

Case Study

Thermal Imaging

Automaker Avoids Damages and Saves Costs



Challenge

One large automaker's predictive maintenance program seeks to save money by avoiding expensive damages in favor of otherwise routine maintenance and repairs.

Corrective Measures

Regarding preventative maintenance, FLIR infrared cameras are very powerful tools in a manufacturing environment where most electro-mechanical equipment not working at an optimal level show inconsistent heat signatures than equipment that does. This is especially true at the Powertrain Engine Facility, where FLIR IR cameras have been utilized for this very purpose.

Cost Savings Description

Preventative maintenance is usually scheduled during convenient downtimes and swiftly handled whereas equipment replacement after failure cuts into business production and often lengthy in time due to safety issues and additional damages to equipment after failure.

At a particular facility the maintenance team identified an unusually high temperature on a V8 engine track chain, commonly understood as a sign of friction. The team quickly found the source of the problem to be the automated grease system which had been empty. \$65 dollars for labor and a refill on grease saved the plant an unimaginable amount had the problem been left undiscovered. The estimated costs including 136 hours of repair labor at \$45 per hour, 1,072 hours of lost production labor at \$39 per hour, part costs of \$32,430 to replace 4600 links of chain, \$750 for new drive chains and \$20 for grease total to about \$81,078. If, however, we add the cost of lost labor production for the two shifts (2,100 V8 engine units) total in the range of \$1,000,000.

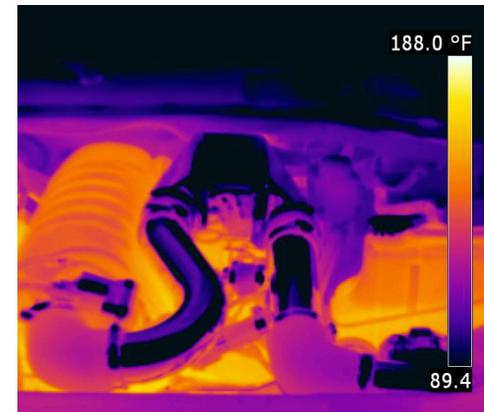
Results

Thanks to preventative maintenance aided by FLIR IR cameras, this automaker sees more profit due to the near elimination of large scale maintenance overhead costs.

In this one example alone, the program saved the company nearly one million dollars.

Result

By eliminating large scale maintenance overhead costs, this automaker saved nearly \$1 million dollars



Dramatic savings are achievable from regular preventive and predictive maintenance in large manufacturing facilities.