

# Precision Induction Heating for Automotive Rotor Treatment

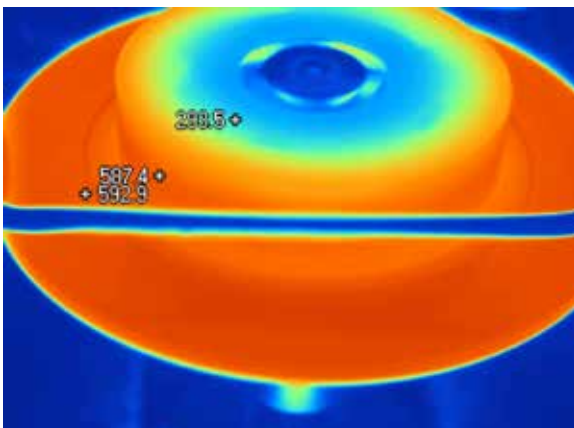
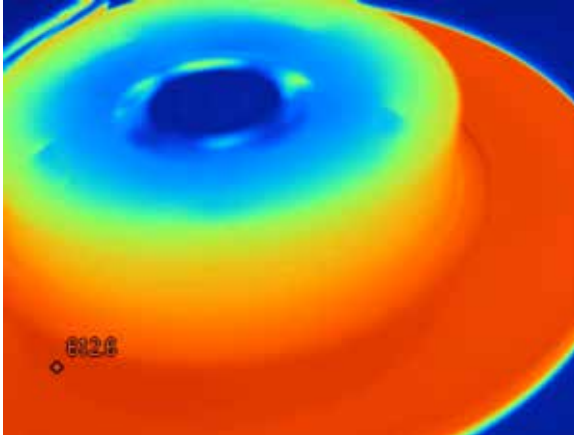


**Ambrell**<sup>®</sup>  
INDUCTION HEATING SOLUTIONS  
an inTEST Company



*Experience the Excellence.™*

## The Cure for Brake Rotor Coatings



*Thermal images (above) shows the even temperatures on the rotor surface while keeping the center hub cool.*

### A Simple, Cost-effective Heating Method for Drying and Curing

Protective coatings used on automotive brake rotors provide a more durable and visually appealing product by reducing rust and corrosion. Once protective coatings are applied, typically they are dried or cured in an oven. However, using induction heating for rotor finishing saves on energy costs and valuable production time.

Induction heating generates the heat from within the rotor improving the quality of the finished coating by curing from the metal coating interface allowing for any outgassing during the curing process. This flameless, concentrated energy, saves the wasted time and energy in ramping up an oven as well as saves ambient heat surrounding the part.

### Even, Safe Application

Induction heating consistently produces a quality cure of specialty coatings by using a uniquely designed coil and power supply to provide precise, even temperature across the rotor. It is safe for water-based cadmium- and chromium-free coatings. The process will not alter a coating or affect the coating during the high temperatures on the rotor in the braking process. Ambrell supplies versatile induction heating systems that can be configured for the pre-cure at 150-250° F (66-121° C) and curing cycles at 575°-600° F (300-315° C) for different brake rotor sizes.

