

Wheel Wear Report LCF OnBoard Sticks Freight Eastern US Freight System

EXECUTIVE SUMMARY

Kelsan Technologies Corporation was approached to evaluate the effectiveness of its Friction Management System at an Eastern US Freight System (EUSFS). The objective was to determine the expected improvement in wheel flange life on locomotives.

In this case, the Kelsan solution consists of the Solid LCF (Low Coefficient of Friction), applied on board the EUSFS locomotives by RB047 Bearing Housing LCF-Only brackets.

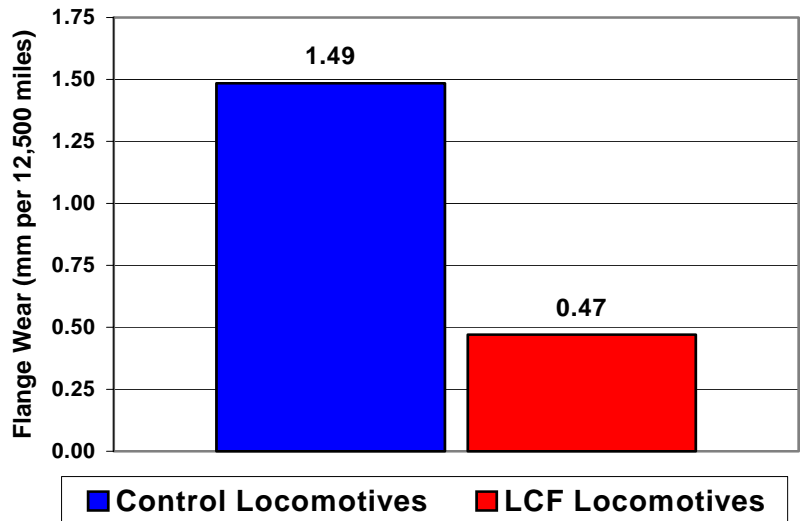
The trial results in this document include wheel flange wear rates of the control and LCF. Inspection of the application system (brackets, applicator and sticks) is also included in the report.

Summary of Results: Wheel Flange Wear Testing

The wheel wear performance of the Kelsan Solution on two GP-10 locomotives was compared to two locomotives with no onboard flange lubrication. The vehicles accumulated 12,500 miles during the trial in regular revenue service.

The LCF trial resulted in an average three times increase in wheel flange life for the trial locomotives relative to the controls.

Flange Wear Rates



Average Result: 3X Wheel Flange Life

Summary Results:

- ◆ LCF fitted to 50% of the wheels on the locomotives resulted in a three times (3X) increase in wheel flange life for the trial vehicles relative to the control vehicles.

- ◆ The RB047 Bearing Housing LCF-Only bracket performed well under regular operating conditions.

Conclusion

A solution of Kelsan LCF in solid stick form delivered through a vehicle mounted delivery system is recommended to extend wheel flange life and thereby decrease the EUSFS operational expenses related to wheel truing and replacement.

Note: To obtain a copy of the full report or find out the identity of the Eastern US Freight System, please contact John Milobar, Vice President Sales & Marketing at 604-984-6100 or jmilobar@kelsan.com.