

JÖNKÖPING PROJECT

HORIZONTAL DIRECTIONAL DRILLING SECTION OF JÖNKÖPING ENERGI'S DISTRICT HEATING DISTRIBUTION NETWORK EXPANSION PROJECT IN MARCH 2021.

Project Name	Jönköping
Date	March 2021
Market	District Energy
Country or Location	Sweden
Scope	Horizontal Directional Drilling comprised of one-hundred PE 710 pre-insulated pipeline field joints
Diameter	PE 710
Product	ScarGuard®

Since 2020, Canusa-CPS, partnered with Hantech System AB and Freds Fjärrvarmeservice, have been supplying the CSC-XP™ advanced joint casing system for Jönköping Energi's district heating distribution network expansion project.

A section of the Jönköping Project, containing one-hundred PE 710 pre-insulated pipeline field joints, required trenchless construction using horizontal directional drilling (HDD). HDD is a popular method for installing pipelines when trenching and excavating is not an option, but factory-applied coatings, and more often field-applied coatings, can be severely damaged during the process. Abrasion resistant overcoats (ARO) used for additional mechanical protection can be applied on top of anti-corrosion or joint casing systems, but the degree of protection, ease of application and application conditions between AROs is not always equal.

The installation of the HDD section for the Jönköping Project was planned for March 2021, when the low temperatures in Jönköping, Sweden average -2°C and can drop down to -10°C. The ARO selected for this HDD section would need to be compatible with unpredictable March temperatures to prevent project delays.

Understanding the weather conditions and the mechanical protection required for a joint casing system, Canusa-CPS recommended **ScarGuard®**, its versatile composite ARO comprised of fiberglass fabric and a pre-impregnated flexible resin. The resin in **ScarGuard®** is activated by water and will fully cure while the resin remains wet, allowing **ScarGuard®** to be applied over a wide range of temperatures. For cold temperature applications, water can be substituted with a propylene glycol solution to prevent the resin from freezing during the curing process.

ScarGuard® was selected by the client and successfully used to protect all one-hundred of the CSC-XP joint case systems during the HDD pull. The client stated that **ScarGuard®** was selected in part due to ease of application compared to other ARO solutions in the market.



HDD SECTION OF THE JÖNKÖPING ENERGI EXPANSION PROJECT



SCARGUARD® PROTECTED CSC-XP CASING SYSTEMS