RAILWAY LOCOMOTIVE





REDUCED OIL CONSUMPTION AND DISPOSAL COSTS, MAXIMISING OIL LIFE SPAN

Transport Network -Oil Condition Monitoring

The Challenge

Tan Delta equipment was deployed across a fleet of large diesel electric locomotives to improve reliability, maintenance scheduling and control.

Solution

An Oil Quality Sensor (OQSx) was installed down stream from the main engine oil filter using a simple prefabricated manifold which was fitted in-line and into which the sensor was installed.

Power for the sensor was provided by an available feed from the engine. Data was sent to a locally fitted Oil Quality Display (OQD) to show real time data, as well as being connected to the existing telematics system, such that data was communicated back to the customers central maintenance control and planning department.

Data from the sensor is used to help plan optimal servicing whilst simultaneously providing an alert mechanism to identify potential problems before damage is caused.

Benefits

The customer has benefited from the ability to track actual maintenance activities of locomotive operators through the data provided by the sensor and ensure that an optimal service schedule maintained, thus reducing operating and failure costs.

COMMERCIAL BENEFIT

The site has reduced their annual maintenance costs by 80%, and now operate an effective condition based monitoring schedule thanks to Tan Delta equipment.

HIGHLIGHTS

Cost Effective

Actual oil consumption was reduced by 21%.

Improved Maintenance Schedules

Equipment failure costs were reduced due to improved maintenance schedules and auditing of correct procedures through analysis of the data.

Reduced Waste

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

Reduced Maintenance Intervals

Service intervals were extended and their cost reduced due to improved need based scheduling.





Service and Support from Tan Delta

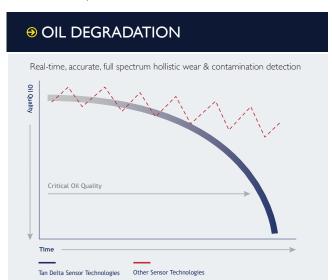
The Tan Delta Customer Support team partners with customers to implement highly effective and commercial beneficial oil conditioning. Our experience and expertise enable customers to quickly and smoothly implement successful condition monitoring.

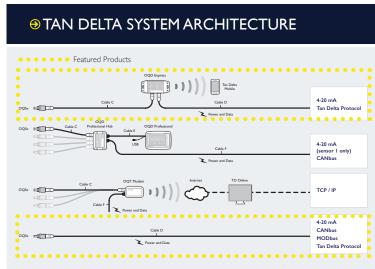
- \varTheta The evaluation and identification of the commercial benefits that will be derived from the implementation of Tan Delta full spectrum hollistic real time oil condition monitoring.
- \varTheta Support for the planning and efficient implementation of systems across large estates of equipment, including the integration into existing monitoring systems and operational procedures.
- \varTheta 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 hollistic 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, quantitified 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.

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.

All Tan Delta products are engineered and quality manufactured for long

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