



TENNESSEE GREEN STAR PARTNERSHIP MEMBER HIGHLIGHT

ABC INAOC Exterior Systems, LLC - Livingston, TN



Tier 1 Automotive Supplier

By: Caleb Powell

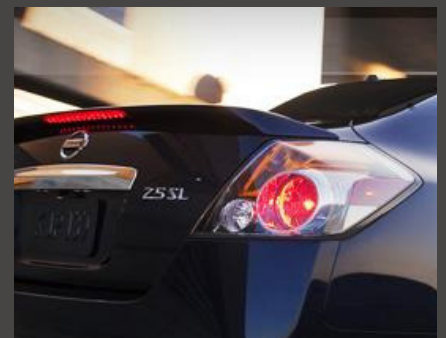
ABC INOAC Exterior Systems, LLC operates as a Tier 1 automotive supplier of exterior products by manufacturing and painting plastic molded components. The facility's two main product commodities are rear spoilers and exterior moldings (body side and roof drip moldings). ABC INOAC's customers include Nissan, Subaru, Ford, Chevrolet, Lexus, Toyota, Honda, General Motors, and Acura. The company produces spoilers for all Nissan Altimas and Maximas, Lexus ES-350s, and Chevrolet Corvettes. This location also manufactures body side moldings for all Nissan Altima sedans, Lexus ES-350 sedans, Subaru Imprezas, and Honda CRVs. Similarly, roof moldings for all Nissan Maximas and Nissan Frontiers are fabricated at the Livingston plant. The manufacturing processes include blow molding, robotic and manual sanding, Class A painting, injection molding, extrusion, and assembly.

The facility was constructed in 1975 and opened as Sterling Engineered Products in 1987. In the early 90's the name was changed to Aeroquip and the partnership agreement with INOAC came soon after. By the late 90's, Eaton acquired Aeroquip and the facility's name officially changed to Eaton INOAC Company. It wasn't until 2012, when ABC and INOAC joined forces to become what it is today, ABC INOAC Exterior Systems, LLC. ABC Group is a privately owned Canadian company that specializes in automotive systems and INOAC is a leading Japanese company of polyurethane, rubber, plastics, etc.

One of ABC INOAC's signature areas of focus is employee driven continuous improvement, which has become an essential part of the Livingston facility. Lean production is a systematic method to eliminate waste from the manufacturing process resulting in improved efficiency, effectiveness, and profitability. ABC INOAC has a Lean Council comprised of employees that meets weekly to discuss lean activities and ideas. Stemming from the INOAC side of the company, the Livingston plant's 130 employees are broken up into Kaizen teams. Kaizen is the Japanese word for efficiency and refers to the activities that continuously improve all functions and involve all employees from the CEO to the assembly line workers. There is a yearly competition conducted where the teams present their activities and results, with the winners getting a paid trip to the US headquarters in Michigan.

FEATURED THIS MONTH:

- Established 1975
- Employs 130
- Member since 2016
- This site has less than 1% employee turnover.



Nissan Altima spoiler
manufactured at the Livingston
plant

Once there, all of the winners from the US facilities compete for a chance to travel to Japan to present their ideas and solutions to the top executives. Livingston's plant manager, Gary Tapocsi, mentioned, "I take the top team from our facility and stay a few extra days in Michigan to sight see and reward them for the hard work and dedication they put into making the work we do more sustainable". These programs have greatly increased employee buy-in as well as helped to find innovative solutions to problems that aren't always visible. Process improvements suggested by the employees are shared at plants across the world.

ABC INOAC Exterior Systems, LLC has accomplished tremendous energy, water, and monetary savings by updating technology and implementing employee recommendations. In early 2018, the facility replaced all of their existing, low efficiency bulbs with LED lighting. They installed variable frequency drives on 15 of their hard start pieces of equipment. The facility also took on the challenge of replacing three air compressors and a 350 ton chiller with more efficient equipment. The plant plans to replace another 350 ton chiller in the coming year. The updates to the various technologies have contributed to tremendous energy reductions and over \$31,000 in savings in only 4 short months. Regrinding of the extra plastic that is removed from the product line has decreased the volume of one waste stream and is projected to save over \$2,000 per year. The facility is able to extract the usable water from the wash that is used during the painting process. This way they can reuse the water and reduce the amount of hazardous waste that is produced. This technology was responsible for a 1.3 million gallon reduction of water use from 2017 to 2018. During conventional automotive parts painting processes, a catalyst is mixed with paint, which is then applied. Leftover paint is flushed out of the equipment and disposed of to make way for a new color. Instead, the Livingston facility uses technology called precision mixing where paints are mixed and drawn into an electrostatic gun. The paint and catalyst are mixed as they go through the gun. If the plant didn't use this process there would be wasted paint because the catalyst would harden. This particular type of technology helps reduce over-spray and allows them to change colors multiple times a day without waste.

ABC INOAC Exterior Systems, LLC continues to prove that employee engagement can bring about more benefits than just a reduction in turnover. This facility demonstrates the power of working together to innovate and become better environmental stewards.

[The Tennessee Materials Marketplace](#) is a collaboration between industries, facilitated by an interactive online materials exchange, to recycle, repurpose, and return material discards back to Tennessee's economy. ABC INOAC Exterior Systems, LLC learned of the marketplace initiative through its membership in the Tennessee Green Star Partnership.



Side molding



Recycling Center



Plastic Regrinder

"We further commit to set and review objectives and targets in an effort to continually strive to be a good corporate neighbor." – ABC INOAC Exterior System's Environmental Policy

The [Tennessee Green Star Partnership](#) is a voluntary environmental leadership program designed to recognize industries in the state that are committed to sustainable practices. If you are interested in joining ABC INOAC Exterior Systems, LLC and other sustainable industries in Tennessee by becoming a member, please contact us.

