

# APPLICATION NOTE

## Corus Steel – Blast Furnace Gas

### AVERAGING PITOT TUBES - FROM SYSTEC



#### BACKGROUND:

Corus in Port Talbot supply blast furnace gas around the site to the various furnaces. At strategic points flow measurement was required for control and allocation purposes.

#### THE PROBLEM:

The selected meter had to be a low pressure loss device in the blast furnace gas line, and a large issue was the pipe could not be taken out of service for the installation. In addition the gas was dirty and has a tendency to clog sensors such as turbines and vortex meters. Long term reliability and ease of calibration by the site influenced the selection of the final selection.

#### FLOWLINE'S METERING SOLUTION:

The DF25 Averaging Pitot Tube from Systec has been designed to measure dirty gasses with a high tolerance against blockage. The sensor holes are very large compared to most other similar systems. The unit was installed by Corus quickly and easily and provided 4-20mA signals to their Scada. The unit was supplied with a Siemens DSIII dp cell that has excellent temperature stability.

#### 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.

**flowline**  
SPECIALISTS IN FLOW MEASUREMENT

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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](http://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.