



APPLICATION SPOTLIGHT

Pizza Production Plant Automates Inventory
Management of Flour Storage Silos



Pizza Production Plant Automates Inventory Management of Flour Storage Silos



APPLICATION:

A regional pizza commissary operated without instrumentation to manage flour inventory in storage silos at its production plant. Instead, the plant relied on its vendor to decide when to make flour deliveries to support their weekly output of over 50,000 crusts. As a result, the pizza commissary had no control over inventory and risked running out of flour that would halt production.

PRODUCT SUPPLIED:

- VEGAPULS69 Radar Sensor
- SignalFire Remote Sensing System including a Sentinel HART node and Gateway

CHALLENGE:

Previously, operators at the pizza production plant would only know flour levels were low when the vibrator on the silo began to make a loud, banging noise. With no measurement instrumentation, the plant relied on the flour vendor in delivering required amounts each week. As a result, the pizza plant risked inefficient production schedules and inaccuracies in product delivery quantities, which can be costly.

SOLUTION:

A SignalFire Remote Sensing System integrated with VEGAPULS69 level sensors were installed atop the silos to provide continuous measurement of flour levels in the storage silos. Data on flour levels is now wirelessly transmitted to the plant network, where it is accessible by personal computers and other devices. In this particular configuration, a SignalFire Gateway Stick

was specified with an Ethernet interface module that enables accessibility to data via the local Intranet. Pizza plant operators can access data on flour levels through the convenience of their laptops and even smartphones using a specific IP address.

Offering superior signal focusing and relatively fast warm-up times, the VEGAPULS69 level sensors ensure reliable level measurement while operating in explosive and dusty environments. A HART data interface minimizes power usage, which is important when paired with a wireless SignalFire HART Sentinel node that extracts and then transmits level data via a wireless radio transmission to a network gateway. The Sentinel not only powers the instrument, but manages its power to greatly extend battery life. With 30-minute check-in intervals, battery life is estimated to exceed 5 years, without running expensive EX conduit.

By automating the flour level monitoring process, the SignalFire Remote Sensing System integrated with VEGAPULS69 Radar Sensor increased efficiency and safety at the pizza production plant while providing a more convenient interface to data.