



CASE STUDY – AMERICAN CAST IRON PIPE COMPANY (AMERICAN)

Steel Pipe Manufacturer Replaces Aging Wireless Network Across 2,000 Acre Facility

Complete wireless coverage and security needed at Birmingham-based pipe manufacturer



American Cast Iron Pipe Company, now called AMERICAN, is a manufacturer of ductile iron pipe, spiral-welded steel pipe, fire hydrants and valves for the waterworks industry, along with electric-resistance-welded steel pipe for the oil and natural gas industry. Founded in 1905, AMERICAN's diversified product line also includes static castings and high performance fire pumps.

Due to obsolete equipment and incomplete coverage, AMERICAN needed to update its wireless LAN (WLAN) and add additional WLAN coverage at its headquarters location in Birmingham, Alabama. They also required updated wireless network security and possible voice connectivity in the future.

The Problem:

AMERICAN's aging wireless network was causing problems across its 2,000-acre indoor and outdoor headquarters in Birmingham, Alabama. Obsolete Cisco equipment was not upgradable and the campus had numerous dead spots that hindered the productivity and accessibility of AMERICAN's mobile workforce across such a large property. To replace the entire WLAN, AMERICAN was considering its incumbent provider, Cisco, along with newcomers Meraki, Aruba and Motorola Solutions (now Zebra Technologies) to provide the newest technology for their wireless LAN across the entire yard and in over 100 buildings.

Because they were a dedicated, existing Cisco user, AMERICAN was strongly considering Cisco equipment for its upgraded wireless network. This incumbent advantage, along with other Cisco-friendly internal divisions involved in the decision-making process, made a transition to a different provider a formidable obstacle to overcome.

Why Inovity?

Inovity, formerly BarCode ID Systems, had been an existing vendor of AMERICAN's with a strong track record in mobile application development. When it came time to replace its WLAN, AMERICAN trusted Inovity's expertise and was willing to discuss the project with them, even though its decision-makers were leaning toward a Cisco refresh with their previous provider.

Before they made the change from Cisco, AMERICAN needed proof that a new WLAN from an unknown manufacturer would work, and that Inovity had the expertise to handle



the project. To begin, AMERICAN's decision-makers visited a Inovity' customer site where they observed a successful installation of a Motorola Solutions (now Zebra Technologies) indoor/outdoor wireless network covering a 2,000,000-square-foot plant and rail yard.

Then, Inovity and Motorola Solutions provided a demo of a high-performance, long-range outdoor access point so AMERICAN could test and witness the long-range, high-speed performance first hand. The demo worked exceptionally well and AMERICAN was very pleased with noticeably improved performance.

The combination of a customer reference with such a large, working WLAN, the successful product demo, and AMERICAN's trust in Inovity as a demonstrated solution partner put Inovity at the top of the running for the project. Additionally, AMERICAN liked the idea of having one single provider and point of contact for its handheld devices, wireless network and security. Inovity was awarded the project.

The Solution:

Inovity and Motorola Solutions conducted a site survey using Motorola's LAN planner tool to emulate the wireless network and determine coverage needs over the 2,000-acre facility. While physical site surveys are typically common for WLAN installs, AMERICAN's large coverage area, dangerous production areas of molten steel and budgetary restrictions required the emulator be used to estimate pricing.

Once coverage was determined, the project consisted of Motorola Solutions' wireless network equipment for exposed outdoor use, covered outdoor use, indoor warehouse use and indoor office use, along with network controllers and advanced exchange comprehensive service coverage. AirDefense Services Platform provided comprehensive security and compliance, network assurance, infrastructure management, proximity awareness and analytics.

Once AMERICAN saw what their total wireless refresh investment would be, they decided to roll out the project in three phases across the plant and yard due to annual budgetary limitations.

The Results:

Inovity worked closely with Motorola Solutions' engineers, technology-deployment partner Velociti, and AMERICAN's engineering staff to successfully install and integrate over 80% of the entire project over three years. Seamless installation and high-performance equipment brought AMERICAN the much-needed improvements to its aging wireless network, providing full wireless coverage to its mobile workforce inside buildings and outdoors across 2,000 acres. Because the project was rolled out in phases, coverage gaps remained where the old Cisco equipment was in use, but the project is on track to be completed in 2016. Overall productivity and efficiency of mobile users has increased substantially due to the absence of network failures when on the new Motorola Solutions network, and workers can connect to and conduct mobile transactions with core business systems from mobile devices across the campus. Voice coverage over the WLAN remains a future project after the network is completed.



Formerly BarCode ID Systems, Inovity is a business process improvement company that transforms technology into powerful, integrated solutions that drive efficiency and reduce costs. As a specialty IT systems integrator, Inovity designs and delivers innovative solutions that connect and relay crucial business information between all points of operational activity, in real time. By emphasizing workforce mobility, ERP data mobilization and business process intelligence, Inovity provides automated technology solutions for manufacturing, distribution, healthcare, retail and field service environments.

The company was established in 1993, is privately owned with headquarters in Atlanta and maintains sales and engineering offices in Atlanta, Chicago, Boston, Greenville, SC, Greensboro, NC, Columbus, OH, Huntsville, AL and Ft. Lauderdale. With innovation at its core, combined with solutions for productivity, agility, efficiency, connectivity, and visibility, BarCode ID Systems has become Inovity. Contact Julie A. Leonard, Marketing Director, 800-452-7418, ext. 9045, jleonard@inovity.com, www.inovity.com.