

# Case study – Automotive



## Company

Producing more than 40% of the automobiles in its home market and with a rapidly-growing export market, now exceeding \$2B annually, this manufacturer has achieved a global reputation for reliability and cost-effectiveness. It is now engaged in releasing a new generation of automobiles to all its major markets.



## Challenges

Increasing focus on productivity forced this company to address a history of conveyor system failures on three major production lines that had impacted operations for several years. Bearing and insulation failures on drive motors had been failing unexpectedly despite the adoption of a planned maintenance program, leading to a cumulative loss of several days of production every year and pushing the plant's Overall Equipment Effectiveness down by a full %. Increasing exports eliminated any spare manufacturing capacity, and finding a solution became a critical issue.

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Solution	Results
<p>Although it quickly became clear that condition monitoring of the conveyor systems had the capability to predict failures weeks in advance and avoid the run of failures, finding the right system was a key factor. The company selected Artesis MCM after a careful review of many systems, not only because it was possible to install at the motor control cabinets (avoiding the need for significant new cabling) but also because it excelled at early detection of bearing and insulation problems (their two major faults). As few as 20 MCM units were required to cover all critical equipment.</p>	<p>Typical failure events resulted in around 40 production staff remaining idle for up to 4 hours while repairs were carried out. Increasing export success meant that this loss could no longer be corrected by overtime working, and the cost of lost production exacerbated the cost of lost man hours.</p> <p>The use of Artesis MCM completely eliminated these failure events, the <b>cost of each of which has been estimated at \$100-200K</b> and which had been occurring several times a year, for <b>less than \$100K</b>. This high return on investment has led to the progressive deployment of Artesis MCM in several other plants.</p>