



TORSION CONTROL PRODUCTS DRIVES AWAY DOWNTIME FOR ASPHALT EQUIPMENT MANUFACTURER

CHALLENGE ▼

Failed couplings. Unexpected shutdowns. Long traffic delays.

Those are some of the issues a leader in road building and asphalt equipment manufacturing faced on two of its planers. The planers are used to remove asphalt and lower roads up to 14 inches.

The Torsion Control Products customer had a configuration within the planer which included a clutch, gearbox and a elastomeric coupling from another manufacturer.

However, the elastomeric coupling had difficulty meeting the needs of the application. The customer needed a minimum of 3,000 hours of uptime between overhauls, but the elastomeric coupling only provided between 200 and 1,000 hours of uptime due to unpredictable failures. The premature and unanticipated failure of the coupling caused extra costs, including downtime, renting additional equipment to complete the job and removing the machine to replace the coupling. These failures also resulted in disruptive traffic jams and field issues.

TCP SOLUTION ▼

TCP engineers completed a torsional vibration analysis of the application to determine the correct performance for the coupling. Within six weeks, TCP provided a new helical spring design coupling designed specifically for this application. In addition, TCP provided on-site field testing to determine if the coupling addressed the torsional characteristics of the application and correlated to the torsional vibration analysis. The analysis looked at the gearbox, clutch and hydraulic clutch. The TCP coupling increased the life of the coupling and the overall uptime of the machine.

RESULTS THAT MATTER ▼

The asphalt paving equipment manufacturer experienced significant cost savings with the changeover. Uptime tripled to more than 3,000 hours plus with no failures, exceeding customer expectations. The change worked so well that the manufacturer now uses the TCP coupling on all their high horsepower equipment.

CONTACT US

for more information at Info@torsioncontrol.com.

www.torsioncontrol.com

TIMKEN

The Timken team applies their know-how to improve the reliability and performance of machinery in diverse markets worldwide. The company designs, makes and markets high-performance mechanical components, including bearings, belts, brakes, clutches, chain, couplings, gears and related mechanical power transmission products and services.

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