



CASE STUDY

Comprehensive Maintenance Solution

ATS Puts Luxury Automaker’s Assembly Plant on the Road to Greater Productivity With Over 22% Downtime Reduction

Customer Challenge

Nothing hits the brakes harder at an automobile assembly plant than conveyor downtime. At one luxury automaker’s production facility where vehicles are built for the North American market, ATS was called in to help reduce production line reliability issues that, at times, was costing the manufacturer \$16,000 per minute.

As with most final assembly plants, each major component at this factory moves through the assembly process on a carrier system. Chassis, engines, doors and other components travel on specially-built carriers and pallets suspended from overhead tracks. Using a complex array of winches, hoists, and motors managed by programmable logic controllers (PLCs), the carriers raise, lower, and move sub-assemblies forward, marrying them to the vehicle at the precise moment they are needed.

Despite its advanced manufacturing systems, the automaker was not achieving its downtime goals—a situation that was negatively impacting both production quotas and operating margins. As one of the most respected automakers in the world, the firm sought an elite factory equipment maintenance partner with the expertise and fresh ideas to keep its wheels of production rolling.

ATS Solution

According to an ATS Director, the customer required a solution that was both technical and cultural. “This company had a well-established maintenance infrastructure. Not only did it have a computerized maintenance management system in place, but also its procedures required careful coordination with its production planning and scheduling teams,” he noted. “Its best practices are derived in large part from its firmly entrenched heritage, so understanding and following those unique methods was critical.”

To fully integrate with the automakers’ processes, ATS sent personnel to the customer’s overseas headquarters for advanced technical training. ATS also established a plan for implementing its own continuous improvement practices using the automaker’s maintenance data. “It took time. We worked diligently to roll out a preventive maintenance system that matched our customer’s way of working,” the ATS Director said.

ATS’ continuous improvement program spanned all conveyor system elements including carriers for doors, engines, transmissions, and others. Performance metrics were established for quality, safety, project management, scheduling, KPIs and training.

AT A GLANCE

- Luxury automaker looking for further reductions in production downtime
- ATS hired to transform conveyor maintenance program
- ATS structures program to meet customer’s culture and technology
- Preventive maintenance effort built on continuous improvement
- Weekly carrier/pallet downtime reduced 22% year-over-year
- Final carrier downtime reduced 29% versus year-over-year resulting in a \$12 million cost avoidance in the first 6 months.

Bottom-Line Success

After an adjustment period at the assembly plant, the ATS program took off. Now in its second year, ATS’ practices dropped average weekly downtime for carriers and trim lines by 22% over the prior year. Final carrier downtime dropped 29%; at \$16,000 per minute, the improvement amounted to a cost savings/avoidance of \$12 million over a six-month period.

ATS continues to work on an array of metrics, using a standards and assessments heat map to guide its efforts. ATS was awarded the automaker’s highest safety award for its performance at the plant.

In its most recent review, the automaker, known for its high standards, rated ATS “excellent” or “good” in 26 out of 28 key relationship areas in its most recent quarterly ratings. “ATS has become a valuable and trusted partner,” commented the automaker’s maintenance director. “The possibilities for ATS with our company are limitless.”



29% YoY DECREASE
FINAL CARRIER DOWNTIME



\$12 MILLION
COST AVOIDANCE