

ArcelorMittal earned top honors in the International Data Corporation (IDC) Future Enterprise North America Awards for an innovative project that leverages the power of Artificial Intelligence (AI) to optimise slab yard operations.

The winning project, ArcelorMittal AM/NS Calvert Slab Yard Optimisation Brain, is a joint effort of ArcelorMittal Global R&D and AMNS Calvert personnel that was recently deployed within our AM/NS joint venture in Calvert, Alabama, U.S.

The Yard Optimisation Brain is an AI machine-learning model created to transform the way steel plants operate, by collecting and learning from operational data to manage slab yard operations. Using a mix of algorithms and hybrid simulation models it automatically adjusts its strategies in real-time to make changes in process flow and production demands that optimize operations and real-time decision-making.

“ArcelorMittal R&D is entering its third decade of investing time and resources in the study and application of AI to improve operational processes and business decisions. The Slab Yard Optimization project serves as an excellent example of how close collaboration and the integration of our internal AI expertise with the Calvert team’s operational expertise is ushering us into a new AI-enabled era of increased efficiency and productivity,” said Marta Garcia Barzana, R&D AI Business Portfolio Director.

The project enables AM/NS Calvert to dynamically manage an inventory of more than 17,000 slabs distributed across five bays while directing the operation of ten cranes. By integrating this model with existing tracking systems, the project provides insights into business processes and contributed to millions in savings and record levels of production, setting a new standard for operational efficiency and productivity.

“Traditionally, steel mills focused more on optimizing steel production and less on material flow. With the advent of AI, we wanted to be at the forefront of using this technology with our Logistics operations,” said Cai Unger, Director of Internal Logistics for AM/NS Calvert. “Our long-term cooperation with Global R&D and the development of different simulation models has enabled Calvert to sharpen its competitive edge, using AI to optimize material flow.”

IDC’s Future Enterprise Awards recognize organizations that effectively operate and invest in digital business initiatives supported by an infrastructure that is intelligent, informed, empowered and well-connected. ArcelorMittal was selected as the Overall Winner in the Award’s Operations category.

“This recognition in our fourth annual IDC Future Enterprise North America Awards showcases ArcelorMittal’s ability to thrive in the digital business landscape,” says Reid Paquin, Research Vice President, Future of Operations, IDC. “The slab yard optimization initiative exemplifies innovative business models that are leading the way in the digital era.”

The IDC Future Enterprise Award recognizes the hard work, dedication and achievement of the cross-functional team from ArcelorMittal Global Research and Development and AM/NS Calvert. Best practices and learnings will be shared across our global facilities, ensuring that we continue to set new benchmarks for innovation and operational excellence in steel manufacturing industry.

About ArcelorMittal Global Research & Development and AM/NS Calvert

ArcelorMittal Global Research & Development employs approximately 1,500 full-time researchers, engineers and technicians at 11 centres strategically located in Europe, North and South America. These centres are where new steel products, processes and solutions are envisioned, tested, improved and deployed. ArcelorMittal invests in R&D activities that keep us at the forefront of innovation and put us ahead of the competition as the material and steel manufacturer of choice for our customers. AM/NS Calvert is a 50/50 joint venture between ArcelorMittal and Nippon Steel Corp. (NSC). Recognized as one of the most advanced steel finishing facilities in the world, AM/NS Calvert is highly complementary to ArcelorMittal's portfolio of world-class assets. The facility includes a river terminal, hot strip mill, cold rolling mill, three hot-dip galvanizing lines, rail yard, and supporting infrastructure.

You can learn more about the IDC Future Enterprise North America Awards [HERE](#).