



CUSTOM DESIGNED RESIN DISPENSING & COATING SYSTEMS FOR THE ELECTRIC MOTOR INDUSTRY.









Trickle Coat Systems
Roll Coat Systems
Dip and Bake Systems
Powder Coat and Cure Systems
Lab Equipment
Custom Heat Cure Systems



HeatTek Trickle Coat Systems are designed for stators, rotors and armatures and are sized to meet production line volumes and varying product sizes.

TRICKLE COAT SYSTEMS

HeatTek's engineering staff brings decades of experience in the design and manufacturing of custom designed Trickle Coat Systems. Choose from any of HeatTek's existing designs or we will work with you and your resin supplier to design a custom designed machine built exactly for your needs.

Features:

- Custom designed systems to meet your production volumes
- Conveying systems to handle single or multiple parts
- Structural steel framework on all machines minimizes wear and increases coating accuracy
- HeatTek provides the automation to integrate your system into your production lines
- HeatTek designs equipment around your resin whether it's an epoxy, polyester, or other type of resin
- Systems are designed to heat using the right heating method for the product being processed – including Convection, Infrared/UV, Induction, and Resistance Heating
- Control systems feature HMI operator interfaces and PLC controls







Trickle Systems are either single or dual sided fixtures. Resin coating can be continuous flow or precisely controlled using robotic actuation.





Single and Dual mandrel coating systems handle product up to 2,000 pounds and higher.

ROLL COAT SYSTEMS

HeatTek Roll-Coat Systems accurately control roll coating depth maximizing coating coverage while minimizing resin in unwanted areas. Vertical moving linear actuated roll coating tanks create this accuracy. Wipers remove excess resin over the roll coat tank reducing waste and maintenance. Systems incorporate preheating and post heating of parts or post heating only based on the type of resin being used. Forced or chilled air coolers are often integrated into the process.



Roll Coat Systems are tested prior to shipment.



Roll Coat Systems feature multiple heating methods including resistance and infrared heating

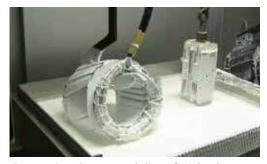




Roll Coating is performed in enclosed and fire protected viewing areas.



Dip and Bake Systems utilize different conveying methods and transfer single or multiple parts at a time. Conveying Systems are most often designed to index on timed intervals.



Conveying Systems deliver finished product to the work cells.

DIP AND BAKE SYSTEMS

HeatTek engineers will review the product size, volume, resin, and preferred handling method in efforts to design the optimal Dip and Bake system design. Systems include multiple heating methods that will minimize heat up times and cure times. Automatic control and monitoring of the resin system takes away the need for operator monitoring. HMI and PLC's control the system and visually display the system status for the operator while delivering critical information to the factory data acquisition system.

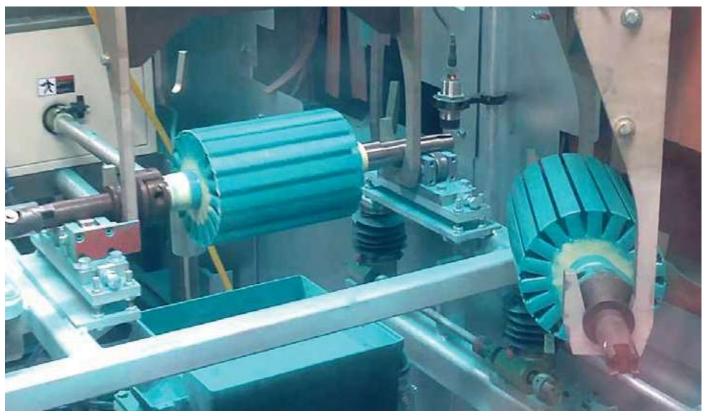


Palletized loads of transformers are cured and processed inside of enclosed vented chambers.



Dip and Bake System utilize all types of resin. Auto fill and control systems are included in all Dip and Bake Systems.





Fluidized beds are used to provide and deliver controlled amounts of powder to preheated parts allowing for controlled film build.

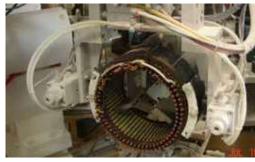
POWDER COAT AND CURE SYSTEMS

HeatTek Powder Coat and Cure Systems include walk in ovens, continuous cure systems utilizing fixture parts, and overhead indexing conveyors. HeatTek works with your company to provide the most effective design for your needs. Powder coat systems utilize and include powder booths, fluidized beds, auto powder fill capability for powder transfer and reclaim/reuse of recycled powder. Enclosures, fume collection, filtering and fire protection systems are all integrated into a HeatTek system.



HeatTek Curing Systems incorporate multiple heating methods including Induction, Infrared and Convection





Parts are delivered to the powder coating station using robots or multi-axis pick and place units based on the product size and volume.

LAB EQUIPMENT AND SYSTEMS



Convection Roll Coat/Trickle Lab System

HeatTek Lab Systems are designed and built to meet the most demanding customer specifications. Our equipment features different heating methods including convection, infrared, induction, and resistance. Our Lab Systems can apply a variety of resins using application methods such as Roll Coat, Trickle, and Dip. Let HeatTek's system knowledge and experience provide you with a Lab System that is cross functional and cost effective.



Vacuum coating of parts and IR curing is featured in this particular lab unit.



HeatTek Lab unit includes induction, infrared, resistance heating along with Trickle and Roll Coating of test parts.

REBUILDS AND UPGRADES





After

With HeatTek's years of industry knowledge and experience we can rebuild your outdated electric motor / transformer processing system, industrial oven, furnace, washers or control system to meet current modern standards. Whether the changes are for electrical controls only, upgrading the conveying system, or a complete rebuild of the internal and external housing – HeatTek has the know-how and capability to make the changes. Repairs and Rebuilds can be made in the field or at our facilities.

Before

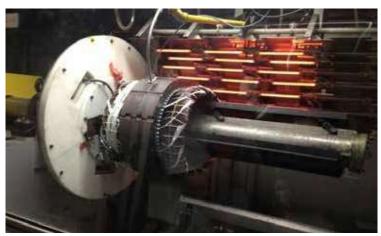




Armatures being heated by a water cooled induction coil.

HEATING METHODS

HeatTek's industry knowledge and experience allow us to select and design a heating method for your application. We can design and provide systems featuring convection, induction, infrared, and resistance heating methods. In some instances combinations of these heat methods have proven to be more effective than one alone. HeatTek partners with our customers to provide a "best possible" heating solution utilizing our laboratory to test the effectiveness of heating methods on your parts.



Stator heated using a combination of resistance and infrared heating methods



Armature pre-heated via a moving induction coil



Stator heated using resistance heating method



Stator heated / cured using the infrared heating method