Kestrel 5200 Concrete Evaporation Solver - Tutorial

With Kestrel firmware update 1.39 (or higher), a new concrete evaporation solver was added to assist in identifying the ideal conditions needed to properly pour concrete.

You can currently update your firmware through the LiNK for Windows or LiNK for OSX applications (Bluetooth dongle or USB Cable is needed): https://kestrelinstruments.com/link-connectivity

Our Kestrel LiNK mobile app will not have the latest update until we release the new version of the LiNK app scheduled later this year.
How to Access the Solver

Use the up ▲ or down ▼ arrow until you reach the EVAP screen shown on the Kestrel.

Press the center button ← to enter the EVAP submenu. Enter your Concrete Mix Temperature by highlighting and using left ◀ and right ▶ arrows.

Scroll down ▼ to Use Solver and press the center button ← and you will see the screen shown to the left.

Scroll down ▼ to New Capture and press the center button ← to begin capturing your current environment.
Capturing Environment and Assessing Conditions

Before you begin a capture, you should make sure the Kestrel is about 20 inches above the pour site.

Pressing Select \(\leftarrow\) will begin the capture. You will see the Kestrel count down from 10 seconds to zero. Hold the back of the Kestrel into the prevailing wind (if possible).

When the capture is complete, the current values will become populated. The risk assessment will be shown at the top.

LOW - Low risk: good time to pour.
MED - Medium risk: should wait until conditions are better.
HIGH - High risk: conditions are not good for pouring.
Assessing Conditions

Suppose you get conditions which indicate a HIGH risk. The Kestrel will allow you to adjust each measurement to allow real-time feedback to see what conditions are needed to get back to a LOW risk.

• For instance, the wind speed is fairly high in the above. Do you have a way to block the wind at the pour site?

• If the temperature is too high, can you provide shade to help lower the temperature?

• If the concrete mix temp is too high, can you add ice to the mixture to lower the temperature?

If you have adjusted the measurements and would like to go back to your last environmental capture, just press the Reset button at the bottom of the screen.