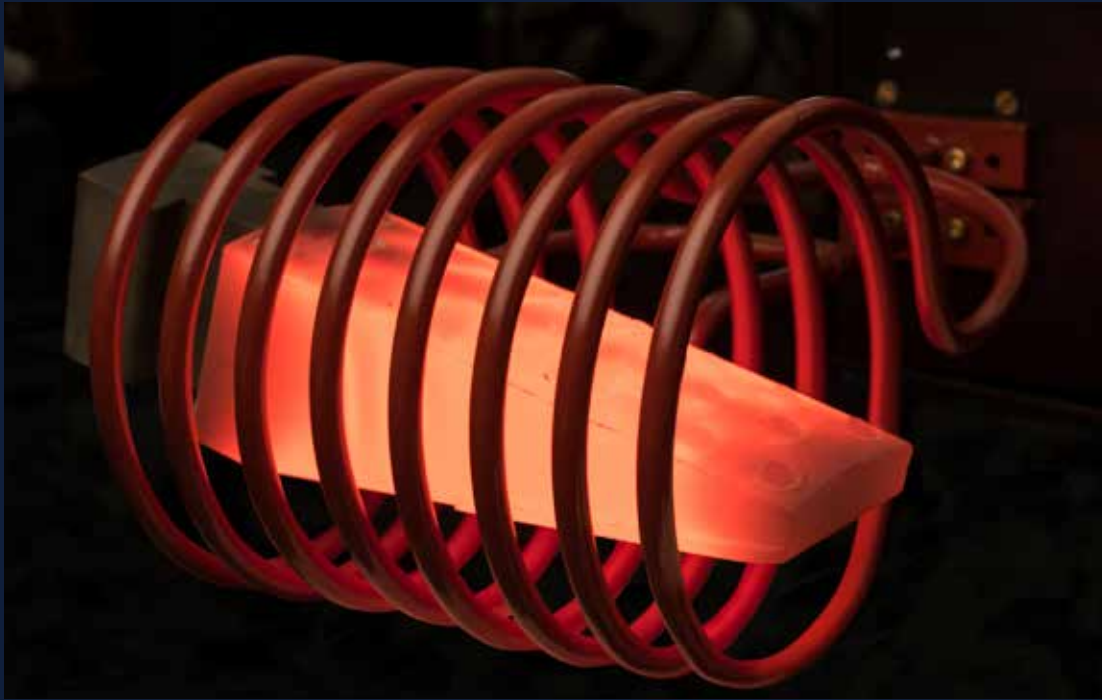


# EKOHEAT® Induction Heating Systems



**Ambrell®**  
INDUCTION HEATING SOLUTIONS  
an inTEST Company



*Experience the Excellence.™*

# EKOHEAT® with VPA Technology™

## Unique Versatility and Exceptional Performance Through a First-of-its-Kind in Product Design Architecture.



The introduction of our next generation EKOHEAT products, featuring VPA Technology, is a first-of-its-kind in the induction heating industry. Our entire EKOHEAT product family has been redesigned, integrating Ambrell's exclusive Versatile Performance Architecture (VPA). This technology breakthrough in design architecture, which includes an all-new innovative feature set, provides more versatility than any other induction heating system available today — all while delivering exceptional product performance.

Incorporating this new architecture, the control and power delivery intelligence is now standardized throughout the product line using a common set of circuit components. With EKOHEAT VPA, the same spare board set addresses all models using stored and easily transferred application attributes.

EKOHEAT VPA induction heating systems are available in a wide array of models to cover a broad spectrum of applications. Models range from 10 kW to 500 kW with frequencies from 2 kHz to 150 kHz. Whether you need a high frequency solution for small parts or a low frequency solution for large parts, there is an EKOHEAT VPA product for your application. And there's no need to worry about sizing a system yourself. Our complimentary applications testing service, conducted in our best-in-class applications laboratories, will determine the perfect system for your requirements.

All EKOHEAT VPA models are parallel resonant so that generators can be located more than 30 meters from the application and each one offers true, high resolution RF power control.



