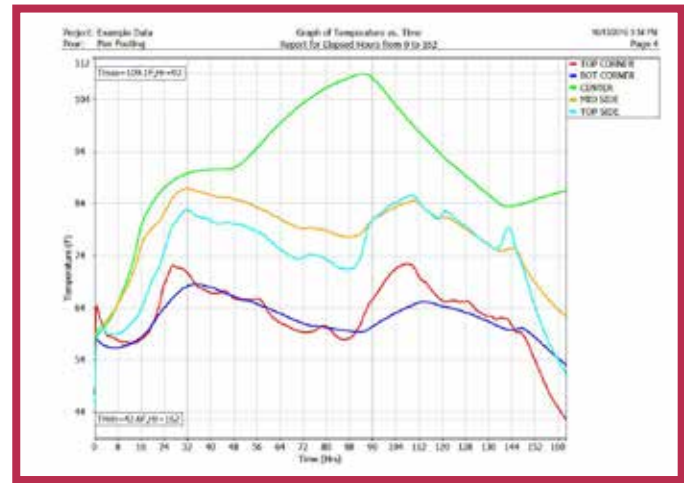


TEMP-S Software

TEMP-S displays measured temperatures versus time in graphical and tabular formats. It also displays maximum and minimum temperatures, as well as the maximum differentials (ΔT), along with allowable limits input by the user.

TEMP-S may calculate concrete maturity based on measured temperatures, and helps the user estimate concrete strength based on a user-determined strength-maturity relationship.

Once analysis is complete, the program outputs a fully customizable project report with just a few clicks.



TEMP Specifications

TEMP Data Logger

- 2-channels
- Size: 165 x 80 x 19 mm
- Weight: 766 g
- Temperature Range: -20 to 65 degrees Celsius operating; -40 to 85 degrees Celsius storage
- Contains 3 internal Li-ion battery or 1.92 gram ELC
- Sampling frequency: user programmable, defaulted to once every 15 minutes
- Water resistant

Thermal Wire® Cables

- Standard configuration of 3 m (10 ft), 4.5 m (15 ft) or 6 m (20 ft) of cable
- Custom wires available
- Sensor type: digital
- Sensor operating temperature up to 105 degrees Celsius
- Technical manual included



Thermal Wire Cables: U.S. Patent 8,382,369

Inspection Instruments, Inc.