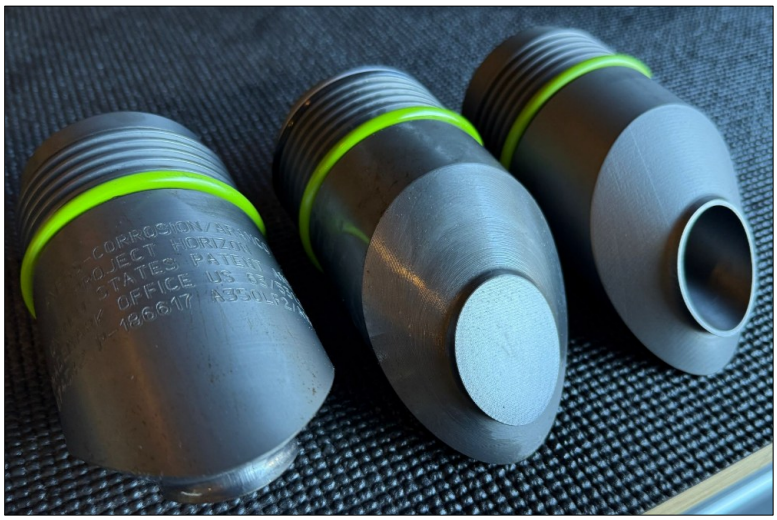
1. Introduction

This document provides a brief overview of the steps required to install a Horizon Access Fitting onto a pipe. Welding should be carried out in accordance with site specific procedures.

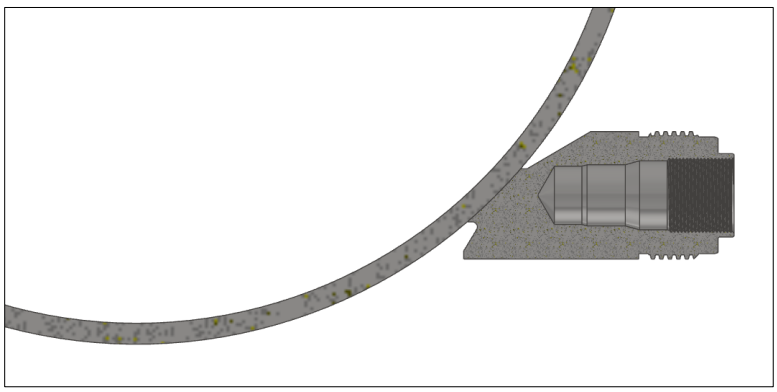
2. Horizon Access Fitting

The Axess Horizon access fitting is designed to provide bottom of the line corrosion monitoring with all the safety and operational advantages of a side of the line access fitting.

The Horizon fitting is supplied with one end contoured to the size of pipe it is to be installed onto and is partially bored through from the opposite end so it can be hot-tapped following installation as shown by the fitting in the middle below. This design provides a 'metal backed' root which is then removed post-welding during hot-tapping to provide a full penetration weld.



To install onto the pipe hold the contoured end of the Horizon fitting directly against the pipe surface and orientate until the length of the fitting is aligned horizontally:



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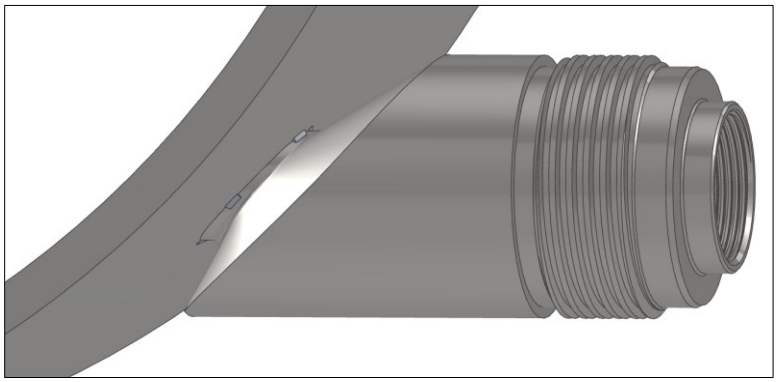
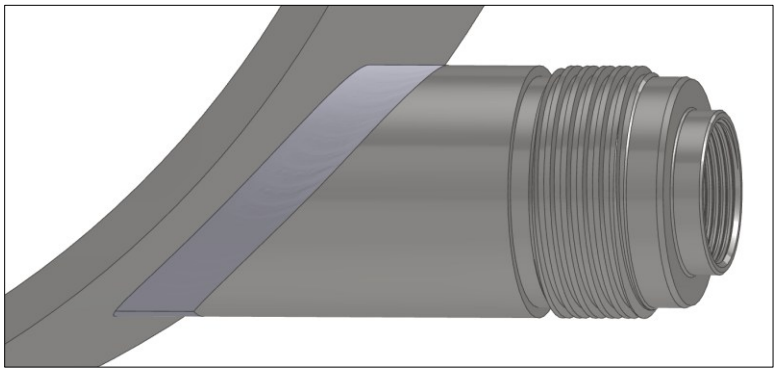
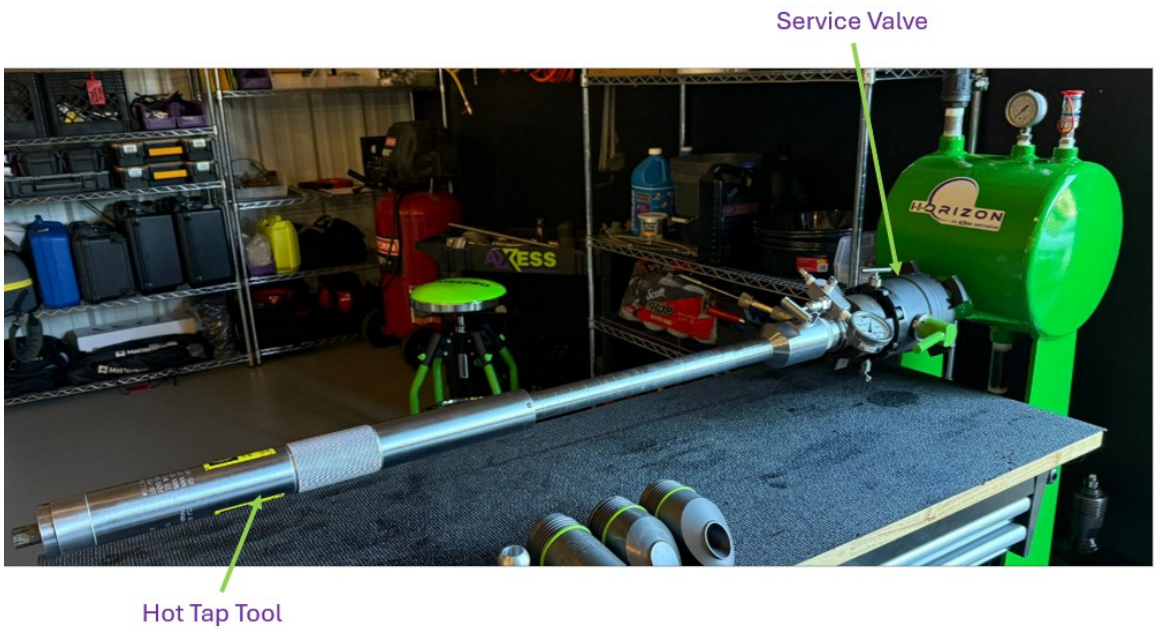
Tack weld the Horizon fitting at several spots around the circumference of the mating face to secure in place then proceed to weld to the pipe by layering several beads around the circumference of the end profile:





