



MUNROE ANSWERS THE CALL FOR POWER COMPANY'S SLOPE WALL REPLACEMENT

When a major power company in the Southwestern, PA needed to replace the slope wall in their boiler, Munroe, Inc. was ready and able to respond in a big way.

Last summer, the power plant, one of the largest fossil fuel fired plants in the USA with three 900 MW peaking units, had experienced severe “clinker” damage to a boiler slope wall in one of the units.



In July of 2010, the power company gave Munroe the green light to build the entire replacement slope wall, headers, soot blower panels and waterwall panels. The \$5 million project involved a 50,000 plus, man-hour outage.

The wall replacement consisted of the fabrication of 13 slope panels, the largest of which measured in excess of 40 feet long x 10 feet wide and weighing approximately 20,000 lbs. A 309L stainless weld metal overlay was applied on the entire hot side of each panel.

The finished size of the slope wall was 80 ft in length x 31 ft high.

In addition to the slope wall, Munroe provided twenty five water wall panels that were 20 to 25 feet long x 15 tubes wide. Each panel had 309L weld metal overlay on the “hot” side.



Four patch panels, necessary to close the boiler opening, were fabricated on an “expedited” basis to replace the wall area that had been removed in order to allow the installation of the new slope and waterwall panels.

“The customer had a challenging schedule, in terms of the amount of work necessary to rebuild the boiler versus the amount of time to complete the outage. Every aspect of the job was on a tight schedule, Munroe had to be on the ball, 24-7”, said Sales Manager, Tony Manuel.



To complete the project, Monroe utilized all three of its production facilities. The Ringgold, GA facility submerge arc welded the panels. The Youngstown, OH facility “gang bent” the panels utilizing a newly installed panel bending machine. The bends at the top and bottom of the slope panels had to match perfectly in order to facilitate a “smooth” installation. Final assembly of the slope wall panels was performed at the Ambridge, PA facility.

Time saving steps

To save the customer a tremendous amount of time welding, Munroe welded the headers to the panels (in-house) so the only tube to tube weld was the upper cut line. This reduced the amount of tube to tube welds by 50% and presented the customer with a huge time savings.

Special delivery.

Due to the “large” size of the components involved, Munroe utilized unique handling techniques in order to prevent damage while shipping. The slope panel delivery started on February 11, 2011 and finished by the end of February, with the outage starting March 5th. The unit was back on line by the beginning of May.