



➔ TRACKING OIL QUALITY IN REAL-TIME, PREVENTING AVOIDABLE EQUIPMENT DOWNTIME

## Industrial Hydraulic System – Oil Condition Monitoring

### Challenge

Moisture ingress can be a common problem within a hydraulic system, also contamination can be an early indicator of component wear and a precursor to component failure. Ensuring that the oil is kept in the optimum condition will increase equipment liability and reduce equipment wear. Oil can then only be changed when necessary based on its actual condition as opposed to a out dated time-based regime.

### Solution

Installing the Tan Delta Oil Quality Sensor (OQSx) into the low-pressure side and then connecting it to the Oil Quality Display (OQDe) gives you an instant read out of the current hydraulic oil condition and temperature. A single traffic light LED shows the current status for the equipment with individual displays for oil condition, oil temperature and oil rate of change.

### Benefits

An operator can immediately see the current state of the oil within the hydraulic system and can immediately undertake any remedial action should the oil condition deteriorate. Laboratory oil sampling frequency can be significantly reduced and only utilised when the sensor indicates an issue is present.

### ➔ COMMERCIAL BENEFIT

The reduction in oil sampling, the associated reduction in man power required and the extended oil life has realised a £4.5K saving per asset per year.

### ➔ HIGHLIGHTS

#### Reduced Wastage

Unnecessary oil waste was avoided by only changing oil which needs to be changed.

#### Increased Reliability

Detects and reports the early signs of hidden issues enabling remedial action to prevent accelerated wear and unexpected breakdowns.

#### Enhanced Planning

The site can now accurately predict future maintenance and streamline and reduce associated costs.

#### Prevent Catastrophic Failure

The site is able to track real time changes in their oil quality preventing avoidable failures.



## Service and Support from Tan Delta

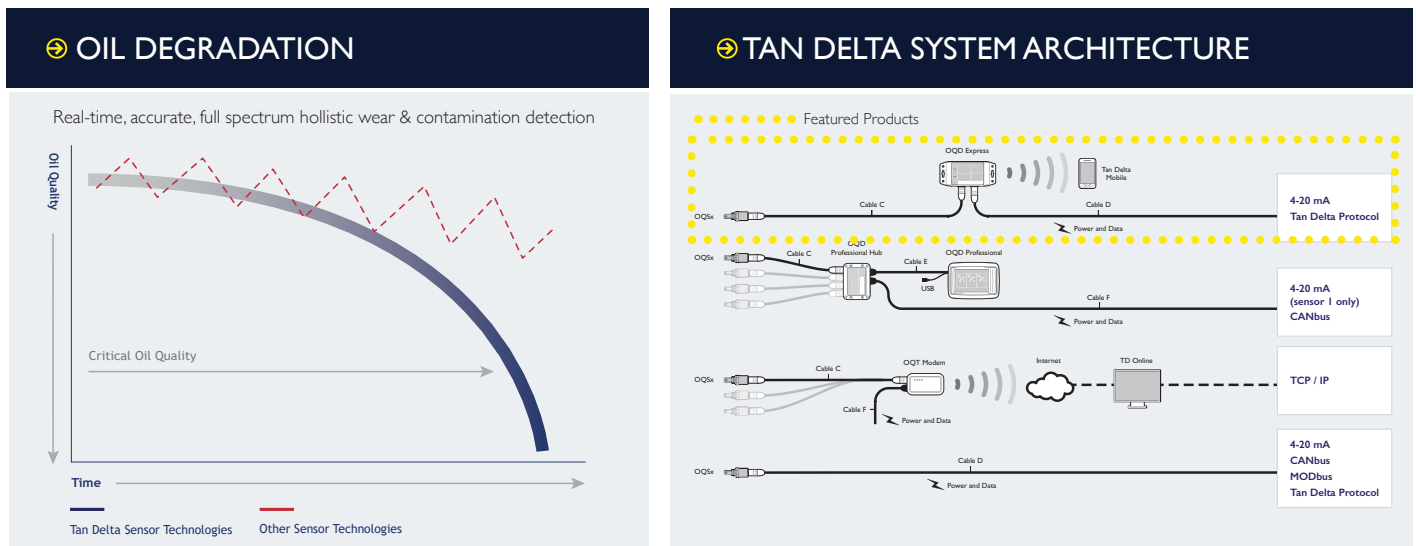
The Tan Delta Customer Support team partners with customers to implement highly effective and commercial beneficial oil conditioning. Our experience and expertise enable customers to quickly and smoothly implement successful condition monitoring.

- ➔ 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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