



➔ INCREASED SERVICE INTERVALS, REDUCED OIL CHANGES AND WASTE DISPOSAL COSTS

## Marine Logistics and Handling – Oil Condition Monitoring

### The Challenge

Reliable equipment is critical to the efficiency of all ports. In particular the large cranes used to move cargo between the port and ships.

### Solution

Oil quality plays a critical role and Tan Delta was able to assist an operator mitigate risk and reduce operating costs.

Oil Quality Sensors (OQSx) were fitted to the primary hydraulic systems and onboard compressors to provide real time monitoring of oil condition. An operator panel was installed providing a simple traffic light condition status, whilst live data was streamed back to the maintenance centre.

The data generated by the sensors enabled the operator to extend the intervals between servicing thus reducing direct operating costs, whilst at the same time providing the comfort that in the event of an unexpected issue an alert would be provided and action taken in a planned and controlled manner before any equipment damage had occurred.

### Benefits

The installation of the oil sensors delivered a series of benefits which all contributed to the estimated six month investment pay back.

### ➔ HIGHLIGHTS

#### Cost Effective

Actual oil consumption was reduced by 32.2% as the sensor showed that oil was being replaced when still viable.

#### Reduced Maintenance Intervals

Service intervals were significantly extended and based upon need.

#### Reduced Waste

Oil disposal costs were dramatically reduced due to fewer oil changes.

#### Prevent Catastrophic Failure

Unexpected contamination which could have lead to serious equipment damage was immediately identified.



Local data display enables quick and simple monitoring

### ➔ COMMERCIAL BENEFIT

Annual operating costs across 36 site assets has been reduced by 86.5%, saving an annual cost of £247K thanks to the Tan Delta OQSx equipment.



## Service and Support from Tan Delta

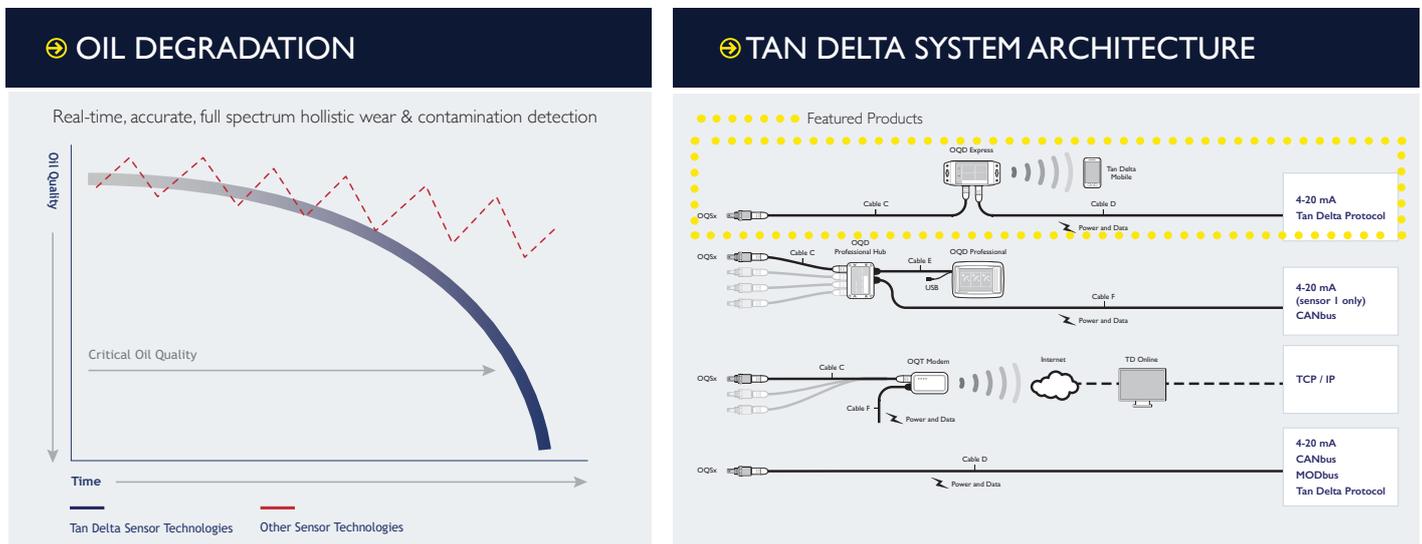
The Tan Delta Customer Support team partners with customers to implement highly effective and commercial beneficial oil conditioning. Our experience and expertise enable customers to quickly and smoothly implement successful condition monitoring.

- ➔ 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.



**Tan Delta Head Office**  
1 CARRERA COURT  
SHEFFIELD  
UK



Company No. 06362470