

## Accelerating Electric Mobility: lean facilities, enhanced productivity, superior quality, optimal investment

AllyGrow, for one of its major plant assembly integrator client performed concept planning & detailed design of a 2 wheeler EV plant that would assemble 8 different variants.

The concept engineering and detail designing phases of the digital lean assembly design project aimed to achieve efficient, high-quality, and costeffective production while aligning with lean manufacturing principles

We streamline design and assembly, focusing on ergonomics, process efficiency, and waste reduction. Our approach includes standardization, modularity, and continuous improvement, ensuring cost-effective production in line with lean principles.

By prioritizing ergonomics, process optimization, and material flow planning, we boost productivity and resource allocation. Through standardization, modularity, and continuous improvement, we achieve cost-effective manufacturing without compromising on quality. Lean principles drive our journey towards progress and excellence

## **Overview**

Industry: Automotive

Location: India

**Challenge**: Establishing a lean manufacturing facility for producing 8 variants of electric twowheelers with a focus on increased productivity & quality, minimize investment and reduce manufacturing costs

**Solution**: This project objectives were met through 3 stages

Stage 1 - Assessment and Recommendations: Recommendations Report development along with key performance indices for project evaluation after thorough assessment, data collection, analysis.

Stage 2 - Concept Engineering: Innovative assembly and in-plant logistics concepts developed based on Stage 1 data analysis

Stage 3 - Detail Planning: In this phase, meticulous planning took place, incorporating the implementation of a digital factory and the creation of precise manufacturing drawings, all aimed at ensuring a streamlined and efficient execution. This involved dwelving into the intricacies of the assembly process and inplant logistics



