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HD Hyundai Electric: Powering the U.S. Grid at Scale

Why a Second Plant at HD Hyundai Power Transformers USA Changes the Game



HD Hyundai Power Transformers USA, which marks its 15th anniversary this year, held a groundbreaking ceremony for its second plant on March 6 in Montgomery, Alabama

Jinho Kang

President of HD Hyundai Power Transformers USA

HD Hyundai Electric, a recognized leader in the global power equipment industry, is expanding its U.S. manufacturing footprint to reinforce its leadership in the North American transformer market

Demand for transformers is surging as power infrastructure investment expands across North America and electricity consumption rises, driven by AI data centers. In response, HD Hyundai Electric—one of the global leaders in the LPT (Large Power Transformer) market—is constructing a second plant at its U.S. production subsidiary, HD Hyundai Power Transformers USA, to strengthen its manufacturing capabilities.

HD Hyundai Power Transformers USA, which marks its 15th anniversary this year, held a groundbreaking ceremony for its second plant on March 6 in Montgomery, Alabama, initiating efforts to expand production capacity and establish local manufacturing capability for 765 kV ultra-high-voltage transformers.

Approximately 200 representatives from industry, government, and the local community attended the ceremony. Alabama Governor Kay Ellen Ivey and U.S. Senators Tommy Tuberville and Katie Britt delivered congratulatory video messages celebrating the company's next stage of growth. Governor Ivey stated, "As

electricity demand in the United States continues to surge and grid reliability becomes increasingly important, it is meaningful that Alabama is emerging as a key hub for building the power grid of the future. We deeply appreciate HD Hyundai Electric's decision to choose Alabama as its partner. Building on this expansion, HD Hyundai Electric is advancing its global leadership beyond North America. The strategic significance of its 765 kV capability is further highlighted through insights from Jinho Kang."

Building on 15 years of growth: Second plant to boost production capacity by 50%

HD Hyundai Electric established HD Hyundai Power Transformers USA in Montgomery, Alabama, in 2011, creating a local manufacturing base for its expansion in North America. The investment was a strategic decision made in anticipation of the long-term growth of power infrastructure demand in North America.

At the time, the North American market landscape was markedly different, with U.S. manufacturing shifting to lower-cost countries such as Vietnam, India and Malaysia, leading some to perceive the transformer industry as a sector in structural decline.

Despite these conditions, HD Hyundai Electric continued investing in HD Hyundai Power Transformers USA, recognizing

that transformer manufacturing requires significant time to build facilities and develop a skilled workforce.

Biography

Jinho Kang, President of HD Hyundai Power Transformers USA

Mr. Jinho Kang has built his career in the power transformer field since joining HD Hyundai Electric's Transformer Design Department in 2001. He began his career focusing on basic transformer design and later assumed project engineering responsibilities, particularly for the North American and European market.

From 2006 to 2018, Mr. Kang served as a member of the IEEE Transformers Committee, participating in discussions regarding global industry standards and guides.

Over the years, he has held several leadership roles including Head of the Transformer Design Department and Head of the Transformer Production Department at HD Hyundai Electric. In 2023, he was appointed Vice President of the Transformers Division, and in 2025 he became President and CEO of HD Hyundai Power Transformers USA, where he currently leads the company's U.S. manufacturing operations.



Top left: Alabama Governor Kay Ellen Ivey delivers a congratulatory video message.

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Acting on this strategic decision, HD Hyundai Electric expanded its production infrastructure in 2018. The investment later paid off as the North American power equipment market entered a boom.

HD Hyundai Power Transformers USA has since become a key production hub in the North American power infrastructure supply chain. Through continued investment since 2011, the company recorded USD 374 million in revenue in 2025, the highest in its history.

According to a report published in 2026 by Goulden Reports, a global market research firm specializing in power equipment, HD Hyundai Electric achieved a 25.7% share of the North American market for large power transformers (100 MVA and above) in 2025, ranking first for the second consecutive year.

Building on this growth foundation, HD Hyundai Electric is moving forward with the construction of a second plant at the HD Hyundai Power Transformers USA site. The approximately USD 200 million investment represents the company's third expansion of production capacity aimed at meeting growing demand for ultra-high-voltage power infrastructure in North America.

Upon completion of the second plant, annual production capacity for ultra-high-voltage transformers at HD Hyundai Power Transformers USA will increase to around 150 units, about 50% higher than current levels. The expansion is also expected to generate an additional USD 140 million in revenue and create more than 200 additional jobs.

Meanwhile, in addition to its investments in North American production facilities,

HD Hyundai Electric is also constructing new manufacturing plants in Korea, including a transformer plant in Ulsan and a low- and medium-voltage circuit breaker plant in Cheongju. With total production infrastructure investments of approximately USD 500 million, the company is expanding its power equipment supply base to support global grid stability.

