



**Good Afternoon** As Steve Jobs once said, "Innovation distinguishes between a leader and a follower." Even in the tough economy of today, innovation in the areas of technology and sustainability will bring companies to the front of the line. American Trim is continuing to improve processes and capabilities to keep the products that go to our customers the best and most efficiently produced in the industry. [If you have any suggestions or comments that would help us improve, please send them through our online suggestion form.](#)

## In The News

Curious to see the other products American Trim produces? See our newest website category "[Metal Products](#)". This section highlights our largest product lines and capabilities at each of the 6 main American Trim locations.

## UNOH Reality Show



In our Alodine EC<sup>2</sup> article to the right we discuss the University of Northwestern

Ohio's role in helping to test the affect of a coated intake manifold on engine performance.

UNOH's unique testing facility has drawn the attention of the Fox Sports Network (FSN). FSN will feature UNOH's High Performance Motorsports students in their own reality show, Motorsports U. This airs every Sunday at 11 AM-tune in to see the most recent advances in high performance motorsports.

## Finish Development

In our last newsletter we told you about the advances we had made in our finishing development department. Today we are up to a total of 1,020 different design chips and are still working to develop new samples daily. Our designs are grabbing the attention of our current and prospective clients. In the last quarter we have taken our show on the road to our US and European clients in the automotive, architectural and plumbing fixtures industries.

## The New Age of Porcelain Enamel

Porcelain enamel is a highly durable coating that has been around since ancient times and was first used commercially in the 1850s. While porcelain enamel has been used over the ages, advances in the technology have helped keep it ranked among the best metal coatings on the market. The porcelain enamel coating begins as a frit, a granulated glass mixture, which is fired in ovens at a temperature of 1100-1600°F and binds the coating to the metal. The resulting coating has the following qualities:



- Provides a barrier to odor and bacteria
- Easy to clean
- Resistant to scratching, abrasion, chemicals, and corrosion
- Environmentally friendly
- Provides bright color over the lifetime of the product
- Graffiti and flame proof
- Weather resistant

Ferro Corporation, a top porcelain enamel frit supplier, has developed a variety of innovative frit options all of which can be used to coat products in our facility in Erie, PA.

- Evolution Coatings® - a coating that supplies a metallic look without the cost or maintenance of typical metal finish
- RealEase® - a nonstick coating that comes in a variety of color options
- AquaRealEase® - coating used to line oven cavities so that unhealthy chemicals or high temperatures do not need to be used to clean your oven
- Environmentally friendly, lead free coatings

With the variety of color options available for porcelain enamel, colors can easily be matched to the brand. American Trim is the sole supplier of porcelain enamel color standard tiles to the measurement industry. These are the tiles that are used in color calibrating and color matching machines that are found in places like Lowes and Home Depot. This capability ranks us at the top in being able to match the color needed.

One example of newer uses for porcelain enamel is in the marker/chalk board industry. With our unique custom screen printing of up to 6 colors, we have been able to supply long lasting porcelain enamel boards for health and educational facilities.



[See a complete list of our capabilities by visiting our Porcelain enamel page](#)

**Alodine EC<sup>2</sup>-One Part Can Make a Difference - Higher Horsepower**



Our newest testing has been combining our finishing development with our high velocity metal forming (HVMF).

[View Metal Finishing Matrix](#)

#### Customer Links

[Keep updated with recent news](#)  
[Quality Contacts and Documents](#)  
[Design Assistance](#)

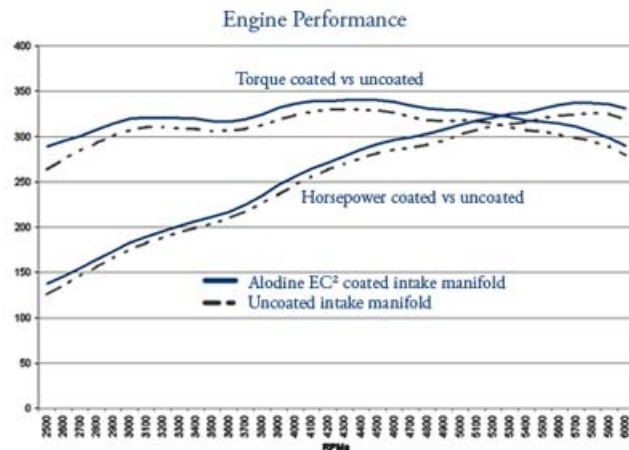
#### Contact Us

1005 West Grand Ave  
Lima, OH 45801  
phone: (419) 228-1145  
web site: [amtrim.com](http://amtrim.com)  
email: [Newsletter Questions](mailto:NewsletterQuestions)

While engine design and performance play an important role in the efficiency and fuel consumption of a vehicle, it is not the only aspect to consider. The intake manifold's performance is part of this total picture. The intake manifold's responsibility is to combine air and fuel in an equal and consistent manner and then distribute it through passages that connect directly to the intake valves of the engine.

American Trim offers the Alodine EC<sup>2</sup> coating to industries where their products are functioning in a harsh environment. One of the many properties that make Alodine EC<sup>2</sup> unique is its high lubricity. This property partnered with high corrosion resistance lead us to the University of Northern Ohio (UNOH), a renowned high performance testing and education facility, to run some tests on intake manifolds.

We brought UNOH an intake manifold that was coated with Alodine EC<sup>2</sup>, and the manifold was installed on a Chevy engine block and then hooked to a dynamometer for testing. In a side by side comparison it was discovered that using the coating improved airflow which resulted in improved horsepower. See results on larger graph



All the testing was completed by the instructor and students at UNOH. During the testing one of the students noticed that while the two engines were being tested, the intake manifold coated with the EC<sup>2</sup> was cooler to the touch. With the connection between temperature and fuel economy presented, it can be deduced that the fuel mixture could be made leaner for improved MPG. Our next phase in the testing will be to more thoroughly analyze this affect on fuel economy and overall performance.

The UNOH findings were shown to an automotive OM, and they are interested in testing a variety of engine parts to assess improved performance. We are in the process of coating these parts today.

Alodine EC<sup>2</sup>'s properties have lead to improvements in products in a variety of industries. This might be the coating that can improve or solve an issue in your product's performance. [Download the Alodine EC<sup>2</sup> white paper/brochure combo pack](#) to get a more complete look at the coating's capabilities. Then let us coat one of your parts to test for improved performance.

You can request to not receive any follow-up emails by [clicking here](#).

Copyright 2009 American Trim, LLC All rights reserved.

1005 West Grand Avenue Lima, OH 45801

We will protect your privacy