



PCCP WINS OVER STEEL

- ▶ PCCP is a rigid pipe with inherent strength.
- ▶ Harness clamps eliminate welding during installation.
- ▶ Detroit installed PCCP more than 60 years ago and continues to expand pipelines with it.



PROJECT OVERVIEW

Not long after acquiring Detroit Water, the Great Lakes Water Authority required 3-miles of pipe to meet the suburban sprawl demand. The entity specified 48" steel and prestressed concrete cylinder pipe (PCCP).

- ▶ PCCP is a rigid pipe, installation moves quickly.
- ▶ Harness clamps speed up installation time and reduce costs. The two-clamp mechanically restrained joint system does not require welding.
- ▶ In the mid-1950s crews installed PCCP in Detroit and more than 60 years later, they continue to see the benefit.

PCCP MANUFACTURE

In PCCP (E-301) prestressing is achieved by helically wrapping, under measured tension and at uniform pacing, a high tensile-strength wire around the concrete core. This wire wrap places the concrete core in compression to withstand hydrostatic pressure and external loads. Unlike steel and other flexible pipe, this rigid pipe requires no special bedding or backfill. Installation moves quickly.



HARNESS CLAMPS

For this project Thompson Pipe Group engineers specified harness clamps. To provide restraint, Thompson Pipe Group offers the clamp-type harnessed joint. The two-part system is positioned around the joint and secured simply by tightening drawbolts on each side.

A VENERABLE PRODUCT

The Thompson Pipe Group Pipeline Services Department owns files for 80 percent of the large-diameter concrete pressure pipe installations. The Price Brothers Company manufactured much of the pipe in Southern Michigan. In 2017 Thompson Pipe Group acquired the company's original pressure division. The original PCCP lines are still in use today.

