



Metal Recycling Plant Implements Tan Delta oil sensors on gearboxes and engines to reduce costly break downs.

The Challenge

At a global metal recycling company, with over 130 sites worldwide, equipment has traditionally been monitored using standard methods such as vibration and oil sampling during scheduled maintenance tasks.

The 'dirty' environment combined with continuous machine operation means that standard methods and scheduled maintenance are not detecting issues. This is resulting in expensive unexpected breakdowns and accelerated equipment wear.

Solution

The customer has installed Tan Delta OQSx-G2 real time oil condition analysis sensors to provide continuous monitoring of all their main gear boxes and engines.

The sensors constantly analyse the oil in real time with with absolute accuracy, detecting and measuring all and any contamination and wear to a change sensitivity of 0.001%. Excessive and or unexpected contamination of the oil due to the early signs of issues, is detected and the operator alerted well before equipment damage. This enables preventative maintenance as well as optimal maintenance scheduling to reduce waste and cost.

Benefits

The customer has reported a number of expected and unexpected benefits. Immediately they have been able to direct preventative maintenance where needed and reduce breakdowns.

They have been able to reduce scheduled inspections and oil testing and the associated costs and tailor maintenance according to the actual need of each gear box instead of fixed time based schedules. An unexpected benefit was being able to confirm if maintenance has been carried out properly.

HIGHLIGHTS

Reduced Breakdowns

Early detection of equipment issues has enabled effective preventative maintenance.

Reduced Maintenance Costs

Overly conservative time based scheduled maintenance has been reduced.

Reduced Waste

Less break downs has meant a notable reduction in parts, along with ability to reduce oil consumption by accurately identifying its end of life.

Quick Payback

Installation completed within 1 month. Customer expects full investment paid back through reduced costs within 3 months.



OQSx-G2 Sensor and Express Display Unit for immediate installation