

APPLICATION NOTE

Motor Car Manufacturer

ELECTROMAGNETIC FLOWMETER – BY FLOWLINE

BACKGROUND:

A Car manufacturer had a requirement to monitor all the effluent being processed and discharged off site. Their water company stated that they now had to meter all the flows rather than pay a set amount each month. There were a number of points where flow was discharged, and the output signals given by the meter had to be split in order to allow site monitoring and sub metering / internal billing.

THE PROBLEM:

The effluent came from four different sources. The engine plant, the paint shop and two other parts of the manufacturing site. The effluent was processed separately but each line had to be measured either before processing or immediately after so billing could be kept separate. There were two flows from two large separation tanks, a pumped flow from a sump and one other.

FLOWLINE'S METERING SOLUTION:

As the fluid chemistry was not readily available at that time, Flowline offered their MAGFLO MAG 5000 and MAG 1100 Solution. The MAG1100 magnetic meter can be specified with a number of material options and in this case it was supplied with a high temperature Ceramic liner capable of withstanding some of the most aggressive chemicals. This afforded protection of the meter against most common fluids that could cause low level corrosive attack over a long period of time.

The MAG5000 converter was supplied in an IP67 compact configuration with the electronics mounted on top of the sensor. The MAG5000 converters have most of the standard outputs required by industry and includes a digital display of rate and total.



Further Information



For Further information on the MAGFLO range of Flowmeters contact us on

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EQUIPMENT DESCRIPTION:

MAG 5000 Flow Converter
With plug and play commissioning; Self-diagnostics with error reporting; Bi-directional flow; Flow limit switches; External input and empty pipe detection. Analogue 0-20mA or 4-20mA, Digital Output for Error signal, Flow direction of Flow limit switches
System Accuracy 0.5% (reference conditions)
Housing IP67 – “Plug in” module in Polyamide
MAG1100
Size (mm) DN 2-100
Connection Wafer
Pressure (bar) Max. 40
Temperature (°C) -20 to 200
Liner Ceramics
Electrodes Platinum
Enclosure IP 67
Ex approval sensor ATEX EEx [ia][ib] IIB T4-T6

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SPECIALISTS IN FLOW MEASUREMENT

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