

# Case Study | Metropolitan Fire Brigade

## Melbourne Fire Trucks



The Metropolitan Fire Brigade (Melbourne) – MFB – uses MultiTrobe level sensing and control products for many of its fire trucks.

### The fire truck requirement

Most MFB fire trucks have two tanks of liquid for fighting fire:

- Normal water
- Concentrated liquid foam

The liquids are stored on board the fire truck in stainless steel or fibreglass tanks.

High reliability monitoring of the liquid levels and the provision of alarms is critical to the successful operation of the fire truck. Monitoring the level of the water was fairly straightforward but the concentrated foam proved very difficult due to its high conductivity and density.

Prior to trialing the MultiTrobe system, the MFB had tested many types of liquid level control devices including analogue pressure transducers, floats and conductivity devices without any real success.

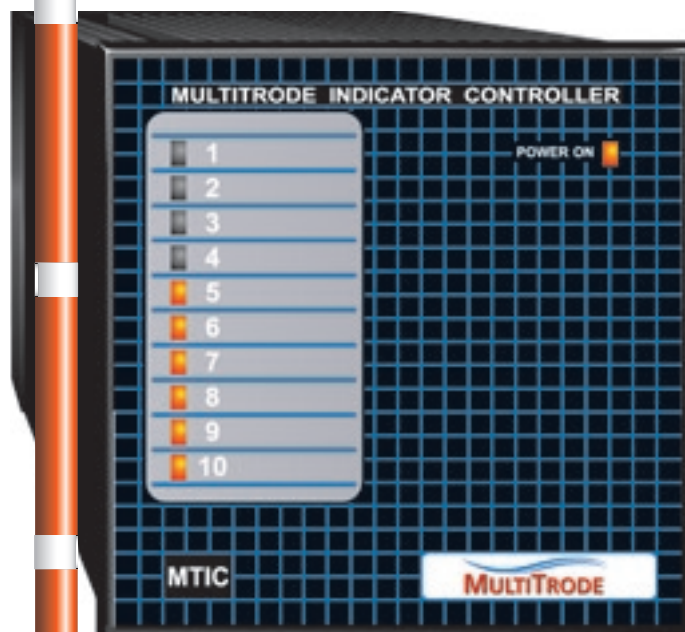
### The MultiTrobe solution

MultiTrobe offered a level sensing solution which had already been used extensively in a variety of harsh and demanding applications:

- The patented MultiTrobe level sensing probe
- The MTIC controller

The probe was originally developed for municipal sewerage pump stations and had proven long term reliability in this harsh environment as well as in many process plants and mines where foaming liquid required level measurement and control.

The probe consists of 10 conductive sensors, with each connected to a separate input on the MTIC. The MTIC has adjustable sensitivity to cater for different liquids. The unit displays the level on an integral bargraph, and provides a 4–20mA output, as well as 10 relay outputs for alarms and control.



MultiTrobe successfully demonstrated its solution to the Engineering Department of the MFB, together with the procedure for installing the level sensing probes in the tanks. An appealing feature of the probe was that it can accommodate different tank sizes. The engineers were then shown the MultiTrobe MTIC interface control unit and how simple it was to install and set up.

Shortly after the demonstration the MFB ordered a trial system which proved very satisfactory and the MFB now specifies MultiTrobe as its first choice for liquid level measurement and control on its fire trucks, as do the Department of Sustainability and Environment and the Country Fire Authority.



*For more information on these products see  
[www.multitrode.com.au/industrial/product\\_listing.cfm](http://www.multitrode.com.au/industrial/product_listing.cfm)*



[www.multitrode.com](http://www.multitrode.com)

**MultiTrobe Pty Ltd • Australia**

Brisbane Technology Park 18 Brandl Street  
PO Box 4633 Eight Mile Plains Qld 4113  
Tel: +61 7 3340 7000 Fax: +61 7 3340 7077  
[sales@multitrode.com.au](mailto:sales@multitrode.com.au)

**MultiTrobe Inc • USA**

Unit 3, 990 East Rogers Circle  
Boca Raton Florida 33487  
Tel: +1 561 994 8090 Fax: +1 561 994 6282  
[sales@multitrode.net](mailto:sales@multitrode.net)