For ease of use, all systems include wide impedance RF transformers for application matching, and are armed with an automatic scan feature that sets the appropriate initial frequency and determines the best application RF setup. True digital tuning provides accurate part heating, resulting in excellent repeatability. And, EKOHEAT VPA systems also offer 100% duty-cycle for demanding, automated processes.

Accuracy, high resolution and RMS power measurement are all supported by intuitive help files which round out our exceptional VPA feature set.

# An Industry Breakthrough in Product Innovation

## Features & Benefits

<b>Auto-Scan Capability</b>	While an Ambrell Applications Laboratory will test your application and determine the necessary frequency, you may decide to take on additional applications later. If so, Auto-Scan will scan your application, auto-set the starting frequency and recommend RF setup parameters. If your application is outside of your EKOHEAT VPA model's capabilities it will even offer recommendations.
<b>High Resolution RF Output</b>	The EKOHEAT VPA displayed RF output is the power actually delivered to the workhead. Resolution is better than 0.05% of full scale.
<b>Universal PCBs</b>	Regardless of system size and frequency, all EKOHEAT VPA products use common printed circuit boards (PCBs). A single board set addresses multiple EKOHEAT VPA systems, minimizing your inventory and eliminating model specific versions.
<b>Industrial Ethernet Communication Compatibility</b>	Industrial and Automation environment networking is fully supported using our chosen gateway that include CIPs (Common Industrial Protocols) such as EthernetIP, Modbus/TCP, and PROFINET protocols.
<b>Easy-to-Use Touch Panel</b>	The front touch panel display will allow you to easily adjust key operating parameters, change languages and read system diagnostics.
<b>Soft Start Circuitry</b>	AC power will not be disrupted when switching on the power to your EKOHEAT VPA power supply thanks to this feature. It eliminates the risk of tripping up other equipment when a power supply is turned on.
<b>Universal Application Setup</b>	The EKOHEAT VPA RF transformer accommodates worldwide voltages and provides the same output voltage. An application conducted in Europe uses the same application setup in the United States.
<b>Two Remote Inputs</b>	Added versatility is provided using a second remote input. Additional process variables, such as temperature can be measured, displayed, recorded and played back with the associated generator parameters.
<b>Application Record and Playback</b>	This feature enables you to record your heat cycle – for up to five weeks – and play it back. The benefit is that you can optimize your application and run it in the most efficient manner.
<b>Ability to Add Power</b>	All EKOHEAT VPA systems have the ability to work together. If you install a 250 kW system and realize later that you need 375 kW, just add a 125 kW system and they will work together seamlessly to deliver 375 kW.
<b>RoHs Compliant</b>	EKOHEAT VPA systems are RoHs compliant, meaning they are free of hazardous materials.

# EKOHEAT® Product Spectrum



## EKOHEAT®



10 and 15 kW  
50 to 150 kHz



20 to 50 kW with models covering  
the three frequency bands  
50 to 150 kHz  
15 to 40 kHz  
5 to 15 kHz

<p><b>10</b> kW 50 - 150 kHz</p>	<p><b>15</b> kW 50 - 150 kHz</p>
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<p><b>30</b> kW 50 - 150 kHz</p>	<p><b>45</b> kW 50 - 150 kHz</p>
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<p><b>20</b> kW 15 - 40 kHz</p>	<p><b>35</b> kW 15 - 40 kHz</p>	<p><b>50</b> kW 15 - 40 kHz</p>
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<p><b>20</b> kW 5 - 15 kHz</p>	<p><b>35</b> kW 5 - 15 kHz</p>	<p><b>50</b> kW 5 - 15 kHz</p>
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**65 to 250 kW with models covering the four frequency bands**  
 50 to 150 kHz  
 15 to 40 kHz  
 5 to 15 kHz  
 2 to 6 kHz



**180 to 500 kW with models covering the four frequency bands**  
 50 to 150 kHz  
 15 to 40 kHz  
 5 to 15 kHz  
 2 to 6 kHz