Local 765 kV transformer production to strengthen North American market responsiveness

Another key aspect of the expansion is the establishment of local production and testing capability for 765 kV ultra-high-voltage transformers in the United States. Historically, local production of 765 kV

HD Hyundai Power Transformers USA: North American Expansion Milestones

Phase 1 (2011) Establishment & Market Entry	Phase 2 (2018-2024) Expansion of Production Infrastructure	Phase 3 (2026) Enhancement of Production Capabilities
<ul style="list-style-type: none"> • First Korean transformer manufacturing base in North America • Entry into the North American market secured • USD 0.6M initial revenue 	<ul style="list-style-type: none"> • 40-acre production expansion • Specialized storage facilities established • One of the largest transformer manufacturing facilities in the U.S. • Large-scale project capability strengthened 	<ul style="list-style-type: none"> • Second plant groundbreaking • 765 kV ultra-high-voltage manufacturing capability expansion • USD 260M+ cumulative investment • +50% production capacity increase

By securing a 765 kV production line, we believe HD Hyundai Power Transformers USA will further enhance its technological competitiveness while establishing itself as a key production hub capable of meeting the growing demand for power infrastructure in North America

ultra-high-voltage transformers in North America has been limited due to high technological barriers and the substantial investment required for testing and manufacturing facilities. As a result, many projects have relied on overseas manufacturing and long-distance transportation.

Once the second plant is completed, HD Hyundai Power Transformers USA will be able to perform the entire process—from design and manufacturing to testing—locally in the United States for 765 kV ultra-high-voltage transformers. This capability is expected to minimize transportation risks while also reducing lead times.

Jinho Kang, President of HD Hyundai Power Transformers USA, explained the significance of this development as follows.

What is the significance of the second plant groundbreaking?

Breaking ground on the second plant represents a strategic investment to meet the rapidly growing electricity demand in North America while creating high-quality local jobs and supporting the regional economy. By strengthening our local production base, we expect to enhance

the stability of the U.S. power grid while serving as an important platform for strengthening industrial cooperation between Korea and the United States.

In particular, this expansion will extend our production capability to 765 kV transformers. The 765 kV class is a critical component for connecting large-scale renewable energy complexes to the grid and for building long-distance transmission networks across North America.

By securing a 765 kV production line, we believe HD Hyundai Power Transformers USA will further enhance its



technological competitiveness while establishing itself as a key production hub capable of meeting the growing demand for power infrastructure in North America. Going forward, we will continue to closely monitor market developments and consider additional investments in HD Hyundai Power Transformers USA.

What are the goals for HD Hyundai Power Transformers USA over the next 15 years?

The next 15 years will not only be about expanding our scale, but also about strengthening our role and responsibilities. We aim to evolve beyond being an equipment supplier to become a long-term partner that grows alongside our customers and the local community while creating shared value.

As part of this effort, we plan to further expand community partnerships in the Montgomery region based on our

“Transformation for All” CSR vision announced in 2024. We will continue contributing to the development of the local economy and community while fostering sustainable growth with the region.

On-time delivery approaching 100%: A competitive edge in meeting customer demand

In the North American power market, where reliability is critical, the criteria used to evaluate suppliers are clear. The key question is whether suppliers

can deliver equipment when customers need it—in other words, whether they can meet the delivery schedules they commit to. Recently, as supply in the North American transformer market has fallen short of demand, the ability to meet delivery deadlines has emerged as a decisive factor in securing orders.

HD Hyundai Power Transformers USA maintains an on-time delivery rate approaching 100% through a rigorous production slot management system. Even as delivery delays continue across the industry, the company maintains stable production by operating its plant for

The approximately USD 200 million investment represents the company’s third expansion of production capacity aimed at meeting growing demand for ultra-high-voltage power infrastructure in North America



more than 360 days per year and maintaining an efficient shift system. In addition, the company signs “slot reservation” agreements with key customers to secure production schedules in advance, thereby improving project schedule predictability.

Logistics capabilities are another key strength of HD Hyundai Power Transformers USA. The facility is equipped with a dedicated rail system that extends directly into the plant, enabling transformers weighing up to 300 tons to be shipped efficiently while reducing transportation time by more than a week and minimizing handling risks. The company also operates a specialized logistics team based in Atlanta, Georgia, whose expertise helps ensure safe and timely delivery while providing customers with a high level of service.

Quality performance is also maintained at a world-class level. In 2025, the company’s Cost of Poor Quality (COPQ) remained well below the global benchmark of 1%, and it continues to receive positive evaluations from major customers. The company also oper-

The company also operates a specialized logistics team based in Atlanta, Georgia, whose expertise helps ensure safe and timely delivery while providing customers with a high level of service

ates an integrated engineering system combining design expertise from its Korean headquarters with manufacturing design capabilities at its U.S. facility, enabling rapid responses to design or specification changes. Such operational stability is particularly valued in projects such as AI data centers and large industrial facilities, where delays in power supply can lead to significant financial losses.

Sungsoo Kang, President of HD Hyundai Electric America, the company’s U.S. sales subsidiary, commented:

“Our strength lies in providing comprehensive support throughout the entire

process—from technical consultation during the bidding stage to sharing production progress updates and providing after-sales service—while maintaining close communication with customers.” He added: “Another important advantage is our ability to communicate with local customers quickly and directly through our sales subsidiary based in Atlanta, Georgia.”

Building on its strong delivery reliability and close customer collaboration, HD Hyundai Electric aims to strengthen its leadership in the North American transformer market by establishing local manufacturing capability for 765 kV ultra-high-voltage transformers through the second plant. ■



Architectural rendering of the planned second plant at HD Hyundai Power Transformers USA



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