



The H-J Family of Companies was founded on the very principles that set it apart today – the desire to supply customers with the highest quality products delivered on time at a competitive price

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CEO and President of The H-J Family of Companies

The H-J Family of Companies is a global leader in the manufacture and supply of products to the heavy electrical industry. These components support the transformer, switchgear, regulator, reclosure, and breaker industries, along with specialties in the utility market. Founded in 1969, H-J is headquartered outside of St. Louis, Missouri, USA. Today, H-J continues to be the leading supplier of distribution transformer bushings, connectors, and associated components in North, Central, and South America. The company maintains a global presence with offices operating in locations including Brazil, Canada, China, Colombia, India, Mexico, the Philippines, Spain, Germany, the Netherlands, and throughout the United States, allowing H-J to serve domestic and international customers. H-J employs state-of-the-art manufacturing technology producing a wide range of insulating components and non-ferrous castings such as brass, bronze, copper, and aluminum. As an engineered solutions company, H-J has vast expertise in designing and manufacturing custom products to meet customer needs.

The H-J Family of Companies was founded on the very principles that set it apart today – the desire to supply customers with the highest quality products delivered on time at a competitive price. H-J is a vertically integrated manufacturer with in-house resources allowing product development from concept to design, through testing and final production. These resources include electrical, me-

chanical, and material flow simulation software, full tool and die design and manufacture, and a fully equipped test lab for all electrical, mechanical, chemical, and environmental test requirements. Continuous investment in operations and personnel has given H-J a worldwide reputation as a leader in the transformer and switchgear OEM markets.

The H-J Family of Companies began with H-J Enterprises. Current CEO and President, Jay Shekelton's father, Jim, and grandfather, Fred, were working together as manufacturer representatives in the electrical industry. The pair grew frustrated when the companies they represented could not provide their customers with the service and quality they expected. Out of a strong sense of loyalty to their customers and in the interest of protecting their reputations for excellent service, they felt a need to strike out on their own. Bringing these external factors under their control, they created a company that was customer-focused while offering quality products in a timely fashion. Lloyd Evitts, an engineer, and former customer joined the Shekelton's and H-J Enterprises evolved into a manufacturing entity. H-J has since grown into a premier component supplier to the OEM market worldwide.

The principles of creativity, innovation, honesty, integrity, and commitment that they brought to their new venture have enabled H-J to develop excellence in customer satisfaction and loyalty that has been with the company since its incep-

tion. H-J continues to be family-owned and operated. Today, three generations of the Shekelton and Evitts families work in the headquarter offices, assuring the company remains true to its original values. Lloyd's son, Henry is the VP of Manufacturing, his son Jeffrey manages H-J's Kaizen program, and Jay's son Jason is an Operations Specialist while completing his college education.

James (Jay) Shekelton III is an owner, CEO, and President of The H-J Family of Companies, a global leader in the manufacturing of switchgear, electrical, and transformer components. Jay was born and raised in Saint Louis, Missouri. He began working with his father at H-J Enterprises 38 years ago, learning all aspects of the family manufacturing business, from the foundry process, running machines, to engineering and material sourcing. In 1992, Jay founded H-J International. The company began as a channel to sell H-J Enterprises' products packaged with other strategic partner company's products to international customers. H-J recently completed a merger, bringing H-J International and several other companies within H-J under one umbrella, The H-J Family of Companies.



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The H-J Family of Companies conducts business in more than 68 countries. In addition to the two facilities and headquarters in the St. Louis area, H-J has manufacturing facilities in Tianjin, China, León, Mexico, and sales offices in 16 countries. The company employs more than 500 people worldwide who were drawn to the company for its persistent reputation of honesty, integrity, and innovation. “At H-J, we take pride in having some of the top transformer and component engineering talent from all over the world,” said Shekelton.

“Many are drawn to our approach in the market, working in a collaborative team environment in conjunction with our customers to improve their products and applications.” H-J is proud of the diversity within the organization. The H-J talent comes from all over the world— Argentina, Afghanistan, Bosnia, Brazil, Canada, Colombia, China, Mexico, Mongolia, India, Iran, Spain, United States, Venezuela, and more. This multicultural environment leads H-J to a comprehensive understanding of the challenges of its global customers.

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In addition to component design and manufacturing, the company offers a broad portfolio of products and strategic partner brands serving the transformer and switchgear OEM market. H-J supplies not only bushings, connectors, and insulators, but also fuses, breakers, switches, tap changers, valves, and instrumentation. Further, H-J can offer its customers state-of-the-art manufacturing from the most modern winding machines to the most efficient state-of-the-art step lap core machines. This is a tremendous advantage for customers that aim to simplify their supply chain process by purchasing all they need from a single reliable, established, and well-known company. The H-J Family of Companies is truly a one-stop source for the transformer and switchgear OEM market.

