



➔ INCREASED EQUIPMENT PRODUCTIVITY, REDUCED MAINTENANCE AND UNPLANNED DOWNTIME

## Power Distribution – Oil Condition Monitoring

### The Challenge

The customer's primary goal was to improve safety and reduce the risk of catastrophic failure due to undetected oil contamination.

### Solution

Oil Quality Sensors (OQSx) filled a critical missing element in the existing monitoring system by providing a constant feed of highly accurate, real time oil quality data back to the central maintenance department.

During the evaluation phase of the roll-out, the sensor detected a sudden, but marginal, change in oil quality. This enabled maintenance crews to attend the transformer unit and discover that water ingress was occurring. This source was traced and repaired with minimal disruption and no damage to the equipment, potentially saving the operator millions of Euros.

The ability to monitor real time oil condition on transformers of all sizes has provided the final piece of the monitoring jigsaw and is helping the customer to further reduce long term operating costs.

### Benefits

Ability to detect any unexpected deterioration and plan immediate action. Improved maintenance scheduling which reduced costs. Reduced long term equipment wear.

### ➔ COMMERCIAL BENEFIT

Annual operating costs have been reduced by £20.5k thanks to the implementation of Tan Delta's OQSx as part of the site's condition based monitoring programme.

### ➔ HIGHLIGHTS

#### Cost Effective

Improved maintenance scheduling which reduced costs.

#### Prevent Catastrophic Failure

Contamination which could have caused serious damage was immediately identified by the sensor allowing instant remedial action.

#### Optimise Planning

Ability to detect any unexpected deterioration and plan immediate action.

#### Improve Safety

Continuous monitoring to detect any issues improves equipment safety.



Reduction in equipment failures results  
in a safer working environment

## Service and Support from Tan Delta

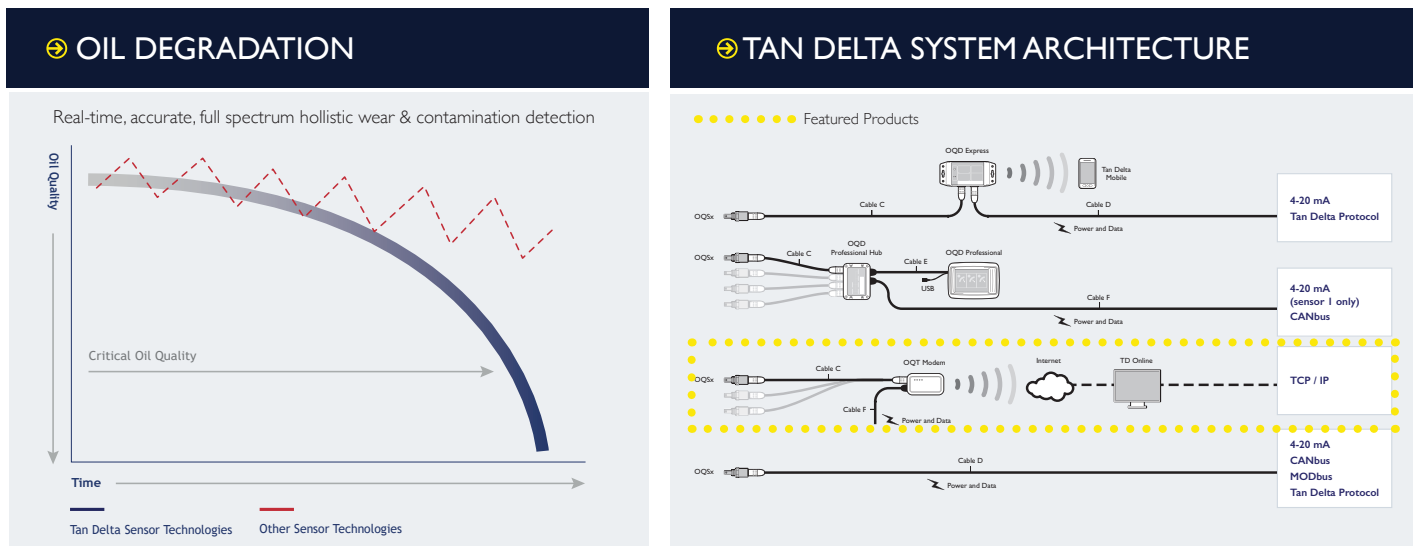
The Tan Delta Customer Support team partners with customers to implement highly effective and commercial beneficial oil conditioning. Our experience and expertise enable customers to quickly and smoothly implement successful condition monitoring.

- ➔ The evaluation and identification of the commercial benefits that will be derived from the implementation of Tan Delta full spectrum holistic real time oil condition monitoring.
- ➔ Support for the planning and efficient implementation of systems across large estates of equipment, including the integration into existing monitoring systems and operational procedures.
- ➔ Ongoing 24/7 global warranty support, technical support, advice and consultancy to ensure customers maximise the long term

## Technology That Makes a Difference

Tan Delta core technologies deliver unique oil condition monitoring performance that directly translates into significantly enhanced commercial benefits.

Tan Delta technology uniquely offers full spectrum holistic oil condition monitoring in real time to a very high degree of accuracy. This ensures that any contamination and or wear, no matter the cause, is detected, quantified and reported in real time. Nothing is missed.



## About Tan Delta Systems

Tan Delta Systems Limited is a global leader in the development and supply of advanced oil condition monitoring technologies, products and systems.

Its products are trusted by the world's leading industrial and commercial companies to monitor oil condition, helping to optimise equipment productivity, reduce operating costs, thereby remaining competitive in a global economy.

All Tan Delta products are engineered and quality manufactured for long term continuous operation in the harshest commercial and industrial environments. Each product is carefully engineered and tested to withstand the long term effects of extreme shock, vibration, heat, cold, thermal shock, electrical interference and many more factors.



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