After the fitting has been welded to the pipe the end profile nearest the pipe can then be hot-tapped using an Axess supplied hot-tap tool and accompanying temporary service valve:



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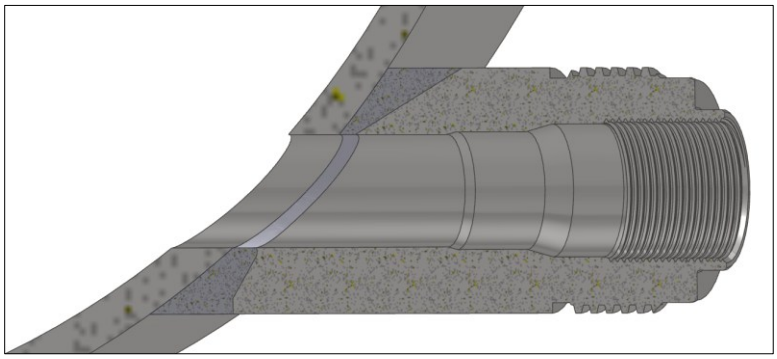
The weld metal backing and root are removed during the hot tapping process leaving a full penetration weld.



Pipe internal post hot tapping

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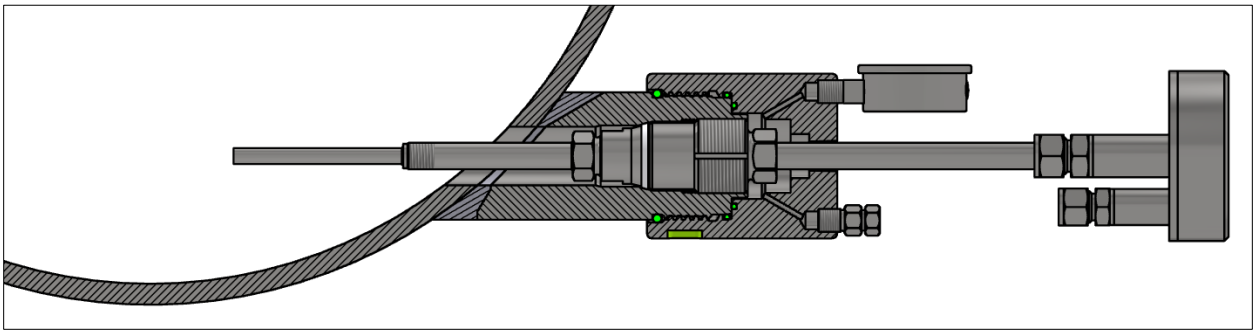
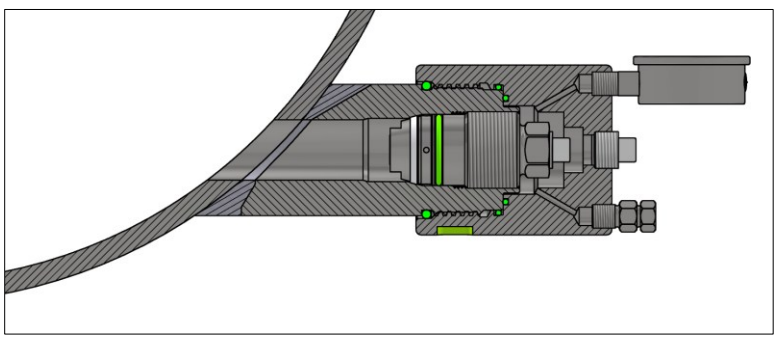
Following hot tapping the service valve is closed, the hot-tap tool pressure bled down and removed and a retrieval tool can then be used to install the monitoring device. An online ER probe with instrument is shown below with the ER probe element located in the water phase.



In instances where the monitoring device is to be installed at a later date the access fitting can be sealed with a solid plug and secondary pressure retaining cover until required:



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