

# CONVEYOR DESIGN VALIDATION WITH STATIC LOAD

Mangal Industries' Engineering & Automation SBU specializes in the design and development of conveyor systems tailored for diverse applications. Recently, the SBU collaborated with Digital Engineering Solutions to meticulously examine and authenticate a conveyor system designed specifically for the intralogistics movement of batteries.

## PROBLEM STATEMENT

Critical elements like static load, dynamic load, and vibration load play a pivotal role in shaping the conveyor's design. It's imperative to ensure the system can endure these forces, mandating comprehensive engineering and simulation via cutting-edge software tools. This meticulous process ensures the conveyor system delivers optimal performance and reliability in practical applications.



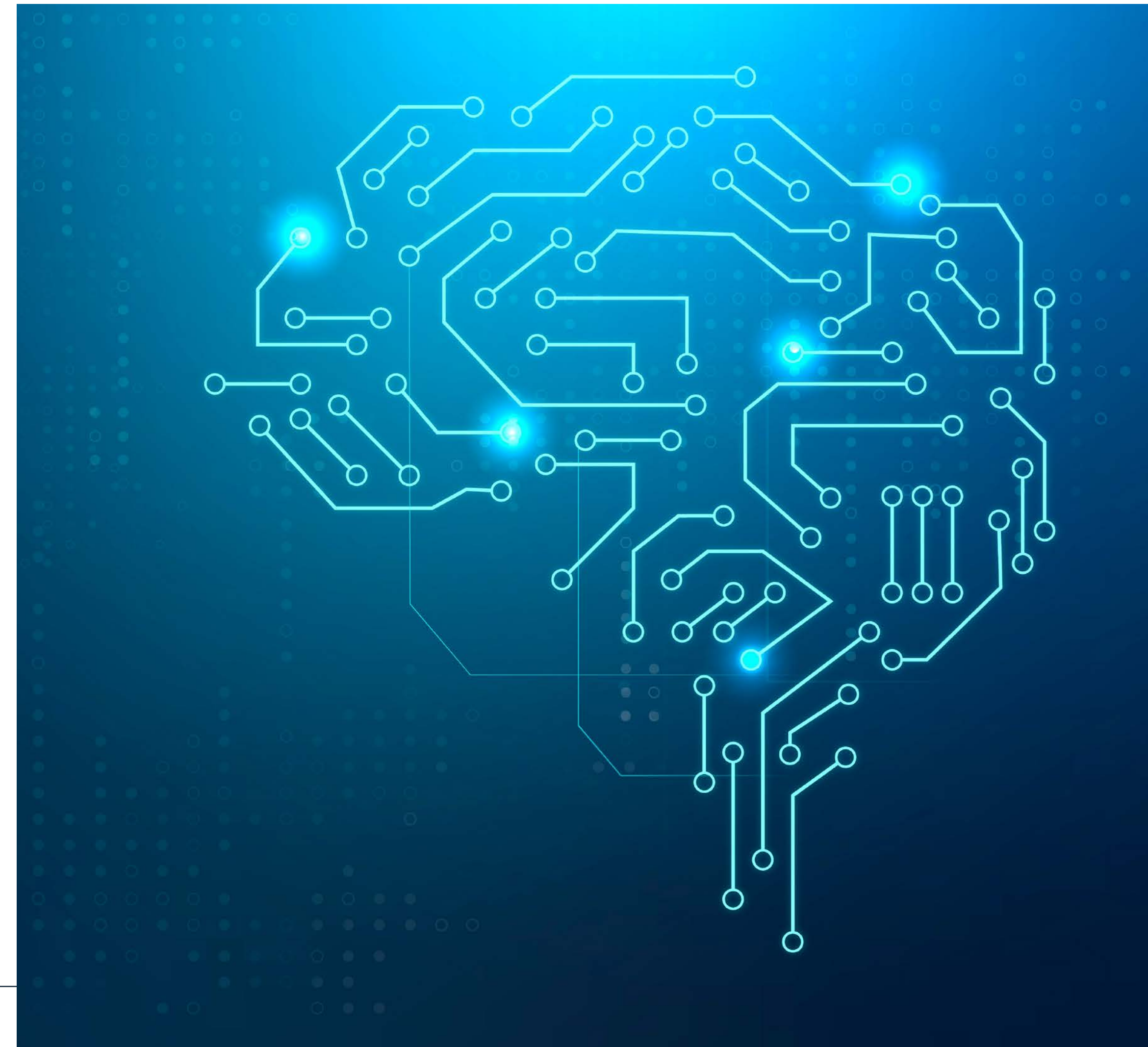


# OBJECTIVE

To analyze stress distribution on the conveyor structure, considering both the weight of the conveyor and the batteries it transports.

# APPROACH

The stress distribution on the conveyor structure is analyzed using Abaqus simulation software, considering various positions of batteries along the conveyor.



# OUTCOME

Stress distribution falls within acceptable limits, ensuring that the design meets safety criteria and is structurally sound for operational use.

Mangal Industries Engineering & Automation SBU’s collaboration with Digital Engineering Solutions has led to the meticulous examination and authentication of a cutting-edge conveyor system designed for the seamless movement of batteries. We invite you to embark on a journey of innovation and excellence together. Connect with us today to explore how our tailored solutions can transform your business.

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