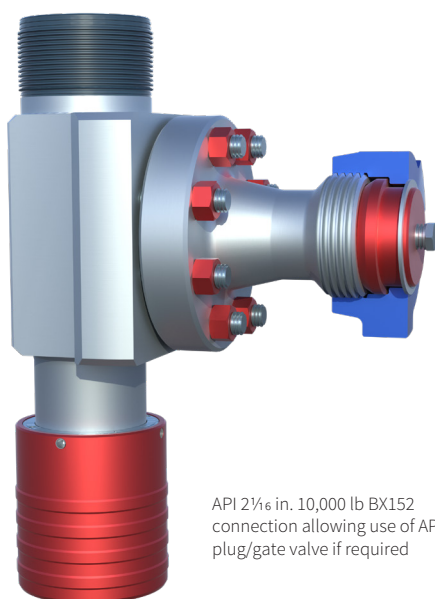


Elmar Pump-in Sub

Our compact low height pump-in-sub (PIS) is a versatile addition to your WPCE rig up. It provides a large bore inlet through which various fluids can be pumped, for operations such as well control, inhibitor pumping, fluid sampling, and bleed-down and equalization.

Our pump-in sub has quick unions top and bottom for fast rig up, and a hammer union type side connection. Our PIS is typically supplied with a blind plug and nut on the hammer union port, the blind plug is replaced with a suitable valve when in operation.

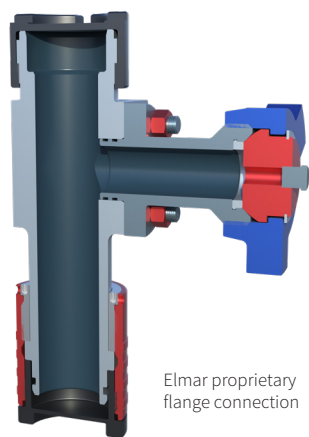
A PIS is normally positioned below the wireline valve and above the wellhead. If you require positive isolation between the well bore and hammer union connection we have developed conversion kits to adapt our proprietary side inlet to API flanged valves. An Anson™ flanged gate or plug valve can then be placed between the pump-in sub body and the hammer union.



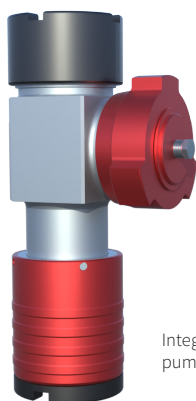
API 2 1/8 in. 10,000 lb BX152 connection allowing use of API plug/gate valve if required

Features and benefits

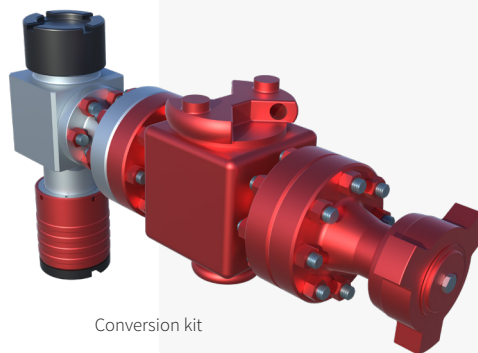
- Proprietary Elmar flange connection gives compact size for shorter rig-up heights
- Proprietary Elmar flange connection eliminates line pipe and potential thread back-off, leak or fracture
- Large Full-bore 2-in. inlet for maximum pump rates
- Figure 1502 and 2202 hammer lug union connections giving convenient connection type
- Full material traceability and 3rd party independent approval covering API 6A, and NACE (for H₂S)
- Versatile asset that can be used for well control, inhibitor pumping, fluid sampling, and bleed-down and equalization



Elmar proprietary flange connection



Integral pump-in sub



Conversion kit

Options

Supplied with any industry standard quick unions or flange/hub connections

Various bore sizes and working pressures up to 20,000 psi

Elmar proprietary, API or integral inlet design

Conversion kits to adapt our proprietary side inlet to API flange

Other hammer lug union inlet connections to suit client flowline