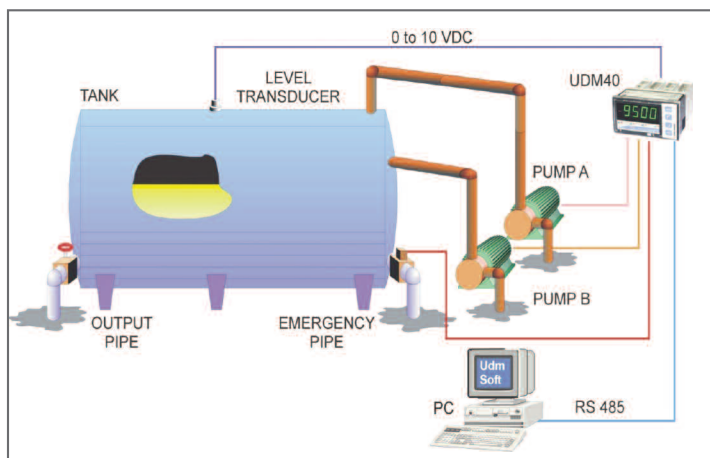


# CG APPLICATIONS

CARLO GAVAZZI



<b>Application Note :</b>	<b>August 4<sup>th</sup> 2006</b>
<b>Market involved :</b>	<b>Chemical, Agriculture, Cement, Ceramic &amp; Glass, Food&amp;Beverage</b>
<b>Product :</b>	<b>UDM40 Universal Digital Meter</b>
<b>Customer :</b>	<b>Panel Builders</b>
<b>Subject :</b>	<b>Monitoring and control of the level in a tank</b>

## CUSTOMER ISSUE :

It is required to display the volume of the fluid contained in the tank - even if it is only available a level transducer: its output signal is proportional to the level, not to the volume, being the tank barrel-shaped.

The volume is also to be controlled in order to always be within a defined range.

The pumps and the emergency pipe valve (in case of full tank) are to be activated according to the measured volume.

## OUR SOLUTION:

The modular Universal Digital Meter UDM40 is the ideal instrument to provide a reliable solution using just one device for the whole application.

The 4 set-points associated to the digital outputs can be used to switch on/off devices as pumps or valves and to change the colour of the display at the same time.

Thanks to the 16 linearisation points capability conversion of the level-proportional signal into a volume-proportional one can be easily and precisely done, being known the level vs volume relationship.

## ACHIEVED BENEFITS:

- Modular instrument with plug and play technique: it allows changing the input/output configuration according to the current needs.
- 3-colour LED display: the colours can be controlled using the up to 4 available setpoints. It allows showing at a glance the current situation of the plant (pump activation, tank empty, etc.) according to the actual display colour.
- Powerful variable control (up to 4 set-points): it provides additional functions to manage the minimum working time of the pumps, to ignore the fluctuations of the fluid after a refilling/emptying, or to filter the measured values.