The H-J Family of Companies remains an independent, privately-held entity. This is a unique strength of H-J over other suppliers who, in some segments, may be a customer’s competitor. These instances could result in conflicts of interest while bidding for the same opportunities. For this reason, the industry shares a sense of trust in H-J, and often customers involve them at the planning stage of a project. Many of H-J’s products began as a

conversation while walking a factory floor discussing concerns that a customer was having with a current design or a supply issue. Through collaboration with the customer, H-J routinely seeks solutions for product design or supply issues. The H-J Family of Companies has a broad range of design services, with a team of engineers that have extensive industry experience. This includes chemical, mechanical, and electrical experts with decades of experience in transformer and switchgear design and manufacturing.

“One of largest advantages that we have is that H-J is family owned with family values but operating as a leading global company. We put emphasis on working with our customer’s design teams to promote the sharing and generation of ideas” says Shekelton. “We can help them define their obstacles while working together to create a solution with the products and services they need. In some cases, this may be as simple as offering a product solution from our inventory, but this can also take the form of a custom product that helps to leverage their efficiencies and productivity through an optimized design. We achieve innovation through listening and collaboration.”

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nology, and nowhere is that more relevant than with renewable energy. Wind and solar power are growing exponentially. With our Epoxy Components Division, we have developed high-temperature epoxies that are specialized to the renewable energy applications, specifically solar and wind farms. The rapid growth of renewable technologies, and the innovation associated with them, has presented technical challenges in component design due to the aggressive environments and the rigorous performance requirements. Our company has been responsive to these challenges with our ability to be innovative, adaptive, and collaborative. By collaborating with the customer’s design teams, we can optimize component designs for their applications. Currently, there are H-J epoxy bushings in the nacelle of some of the largest and most advanced wind farm turbines in the world.”

Continued advancements in equipment design and the evolution of new applications have created a need for epoxy ma-

terials that exhibit enhanced properties concerning electrical, thermal, and mechanical performance. A trend towards higher operating temperatures exceeding most common industry temperature classes (105 °C and 120 °C) has necessitated the development of epoxies capable of operating at significantly higher temperatures. The H-J engineers have developed epoxy formulation solutions to meet these more demanding requirements. The basic challenge was to design a formulation capable of withstanding high ambient and high continuous operating temperatures for component designs. This led to the development of an epoxy system capable of operating in these extraordinary conditions, while maintaining the required electrical and mechanical performance. Developed as an enhanced indoor formulation, the material provides Tg (glass transition temperatures) and HDT (heat deflection temperatures) performance above 155 °C class operating requirements. Achieving these higher material ratings allows component operation at



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155 °C with no detrimental effect on the structural performance of the material.

Shekelton continues, “As the renewable energy market continues to grow, there will be a higher demand for innovation. Often products enter the market prematurely in an effort to compete but are inadequate to meet the long-term demands. We have found that renewable energy reacts differently. There is a whole different approach to transformers for the renewable applications. I think it is going to take a fresh perspective of how our grid system works going forward to maintain and keep networks reliable for the end-users.”

As wind and solar technologies continue to evolve, so has the development of components specific to those sectors including:

- Transformer bushings – typically requiring high current carrying capabil-

ity, coupled with high ambient temperature environments.

- High overload applications – customers require frequent overload capability with limited loss of life, which conventional epoxies cannot meet.
- Separable connectors such as dead break bushings used in wind farm transformers and solar applications.

Optimized equipment design and new technology applications continue to drive research to ensure that insulating materials meet these challenges. The design flexibility offered by H-J makes epoxy type insulating solutions a preferred choice for renewable energy component designs now and in the future.

As the industry has grown, H-J has grown with it. H-J recently completed the merger of H-J Enterprises and H-J International into a single organization, “The H-J Family

of Companies.” This change makes interacting with the company faster and simpler for all customers. In addition, this has enabled the company to collaborate and share expertise across all of its divisions, a win for customers and employees. Despite the changes, the company’s mission remains constant.

“We truly believe there is a place for honesty and integrity in the industry,” Shekelton said. “And that is what we have always strived to do. Be honest with our customers and employees, treat everybody with respect, and if there is an issue, we will work hard to solve it. I like to say that we are in the problem-solving business.”

To learn more, visit H-J.com.

