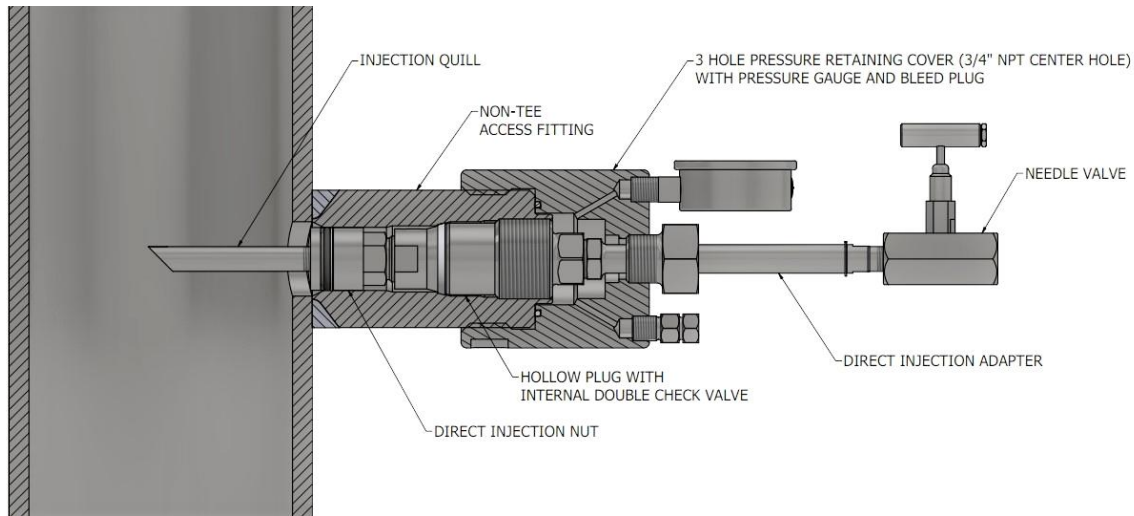


Direct (Non-Tee) Chemical Injection System

Rated up to 6,000 PSI / 413 Bar and 232°C / 450°F



Axess Chemical Injection Systems

Precise, reliable injection of chemical treatments is crucial for any corrosion control system. Whilst many injection devices can only be serviced and maintained during shutdown conditions Axess provides a range of high and low pressure injection systems which can be serviced safely online at pressures up to 6,000 PSI / 413 Bar and temperatures up to 232°C / 450°F.

Retrievable injection systems typically utilize a 2" high pressure access fitting with integral side tee in a range of configurations including NPT, welded and flanged (see separate Axess datasheets).

The Axess Direct Injection system provides an alternate solution allowing the use of non-tee fittings whilst still maintaining the safety, reliability, and online servicing capability of our tee'd systems including secondary isolation with pressure retaining cover. These fittings provide the flexibility to repurpose existing monitoring fittings or allow installation of new injection points at critical locations where space may be restricted.

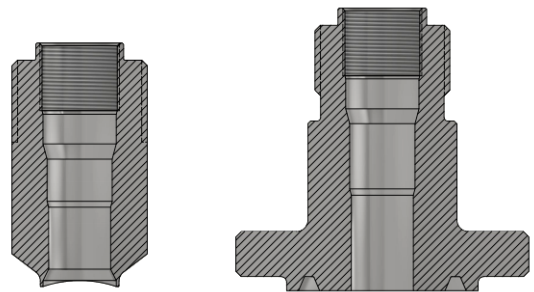


Axess high pressure direct injection and retrieval system comprises the following components:

- High pressure access fitting
- Direct injection hollow plug with integral double check valve and nut
- Injection device (quill, nozzle)
- Direct injection adapter
- Heavy duty pressure retaining cover (up to 6,000 PSI / 413 Bar)
- Retrieval tool and service valve (see separate brochure and data sheet)

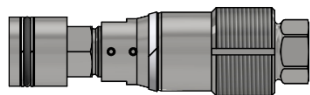
High Pressure Access Fittings

Access Fittings are available in flareweld and flanged, mechanical and hydraulic versions and are manufactured in ASTM A105, ASTM A350 Gr.LF2 and Duplex steel as standard materials. However, other versions (e.g. HUB fittings) and materials are available upon request.



Our Access Fittings meet NACE MR0175 (sour service) requirements. NORSOK specification upon request. PED compliance available.

Direct Injection Hollow Plug



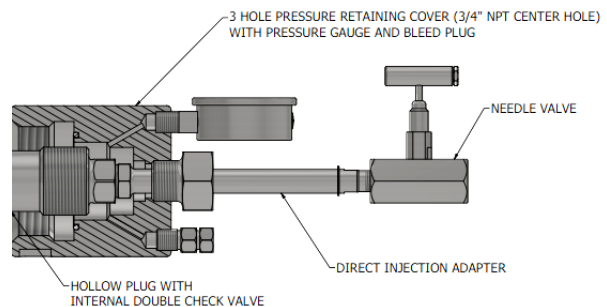
The Direct Injection system uses a special version of the hollow plug incorporating two internal one way check valves. This allows chemical to be injected into the line through the center of the plug, and prevents flowback of process into the injection line.

Seals are provided in PTFE (15% glass filled) and O-rings in Viton as standard however a range of materials are available for compatibility with the process and chemicals.

Access Fitting Cover Assembly

Direct Injection Fittings use a special version of the pressure retaining cover found on Axess high pressure access fittings to provide a secondary pressure barrier up to 6,000 PSI / 413 Bar.

The direct injection adapter seals into the center hole in the cover and is connected to the direct injection hollow plug. A needle valve is connected to the adapter to control or isolate chemical flow upstream of the plug check valves.



Injection Devices

Axess offers a range of injection tubes, quills, and nozzles to suit the injection method, rate and atomization required details of which can be found in our Chemical Injection datasheets.

Please visit www.Axess-Corrosion.com/resources for more information or contact an Axess expert to discuss your chemical injection requirements.