



# RONA KINGSPORT, TN

## ■ Project:

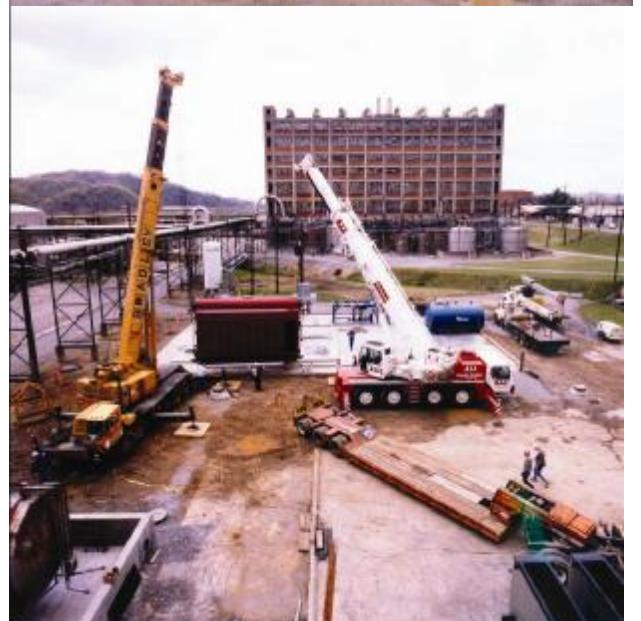
300,000 pph Boiler Room

## ■ Project Completion:

February 2000

## ■ Project Description:

Two 70,000 lb/hr water tube boilers were designed and built to provide the power BAE Systems needed. To allow for future expansion, Ware designed all support equipment and utilities to allow for the doubling of steam output. A specialized control system was installed along with electronic controls on all components that were connected to personal computers in the boiler room. All the system information is also transferred to the main control room to ensure proper monitoring and maintenance. Ware also monitors the boilers from their main headquarters in Louisville via proprietary software.



Case Study: BAE Systems North American (Formerly RONA Royal Ordnance North America)  
Holston Army Ammunition Plant in Kingsport, Tenn.

Design/Build Project - Two 70,000 lb/hr Water Tube Boilers - \$3 million  
February 2000 to June 2000

**Ware Provided the “Ammunition” that BAE Systems Needed to  
Power Production at the Kingsport, TN Plant**

When BAE Systems North America need to get more “bang” for their buck at the Holston Army Ammunition plant, they were looking to find a company who could help them improve production efficiency without compromising their production schedule.

The Holston Army Ammunition plant in Kingsport, Tenn. is currently the largest explosives manufacturer in the world. In 1999, the Army contracted with BAE Systems North America (formerly Royal Ordnance North America or RONA) to manage and run the facility on a fixed-price basis. BAE Systems is an international company that supplies weapons and technology to more than 50 countries world-wide and is a major supplier to both the United Kingdom and United States armies. \$15 million was committed by BAE Systems to modernize the Kingsport facility, improve the manufacturing of explosives, reduce costs and maximize safety.

As a part of the facility upgrade, BAE Systems needed to find a company that could design and build two natural gas fired boilers within a tight timeframe at the Area-A facility. Steam is the energy source at Area-A which drives the processes for refining acetic acid and producing acetic anhydride. These elements play a crucial role in the manufacturing of high explosives. Many companies were attracted to the prestige of the project but once they realized the scope and timeline, they simply could not deliver.

“Ware Energy won the contract because they were able to put together a plan that could give us operational gas fired boilers within our timeframe and budget constraints,” said Lynn Herron, Team Leader at Area-A Operations, BAE Systems, N.A. “Ware also provided the technical expertise and support to operate those boilers. Other companies could not work within the timeframe we requested. It was extremely important to get the boilers on-line as soon as possible.”

Originally, BAE Systems had considered just renting boilers but the project evolved into a complete power plant. Two 70,000 lb/hr water tube boilers were designed and built to provide the power BAE Systems needed. To allow for future expansion, Ware designed all support equipment and utilities to allow for the doubling of steam output. A specialized control system was installed along with electronic controls on all components that were connected to personal computers in the boiler room. All the system information is also transferred to the main control room at Area-A to ensure proper monitoring and maintenance. Ware also monitors the boilers from their main headquarters in Louisville via proprietary software.

BAE Systems had “true client involvement” during the five month production process.

“We [BAE Systems] were involved on a daily basis and worked with Ware Energy and their contractors throughout the entire process from the first shovel of dirt to the day the boilers were fired,” said Herron. “There was an open avenue of communications between our employees and theirs.

Ware’s Project Manager, Steven Taylor, does what he says what he’ll do,” said Herron. “He and his team got us up and running in the shortest time possible. If in the future we were to need additional boilers, we would have to consider Ware Energy. They were there when we needed them.”

BAE Systems Management was so pleased with Ware’s performance on the project that they’ve allowed Ware to bring potential clients on-site to view the Area-A boiler system.

On-time and on-budget – just another example of how Ware can help meet your company’s hot and cold needs.