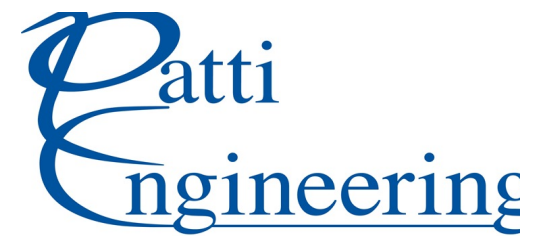


# Project Experience Study

Hill Country Bakery  
San Antonio, TX



PROVEN AUTOMATION SOLUTION  
Reliable Support • Trusted Partner

"Patti Engineering's solution was a cost effective, reliable, wireless solution that would address all our needs and satisfy the requirements for SQF [Safe Quality Food certification]. They worked expeditiously to successfully deliver our system in time for our audit. Due to their great prompt delivery of a solution, ingenuity and reliable service I will continue to call on Patti Engineering when a need arises."

**Nick Rendon**, Maintenance Manager for Hill Country Bakery

## Challenge:

Hill Country Bakery had a distribution center that housed both ingredients and products. The distribution center had multiple refrigeration zones with hard-wired temperature probes to collect and monitor temperature data. Temperatures need to be monitored and kept within a narrow range to ensure product quality and safety. The problem was the connecting wires were prone to damage by forklift trucks, which could temporarily interrupt the continuous collection of data. In addition, the method for data collection was inefficient, temperature readings had to be manually logged into a database for reporting – a time consuming task with inherent risk of human error.

## Solution:

Patti Engineering eliminated hardwired temperature sensors by providing wireless temperature sensors from FreshLoc. Then, InduSoft Web Studio was customized to create an HMI and SCADA that monitors the temperature zones and sends alarms via email. All temperature zones can also be monitored real-time at the plant or on a mobile device. In addition, all data is recorded into an SQL database from which reports can be generated. The engineers were able to program the Indusoft platform to communicate directly with the sensors via ModbusTCP, which eliminated the need for additional PLCs.

## About Patti Engineering, Inc.:

Founded in 1991, the CSIA Certified control systems integration company based in Auburn Hills, MI provides technical expertise and turnkey control systems integration services for design, upgrade/retrofit and asset/energy management projects.

## Customer Benefits:

Due to the automated data collection, Hill Country Bakery now feels confident in the integrity of all reporting needed for SQF certification. In addition, cost savings were realized because employees no longer have to spend hours manually logging the recordings. In the future, functionality can be added to include remote temperature control as well as data collection from the manufacturing lines to improve OEE.

