

## South East Asia hydrocarbon flow measurement Fully functional metering solution

Elster-Instromet participated in the 8<sup>th</sup> South East Asia Hydrocarbon Flow Measurement Workshop (SEAHFMW 2009), which took place from 4 – 6 March 2009 in Kuala Lumpur, Malaysia. Over 20 exhibitors from all high-profile companies in the oil and gas industries took part.

This year, Elster-Instromet decided to improve on its normal show-and-tell method using static demo and go one step further. Elster-Instromet has brought an actual 4" Q.Sonic-3C ultrasonic meter and a 4" SM-RI-X turbine meter to the workshop. The Q.Sonic-3C ultrasonic meter is installed in series with a SM-RI-X turbine meter. A flow simulator is connected to the outlet of the turbine meter in order to simulate gas flow.



The flow signal from each meter is connected to a separate FC2000 flow computer for flow computation. These flow computers are connected to the Elster-Instromet Supervisory System (ISS), where the flows from both meters are monitored.

From this simple setup, we could observe a deviation of < 1% between the ultrasonic meter and turbine meter readings. The flow difference can be further reduced if both meters used are sent for wet calibration.

Through this fully functional model, we were able to share our knowledge and experience with our customers to further strengthen our capabilities. We received much positive feedback on the presentation concept, with many participants commenting that it was very informative, they could observe the meters performance themselves and could physically "touch and feel" the overall energy metering concept of our design.

S.W. Yao [s.w.yao@elster-instromet.com.my](mailto:s.w.yao@elster-instromet.com.my)