### Ease of Integration

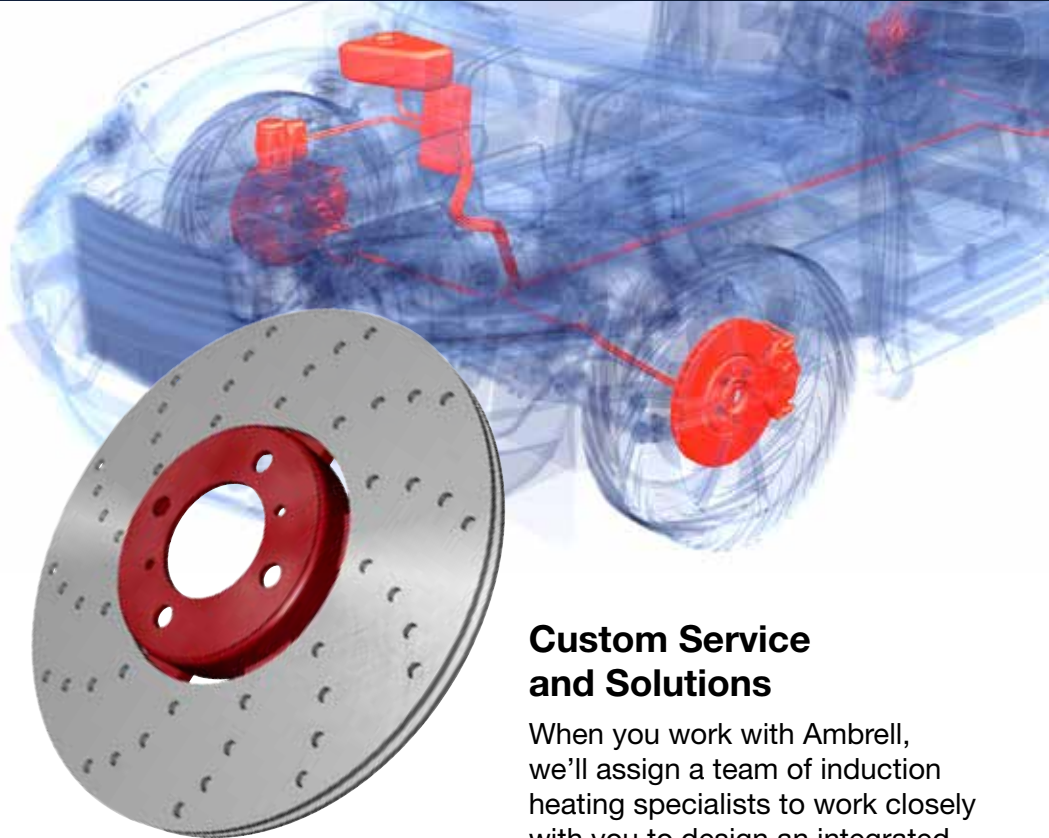
Many users have realized the significant advantages to incorporating induction heating into the curing process for coating. With over 10,000 induction heating system installations for many different applications across the world, you can count on Ambrell to design a system that will enhance production. Ambrell is well-equipped to aid brake rotor manufacturers from system design, to implementation, and support after installation.

## The Ambrell Advantage

- Provides the correct temperature across the rotor
- Each rotor has the same cure process
- Safe and effective: a flame-less concentrated heat energy
- Flexible: coils can be configured to any rotor size
- Energy savings: no furnace to ramp up
- Production savings: faster part throughput
- Easily integrated into existing manufacturing lines



**Coil designed for uniform heating.**



## Ambrell EKOHEAT® at a Glance

**Ambrell's EKOHEAT induction heating systems provide a quick, precise, repeatable, energy efficient solution for brake rotor applications. Benefits include:**

- Precise, direct, consistent heating of the rotor
- Easy integration into a production line
- Movable workheads enable the power supply to be stationed away from the production line to save space
- Rotors of many sizes and geometries can be heated thanks to auto tuning
- 100% duty cycle is ideal for demanding, automated production processes
- Remote access, monitoring and data logging thanks to the RS485 serial port
- Easy-to-use display and control interface
- Efficient power conversion with a power factor in excess of 0.9; minimizes energy expenses
- CE marked and manufactured in an ISO 9001:2015 facility

### Custom Service and Solutions

When you work with Ambrell, we'll assign a team of induction heating specialists to work closely with you to design an integrated induction heating coating curing solution specifically for your manufacturing facility. Your application will be tested ahead of time to ensure optimal results. We will apply our industry-proven induction heating solutions to your process.

Ambrell stands by a firm commitment to service and support that goes well beyond the sale.

Our service department is always on-call for preventive maintenance and timely emergency support. We'll be there to maintain operational excellence and to be sure our solution continues to meet your needs – now and in the future.

*Your satisfaction is our mission.*

*Visit our website:  
[rotors.ambrell.com](http://rotors.ambrell.com) for details.*



## About Ambrell

Founded in 1986, Ambrell Corporation, an inTEST Company, is a global leader in the induction heating market. We are renowned for our application knowledge and engineering expertise. In addition, our exceptional product quality and outstanding service and support are at the core of our commitment to provide a superior customer experience.

We are headquartered in the United States with additional operations in Europe including the United Kingdom, France and the Netherlands. All Ambrell products are designed, engineered and built at our manufacturing plant in the United States, which is an ISO 9001-certified facility. Over the last three decades we have expanded our global reach through an extensive distribution and OEM network, and today we have more than 15,000 systems installed in over 50 countries.



[www.ambrell.com](http://www.ambrell.com)

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