

Weld after Backfill Sequence for Use with Steel Water Pipelines

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The Weld After Backfill sequence is a procedure developed and tested by the steel pipe industry to eliminate costly standby time for equipment on large diameter water pipelines. The procedure allows pipe to be placed, coating applied, and backfilled so that construction can proceed. Welding on the pipeline can then be done on the inside of the pipe as pipelaying continues thus saving the equipment and crews numerous hours of waiting for the weld to be completed.

This paper will present the testing done to develop this procedure and present numerous applications where this procedure has been utilized with great success. The main obstacle to implementing the Weld after Backfill sequence was the potential damage to the pipe coating that might occur due to the high temperatures that develop during the welding process.