# smart concrete



### A Novel Value-Added Solution for Ready-Mix Producers

## smart concrete enables producers to achieve:

- Up to 20% increase in profitability
- Brand differentiation in local market
- Further expansion and market share
- Better customer loyalty
- Mix performance optimization

#### What Is smart concrete?

Smart concrete is a value-added solution offered by ready-mix producers to the contractors who want to know the strength of concrete in real-time on their jobsites.

Concrete mixes from ready-mix producers can be upsold as Smart™ mixes to the construction companies. Contractors install wireless sensors in the formwork and download the dedicated ready-mix producer's app to connect to the sensor. Once connected, they are able to obtain real-time temperature and strength results on their job site.

### Upsell Revenue

All of the producer's structural concrete mixes can be upsold as Smart™ mixes using the smart concrete value-added solution. Ready-mix producers only need to calibrate their mixes based on the maturity method (ASTM C1074) and upload them to the smart concrete cloud.



Contractors install smart concrete sensors in the formwork and select the name of the ready-mix producer in the smart concrete app. They can then select the name of the mix from the list of Smart™ mixes to obtain and share real-time concrete temperature and strength data on the job site. This information helps contractors optimize critical operations such as formwork removal, post-tensioning, and opening roads to traffic.





"Stoneway has successfully offered smart concrete to construction companies in Seattle working on high-rise structures and concrete pavements. Contractors immediately see the value as they can obtain real-time strength information on the jobsite through this novel mobile-based technology."

#### **Greg McKinnon**

Operations Manager - Stoneway Concrete

### Jobsite Mix Performance

Smart concrete, as an IoT solution in the concrete industry, combines wireless sensors with mobile and cloud applications to make field data available for ready-mix producers. This data can be used for the smart analysis of concrete performance in order to optimize mix designs.

In addition, ready-mix producers will benefit from:

- · Online access to jobsite data
- · Project-based mix performance results
- Field data to reduce cement usage
- Mix calibration submittals

Smart concrete makes the construction practice more efficient by offering:

- · Wireless connectivity
- · Mobile-based data collection
- · Labor cost reduction
- · Quick decision making
- Elimination or decrease in break tests









