

FIELD REPORT

PP-RCT SUPPORTS THE PRESSURE OF A COAL MINE SLURRY PRESS



Light and strong: Thermoplastic pipe makes a great fit for Indiana mine.

Meeting Requirements

For years, the Black Panther Mine in Oaktown, Indiana disposed their refuse slurry in pits, like many other mines. However, those pits took up a large footprint. The Environmental Protection Agency (EPA), aware of the impact, has made the permitting process more stringent.

To ease the EPA permitting process and decrease their mark, the mine purchased a slurry press. "Basically, the press just squeezes the water out of the refuse," explained Randy Smith, the plant maintenance manager. "Right now, all of our slurry is pumped over a hill into a pit and it's filling up. The press will let us make a cake and take it up there and pile it up and reuse the water."

Withstanding the Pressure

The press operates at a pressure of 225 to 230 psi. Smith was looking for a pipe that could withstand that kind of pressure without much expansion or contraction in the hangers. He turned to ISCO Industries for a solution. Sales rep Matt Hagel presented 8-inch and 6-inch DR11 PP-RCT originally. After further

discussion, however, they were able to downsize the pipes to a smaller wall thickness and converted all the air lines in the plant to 2-inch PP-RCT.

The PP-RCT Solution

PP-RCT is a thermoplastic that uses fusion welding to join the pipe and fittings. It creates a monolithic piping system that is leak-free and the welding process eliminates the need for harmful chemicals like glues or solvents.

PROJECT

Mine press piping system

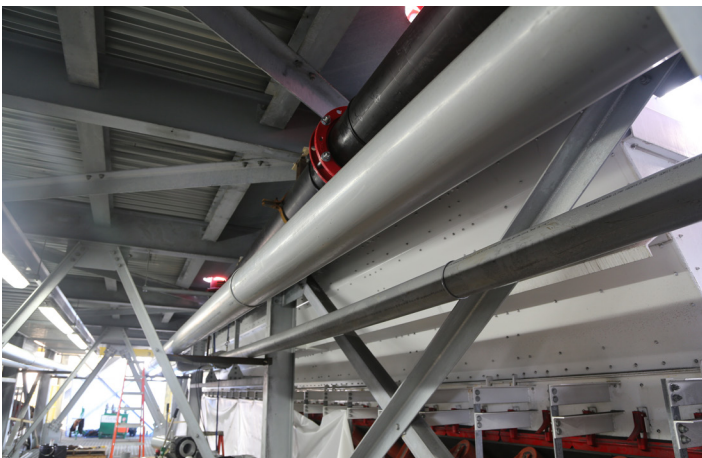
LOCATION

Black Panther Mine, Oaktown, Indiana

SOLUTION

ISCO's PP-RCT





The material is 100% recyclable and environmentally friendly. It lasts significantly longer than traditional pipe materials because it won't corrode. "You don't want to go with steel, of course, especially with slurry," Smith said. "We needed a pipe that would be light enough to hang, but strong enough to handle the pressure. Matt brought PP-RCT to our attention and it sounded like exactly what we needed"

From Start to Finish

ISCO worked with the mine from the start of the project, from design consideration to installation. PP-RCT is joined via heat fusion and ISCO provided the equipment and the technicians to get the job done. The pumps for the press were 20-feet below and 30-feet away from the tie-in point. That challenge was building lines that needed to cross over one another. Hagel said, "Our tech came to the jobsite and developed a plan to build spools to solve the issue."

The mine is now fitted with a system that will support the press and make the entire process smoother and more EPA-friendly.

To see how PP-RCT can work for you, visit www.iscopolypro.com