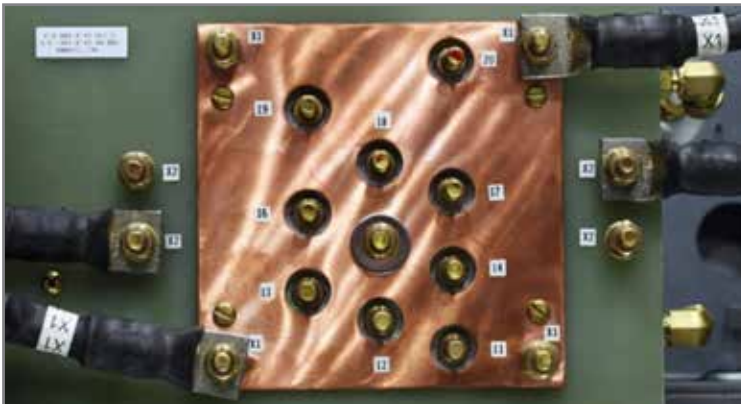


# EKOHEAT<sup>®</sup> with VPA Technology<sup>™</sup>

## Easy-to-Use Versatility



**User Friendly Front Touch Panel:** an EKOHEAT VPA 125 kW/10 kHz front panel display operating at 11.07 kHz in power control with a 125 kW set point and a run time of 59 minutes and 9.98 seconds.



**Easy Tap Changes:** the transformer tap panel for an EKOHEAT VPA 125/10. This transformer has 10 transformer taps and is tapped to tap 15. The tap can easily be changed using a brass washer and nut.



**Remote Control:** all EKOHEAT VPA systems can be remotely controlled using the connection-friendly panel with 0-10V, 4-20ma, 24V inputs or a RS485 serial port.

## Free Application Testing From THE LAB



With a Reputation for Delivering Extraordinary Results, Our Applications Laboratory is the Gold Standard in the Industry.

Ambrell's Applications Laboratory – known in the industry as THE LAB – is where we solve our customers' most challenging heating applications every day.

Dr. Girish Dahake, Sr. Vice President, Global Applications, leads a worldwide team of elite engineers who are uniquely qualified to assist you with your heating process needs. Under the guidance of Dr. Dahake, our engineers have evaluated thousands of applications in THE LAB, so it's likely we have already assessed an application similar to yours.

Our team of engineers is world-renowned for producing extraordinary results. Our innovative and effective induction heating solutions consistently deliver performance excellence in one application after another. It's why THE LAB is the gold standard in the industry.

**Have our team of expert engineers design and test the optimal solution for your application, free of charge. All it takes are three easy steps:**

- 1. Send us your parts and process requirements**
- 2. Our engineers will analyze your process and heat your parts to develop the right solution for your specific application**
- 3. You will receive your parts back for inspection as well as a video of the heating process of your parts, and a laboratory report with a system recommendation**

We also invite you to visit THE LAB where you can experience our state-of-art testing facility, which is fully equipped with Ambrell induction heating systems and hundreds of proven coils. In addition, you can interface with our engineers and see first-hand how they design prototype coils and develop effective solutions to maximize the efficiency of your heating process.



*"Induction heating is a precise, repeatable and efficient method of heating. However, in order to maximize the benefits of induction, it's critical to have the correct system and coil design. Our global team of highly-skilled engineers look forward to assessing your application and making the right*

*recommendation for your process."*

**Dr. Girish Dahake**  
**Sr. Vice President, Global Applications**

**For more information, contact us today at +1 585 889 9000 or visit [thelab.ambrell.com](http://thelab.ambrell.com)**



## About Ambrell

Founded in 1986, Ambrell, an inTEST Company, is a global leader in the induction heating market renowned for our application and engineering expertise. Exceptional product quality and outstanding service and support are at the core of our commitment to provide the best customer experience in the industry.

We are headquartered in the United States with European operations in the United Kingdom and the Netherlands. All products are engineered and made at our manufacturing facility in the United States, which is ISO 9001:2015-certified. Over the last three decades we have expanded our global reach through an extensive distribution network and today we have more than 18,000 systems installed in over 50 countries.



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