



# Cel-Fi QUATRA Helps Brand-name Beverage Manufacturer Experience Better Cellular Coverage Inside its Plant

*A large beverage manufacturer with a 376,000 sq. ft. plant decided to do away with landlines, opting instead to give cell phones to its 40 managers. However, its rural location coupled with the plant's metal roof made it nearly impossible for the managers to get a cellular signal on their phones when inside the building.*

## BUSINESS NEED

### A RURAL BEVERAGE MANUFACTURING PLANT GETS INDOOR COVERAGE

"The cellular signal from the nearby carrier towers have a really hard time penetrating a metal building," says Mike Bozyk, co-founder of KonectaUSA, the Minnesota-based provider of indoor cellular solutions that was contracted by the beverage manufacturer to resolve the problem. "In a lot of rural areas, they are all metal – metal walls and metal roofs."

To solve this challenge, KonectaUSA installed Cel-Fi QUATRA™, an active DAS hybrid designed to bridge the price-performance gap for the middleprise. KonectaUSA chose QUATRA because, unlike analog boosters and passive DAS technology, it delivers a cellular signal that is up to 1000x stronger, utilizing CAT 5e cabling and Power over Ethernet, with no signal attenuation right to the perimeter of a building. The scalable solution also includes proprietary intelligent tools that provided KonectaUSA with greater flexibility and ease in optimizing the system design for this unique environment.

"A system design can look okay on paper, but sometimes engineering on the fly is needed because of the wireless environment that is created by the carriers," explains Bozyk. Initially KonectaUSA planned to put Cel-Fi MIMO Panel Antennas on the back of the building, pointing across the entire metal roof, but the metal was creating havoc with the signal.

#### THE CHALLENGES: Manufacturing

- Beverage manufacturer with a 376,000 sq. ft. plant
- Rural location with cellular coverage challenges
- Metal roof blocked cellular signals

## SOLUTION

### QUALITY WORK + CEL-FI QUATRA = REPEAT BUSINESS

According to Dave Schlange, co-founder of KonectaUSA, "We used the Cel-Fi WAVE cloud-based management platform to see the readings from the signal. We were able to determine the signal quality and strength from the antennas on front of the building were substantially better than the antennas we had mounted on the back." So KonectaUSA moved the antennas into a new position at the front of the building and was able to get a signal into the plant from a nearby carrier tower.

There were also considerable installation challenges inside the plant. "We needed to use a scissor lift to run cable up and down the 25 ft. high ceilings," explains Schlange. "But there were assembly belts, with bottles coming out, running 100 miles an hour. Forklifts were running all over the place. It was like rush hour."

**Konec**taUSA

#### Konec

taUSA

- Founded in 2015, with headquarters in Minneapolis, Minnesota
- Leading cellular live-inside provider installations and service provider
- Services include design, installation, and maintenance
- Customers include education, hospitality, healthcare, and FORTUNE 500 companies

"I was losing sleep over how to get coverage to the production side because of the incredibly high ceiling. It would have been impossible to get a scissor lift in there and manoeuvre it around all the machinery and assembly belts," says Bozyk. "Because the Cel-Fi QUATRA remote units provide coverage over a larger range than a traditional or typical cone type antenna, we got such good results that we didn't have to go into the production areas at all to install the units. That was a huge relief. Not only did we cover more square footage, we did it quickly and with less hassle than I imagined possible."

According to Schlange, the customer was, understandably, very happy with the results. "Remarkably, there's now better coverage on the inside of the plant than on the outside."

## ADDITIONAL PLANTS OUTFITTED WITH CEL-FI QUATRA

"Our business has grown significantly since our humble beginning. A large part of our success can be attributed to repeat business from organizations that previously had no affordable or effective means of achieving in-building cellular coverage," says Schlange. "Once they see what we can offer, they often call us back to provide solutions for other areas, and then they refer us to their peers."

In keeping with its recipe for successes to date, KonectaUSA has since gone on to outfit two additional plants for the beverage company—both with Cel-Fi QUATRA. KonectaUSA expects that it will see a significant surge in its middleprise business thanks to the solution—and to the company's unwavering commitment to doing quality work.



"There's a significant difference between quality and the number of bars on a phone," says Schlange. "You have to be able to get the best quality signal to get the absolute best result for the customer. Cel-Fi QUATRA will help us achieve that each and every time."



CEL-FI  
**QUATRA**

BEYOND  
BETTER  
COVERAGE

- High-quality solution for the middleprise
- Supports multi-carrier 3G/4G/LTE voice and data
- Carrier-approved and unconditionally network safe
- Can be monitored and managed using Cel-Fi WAVE