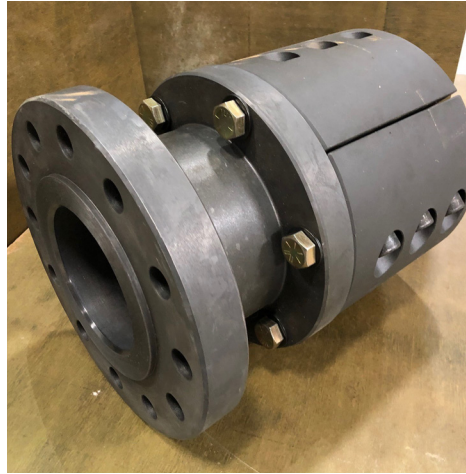


Clamp-On Flanges For Lined Pipes



Imagine ... an early morning call from a client, an engineering firm, a contractor and a distributor almost simultaneously! The on-site contractor tagged a 6" underground pipeline with an excavator. The damage was minor, but protocol was to cutout the damaged section and replace that section by welding in a new piece of pipe. It all appeared innocent enough until the damaged piece of pipe was removed from the excavation. Unbeknownst to all involved, this pipeline was lined with a ¼" thick UHMW liner!

The pipeline was an 8 km run from the processing facility to the storage tank farm. It was used to carry a produced water solution that was relatively low pressure (1,480 psi) Class 600#, but it was corrosive. Phone lines to the corrosion experts, NGC Product Solutions, were lit up! After some deliberation with all the possible options, NGC was tasked to step to the plate to design a solution. A much more cost effective and timely solution to an environmentally challenging problem of replacing an 8 kilometer pipeline in the dead of winter in the Saskatchewan prairies.

A Class 600# Clamp-on Flange was designed by NGC. A prototype was fabricated, and the verification testing was completed between the section of the existing pipeline that was removed under protocol and the Clamp-on Flange. It is important to note that not only was it necessary to create a 6" 600# Bridge Spool 40' long, but it needed to be created without welding on the Bridge Spool or on the original pipeline to maintain the integrity of the liner; and the Bridge Spool needed to be installed in-situ, so that the lining of the Bridge Spool and the lining of the pipeline (dissimilar lining materials) created a leak-free envelop that would contain pressures up to 1,480 psi. NGC verified all possible scenarios in their facility in Calgary. Now it needed to be executed in the field, at temperatures hovering below -40C.

For more details, please contact sales@ngc-ps.com or call us at **403 295-3114**.

[Assembly Animation](#)