In the trenchless pipe repair market, cure-in-place pipe (CIPP) systems are a popular choice. Huntsman’s VITROX® resin is potentially the world’s first polyurethane-based pipe repair resin. VITROX resin provides a longer handling window, faster curing time and superior high temperature resistance properties compared to existing technologies.

**Innovation Uniqueness**

In the cure-in-place pipe (CIPP) process, a resin-saturated felt liner made of polyester is inverted into a damaged pipe using compressed air or water. Steam or hot water is then applied to the saturated liner, aiding the resin to cure and sealing the damaged pipe. Less digging makes the CIPP process more affordable, less disruptive and more environmentally-friendly compared to traditional “dig and replace” pipe rehabilitation methods.

Traditionally, epoxy or unsaturated polyester resins (UPRs) are combined...
Industry and Marketplace Benefits

According to the 2002 EPA “Gap Analysis,” by 2020 approximately 45% of the 600,000 miles of sewer pipes within the United States will be in need of immediate repair. Lack of renovations can be attributed to the high costs, and difficulty making the repairs underground, i.e., digging up and shutting down roads for an extended period during the renovation process. CIPP systems featuring VITROX resin can make sewer renovations/repairs more affordable, quicker and easier to manage on-site. Currently over 12 million ft. of pipelines are being renovated annually in North America using the cured-in-place pipe (CIPP) process. (Source: Trenchless International Magazine). VITROX resin is currently being used in a number of sewer repair applications throughout Europe. According to Dave Burge, Huntsman Polyurethanes Business Development Manager, “in the future, the product will see broader applications on a global basis in a variety of markets, including the water, and oil and gas industries.”