SHUTE Sensing Solutions A/S was founded in 2015 at the Department of Photonics Engineering at the Technical University of Denmark (DTU).

We have developed a novel and unique plastic (polymer) optical fiber sensor system, which enables real-time monitoring of strain/stress, humidity and temperature in points along a hair-thin optical fiber. Hence the name SHUTE.

Like having "eyes" in the core of concrete structures

SHUTE Sensing Solutions A/S has patented the world's first commercial plastic fiber sensor system, which precisely measures moisture in concrete over time. As "eyes" in the core of the construction, the system makes it easy, for contractors to get precise knowledge on how a concrete structure is drying. Optimizing the timing as to when the structure is ready for wooden/linoleum floors, paintwork and plaster walls to be installed.

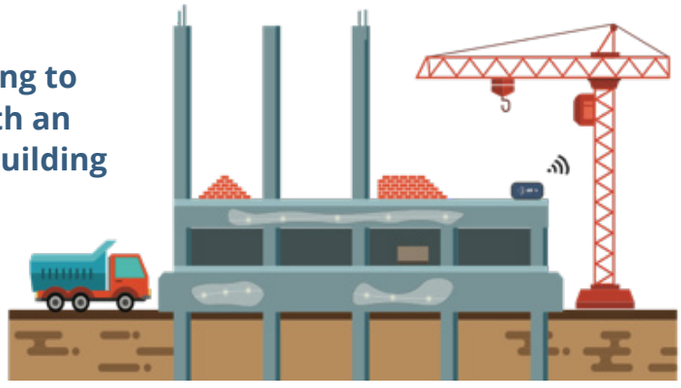
SensoByg:

"New floors worth €20 m are every year ruined, in Denmark alone, due to installation on non-dry concrete."
By placing our fiber into the concrete and covering it, it can be used both as indicator as to when and how fast concrete cures and dries, but also in the long run as a continuous monitor of the health of the concrete along the many measuring points of the fiber. The fibers are attached to a device that logs data. The measurements from each fiber can be displayed on a computer as a 'health chart'.

Save time & money with SHUTE sensors

- Minimize or even avoid the costly and slow process of drilling out destructive samples for lab analysis
- Save money by avoiding using more energy than necessary. Let the data tell you real-time if the concrete is dry enough to continue construction or adjust heating and ventilation accordingly as moisture also can come from the outside environment
- Utilize data from previous projects to improve your planning and projections in future projects. Always have precise and updated documentation at the same place for various stakeholders
- Work in general with lower safety margins and safely work towards the limits
- No need to manually check and empty the datalogger. Avoid losing data without knowing and avoid mismeasurements as the equipment is easy to use

From guessing to knowing with an intelligent building



Optimize construction

Save time and money

Mitigate & avoid risks

Plan and document

For more information visit www.shute.dk or feel free to call us on +45 2338 6728 to discuss how SHUTE technology can assist you in optimizing your concrete drying process.