

Wire-Wound Products

Wire-wound technology has been in existence for over 100 years, these magnetic components are still the workhorses in many industries. NASCENTechnology stays on top of emerging materials and processes, integrating them into our custom magnetic component designs.

Employing well-known standard and highly customized encapsulation systems, we specialize in working with our customers to manufacture HIREL and HITEMP custom magnetic components. Although our forte is custom flyback and pulse transformers, we accept the challenge of designing any component that others may find too difficult.

NASCENTechnology specialized in custom design, prototyping for low to medium volume production. All parts are designed and manufactured in Watertown, SD. With over 20 years of expertise in wire-wound magnetics experience. Standard or custom tooled components and build to print services are available.

Power Magnetics under 250 W output

- Flyback
- Pulse
- Current Sense
- High Voltage
- Inductors
- Common Mode Chokes
- Boost/Buck
- Other Specialized Designs

INNOVATIVE, HIGH RELIABILITY MAGNETICS PROVIDER

NASCENTechnology is committed to serving the high reliability magnetics market. With decades of experience, we use innovative materials and manufacturing techniques to design and produce magnetics. Our patented **Low Temperature Co-Fired Ceramic** (LTCC) products can be used at up to 300C while being half the size of a wire wound part. When LTCC parts are not required, our staff can design and manufacture low quantity, high reliability **wire wound transformers**. We invite you to **contact us** and see how we can help you with your magnetics needs.

NASCENTECHNOLOGY R&D:

NASCENTechnology is devoted to spending a high percentage of its annual revenues to internal research and development. For nearly two decades, NASCENTechnology has partnered with customers and consortiums to research and development of magnetic components. This two-pronged approach results in the constant advancement of the unique multilayer ceramic transformer technology we pioneered.

Our knowledge allows us to partner with the [U.S. Department of Defense](#) and its prime systems contractors. We are proud of our involvement with the [National Armaments Consortium \(NAC\)](#) to develop new transformer technology for emerging mission applications. We also work with the [U.S. Department of Energy Laboratories](#) on ferrite material and magnetic component development for critical applications of national interest.

Our expertise has also lead to partnering confidentially with the world's largest Energy Services Sector firms. These partnerships help develop and supply highly reliable high-temperature magnetic components for measurement while drilling and logging while drilling applications.

Our research interests include:

- High-temperature magnetic material development
- Integrating multi-layer magnetic structures with other passive components
- Enhancing magnetic properties of low temperature, co-fireable ferrite powders and dielectrics
- Processes for applying and combining magnetic materials with co-fireable dielectrics and conductors into 3-dimensional structures
- Advancing reliability of wire-wound magnetic components more reliable in extremely adverse operating conditions

