



Condensate Pot Installation Guide

Parker Condensate Pots for Small Bore Tubing Systems

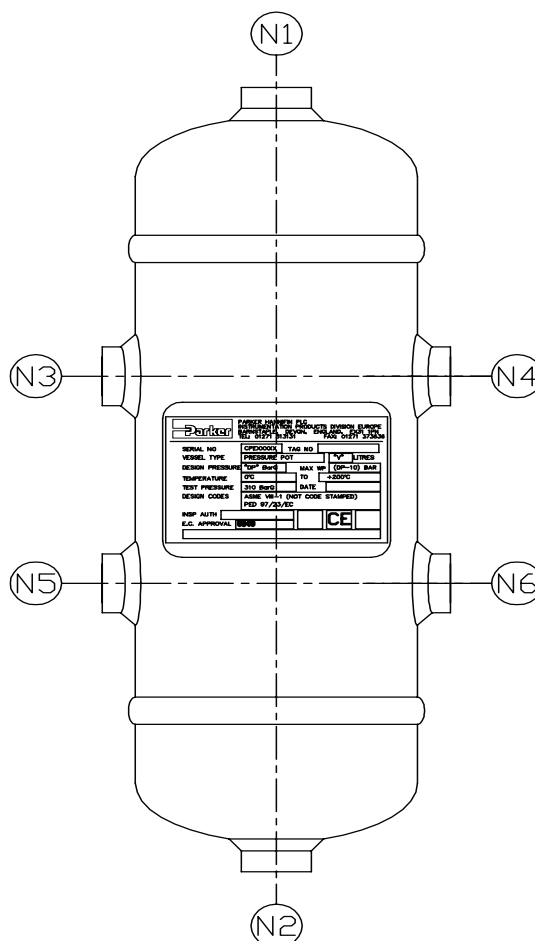


ENGINEERING YOUR SUCCESS.

Condensate Pot - Maximising flow measurement accuracy

The primary use for condensate pots is for maximising the accuracy of differential pressure flow measurement on steam (or vapour) applications. They are used to ensure that the condensation of steam in the impulse lines does not impair the ability to accurately sense differential pressure fluctuations and to minimise gauge line error because of differences between pairs of impulse lines.

The theory of operation for condensate pots is that between the process tapping and the pot is steam vapour. Between the pot and the differential pressure transmitter is water (liquid) which eliminates any measurement errors due a liquid / vapour mix at the measurement device. In order for this to work correctly both high pressure (HP) and low pressure (LP) impulse lines should be the same length. Thus, eliminating pressure head errors. One condensate pot will be required for each impulse line.



Installation guidelines:

1. Evaluate the number of connections required on the condensate pot before ordering (inlets, outlets, fill port, drain port, gas vent port etc)
2. Define condensate pot volume in litres and system pressure and temperature requirements.
3. Consider the need to trace heat and insulate all impulse lines.
4. Consider the need to add an anti-freeze media such a glycol to the water lines.
5. Keep vapour impulse lines as short as practicable.
6. Ensure both condensate pots are mounted at the same level. The higher connection point should be the reference. Consider both Vertical and horizontal steam pipelines.
7. The differential pressure measuring device (DP) should be mounted below both the condensate pots and the steam pipe line.
8. It is recommended that both impulse lines from the condensate pot to the DP include the facility for 'blow down'. Blowing down these lines periodically ensures that collection of debris is prevented from impacting the measurement accuracy.



