

## Application note

# Fuel gas measurement with Vortex meters

Our PanaFlow MV80 – a perfect fit, cost-effective solution



### Problem

An offshore exploration and production asset from an international oil company located in West Africa was in need to replace variable area flow meters that were not accurate enough, had limited turndown ratio, leading to poor reliability.

### Application: Fuel gas to HP and LP flares

- Number of lines: 8
- Pipe: ½" 150#RF (2), 1" 150#RF (3) and 1" 300#RF (3)
- Flow rate: Up to 5 Sm<sup>3</sup>/d (½" lines) and up to 40 Sm<sup>3</sup>/d (1" lines)
- Temperature: -10°C – 55°C (14°F – 131°F)
- Pressure: 400 kPa (58 psi)
- Density: up to 4.5 kg/m<sup>3</sup>
- Viscosity: 0.011 cP

The measurement is there to have a permanent safety purge to the flare during the zero flaring conditions at the facility. Among the decision factors, we had to provide a cost-effective solution.

### Solution

We supplied our Inline Vortex meters, PanaFlow MV80 which covered the entire flowing range of these pipe sizes at a reasonable price. Additionally, these meters are loop powered and could re-use the control loop the VA meters were connected to thereby reducing wiring costs for a powered meter.

### Benefit

Cost effective, reliable and accurate flow measurement. They are not external mounted, they are all inline. Additionally, the complete system provided a low operational expenditure.

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