

Case Study

Line simulation through virtual manufacturing



Customer

One of the world's largest manufacturers of construction and mining equipment.

Business Challenge

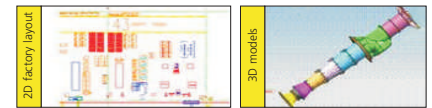
- Reduce New Product Introduction (NPI) timelines
- Design to launch with minimal assembly/build issues
- Emphasis on First Time Right (FTR)

Mahindra Satyam's Solution

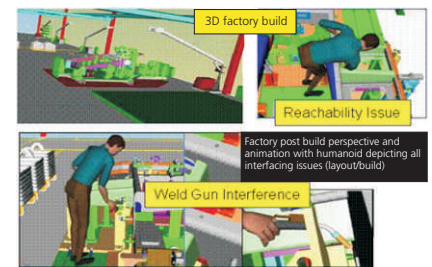
With increased affinity towards using simplified geometry models in analysis and with advancements in PLM packages, all that is needed is to shift the worry curve to design phase and design-in quality to smoothen design-launch transition.

Build factory in 3D environment, reflecting distinctive elements existing on the shop floor for the purpose of **evaluation of your production processes, basic ergonomics and throughput prior to production.**

Input



Output



Tools used

- UniGraphics, ProE, other 3D modeling packages
- Auto CAD with Factory CAD add-on
- Teamcenter Vis Mock-up (Animation and Jack)

Key differentiators

- Accurate work standard for assembly operations
- Solutions to achieve line balance and optimal loading
- Solutions to discover and realize optimal capacity

\$1.2 Million savings through virtual process validations within 4 months.

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Benefits

- Reduced development time with lower spends (about 25% reduction in design-to-launch time)
- Reduction in assembly/build issues and ECN time (near zero)
- Saving in cost to reduce price (competitive advantage)
- Perfect liaison between Engineering and Manufacturing
- Aided in improvement of end product process quality by 15% through appropriate visual aids

At Mahindra Satyam BPO's Manufacturing practice, we offer a wide spectrum of process outsourcing services to manufacturing companies across the world. