Munroe selected for extensive iron coke plant boiler rebuild project.

One of the largest US producers of iron coke has awarded Munroe Inc. with the contract to rebuild two HRSG Boilers during an upcoming outage at the company’s Illinois facility.

Munroe will be providing exotic tube materials and fabrication for the following components: Superheaters, Superheater Support Tubes, Superheater Headers and Waterwall Panels.

A coke HRSG boiler is subject to extreme corrosion and erosion conditions that require extreme materials to withstand the high wear coke gases. Munroe performed significant research and development in order to provide a SA213T91 tube material with Inconel 625 weld metal overlay for a challenging high wear area.

Munroe also developed a process that enabled the tubes to be hot formed to a tight radius without breakage or cracking of the base tube or weld metal overlay. Multiple heat treatments and temperature and humidity control of the assemblies during storage and fabrication resulted in a high quality fabrication. Proper grain structure and physical properties were verified by independent lab testing.
"By working hand in glove with our customer to define their needs and by leveraging our strong relationship with our partner companies, we were able to engineer a high quality project and deliver it in a relatively short time frame," said Bob Vinson, VP of Production. "We're confident that our customer will realize reduced maintenance costs and increased operational profits from this rebuild."

The process of making coke involves heating coal to more than 2,000 degrees F for up to 48 hours. The impurities of the coal are off-gassed to a HRSG boiler as fuel and a pure carbon form referred to as “coke” is what remains. The coke is utilized as fuel to make iron, which is subsequently utilized to make steel.

**The Powerhouse in Hot Metals.** Woodings Industrial and Munroe Inc. are global leaders in the design and manufacture of equipment and components for the metals industries. Blast furnace, BOF or EAF--wherever hot metal is produced--you’ll find equipment from Woodings & Munroe operating at the highest level of productivity.