

APPLICATION NOTE

North West Oil Refinery

AVERAGING PITOT TUBES - FROM SYSTEC

BACKGROUND:

An Oil Refinery in the north west refines petroleum products for the UK markets. The processes involved in making some petroleum products require high pressure super heated steam.

THE PROBLEM:

The high pressure super heated steam lines required the installation of flowmeters without the interruption or shutdown of the flow to the process. Careful consideration must be made in instrument specification and the best information available must be used to obtain the correct product from a vast range of potential instruments. The pipe data, flows, temperatures and pressure had to be obtained prior to specifying the instrument.

FLOWLINE'S METERING SOLUTION:

The DF25 Averaging Pitot Tube from Systec has been designed to allow for Hot Tapping into extreme process conditions like the Super Heated Steam used at this site.

The DF25 comes in many configurations, but the hot tap system gives the user more installation options. It is available in standard and exotic materials including P91.

EQUIPMENT DESCRIPTION:

The Systec range of DF8, DF10, DF25 DF44 and DF50 range of sensors are available for very small pipes to very large stacks up to a maximum size of 15m. They can be used for high pressure steam and can be supplied as a fully hot tap system. Full mass correction can be supplied with integral or separate Temperature and Pressure Sensors and the correction can be supplied by the Systec Flowcom that comes with many data tables preprogrammed in the unit and it includes the GERG88 Natural Gas Calculation. The DF range of sensors are suitable for liquids gasses and steam, and a range of dirty flows such as pulverized coal feeding coal fired power stations. The ports are of an over sized design so that blockage does not occur and condensate will not form in the impulse lines causing false dp readings. Multi Variable transmitters are also available on request.

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Further Information



For Further information on the Systec DF25 Deltaflow range of sensors contact Flowline on 020 8207 6565

www.flowline.co.uk

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EQUIPMENT DESCRIPTION:



EQUIPMENT SPECIFICATION:

Differential Pressure
Primary Element:-
Systec DF25 Hot Tap, DN250, over sized dp ports, MVT measuring dp, static pressure, temperature and giving a 4-20mA output for mass corrected flow.