



Inspection Instruments, Inc.



TEMP

Thermal Evaluation of Mass Pours

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

The TEMP system includes a main unit, Thermal Wire® cables, TEMP data loggers and the TEMP-S analysis software.

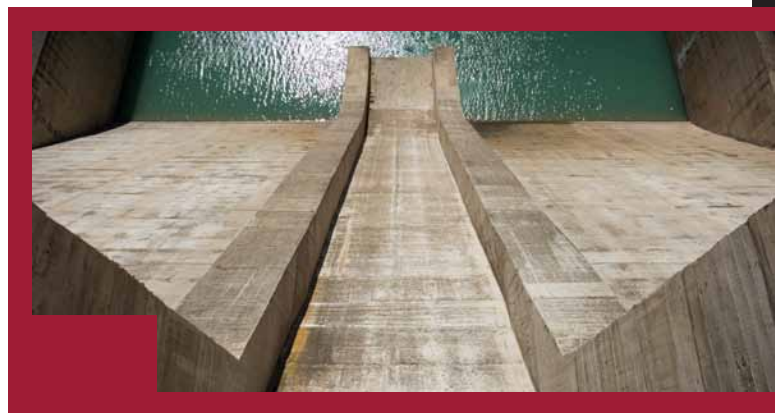
Thermal Wire cables are fitted with custom-spaced temperature sensors. The cable is cast into the concrete, often tied to the reinforcement. Each Thermal Wire cable includes one or more sensors depending on the ideal configuration for the project, and is connected to a single external TEMP data logger.

The external TEMP data loggers read and store temperature measurements and are powered by a rechargeable battery that lasts 28 days. There are no batteries on the sensors themselves. Replacing a TEMP data logger that is running on a low battery with one that is fully charged takes seconds, and makes it possible to monitor and temperature data indefinitely.

Temperature data is transferred from the TEMP data loggers to the TEMP main unit for quick observation, then from the TEMP main unit to a computer for analysis and reporting by the TEMP-S software.

TEMP temperature measurements comply with ASTM C1074-11 Standard Practice for Estimating Concrete Strength by the Maturity Method.

Thermal Evaluation of Mass Pours

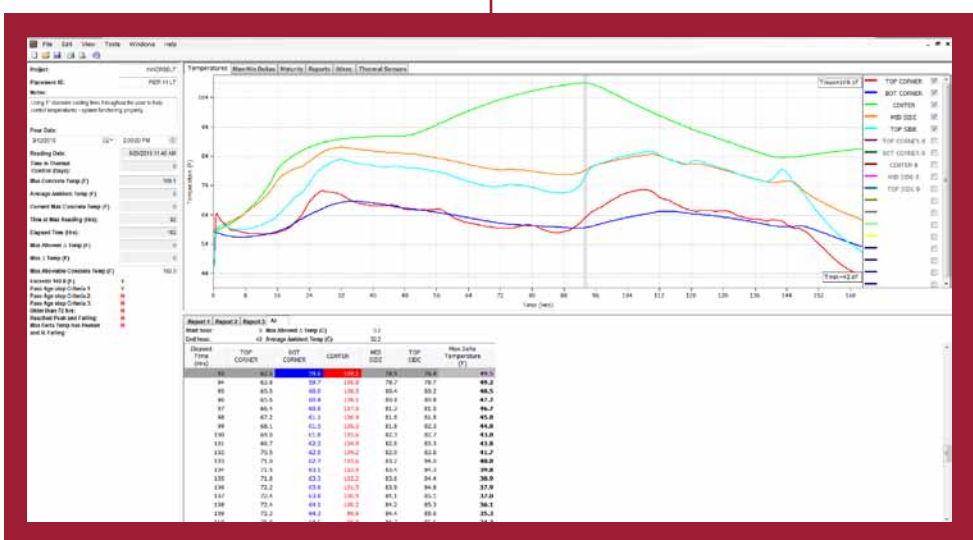


TEMP-S Software

TEMP-S displays measured temperatures versus time in graphical and tabular forms. 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

Thermal Evaluation of Mass Pours

Specifications

Main Unit

Physical

- Size: 135 x 104 x 52 mm
- Weight: 0.45 Kg
- Sunlight readable VGA color display for any lighting conditions, resolution 640 x 480 pixels
- Screen size: 9.4 cm
- Temperature Range: Operating: 0 to 40 °C; Storage 20 to 65 °C
- Powered by Internal Battery (8 hours duration)
- Contains 3 installed Li-Ion batteries, or 1.92 grams Equivalent Lithium Content (ELC)

Electronic

- Microprocessor: PXA270 @ 520 MHz
- Data Storage: Built in 2 GB drive
- USB port for easy data retrieval
- Temperature Range: 0 to 40°C operating; -20 to 65°C storage

TEMP Data Logger

- Size: 133 x 102 x 57 mm
- Weight: 766 g
- Temperature Range: -20 to 65°C operating; -40 to 85°C storage
- Contains 1 installed Li-Ion battery or .64 grams ELC
- Internal Battery (28 day duration)
- Sampling frequency: user programmable, defaulted to once every 15 minutes
- Water resistant



Thermal Wire® Brand Cables

- Custom ordered, each sensor comes standard with 3 m (10 ft) of cable
- Sensor type: digital
- Sensor operating temperature: up to 105°C
- Technical manual included

Thermal Wire cables: US Patent 8,382,369



**Inspection
Instruments,
Inc.**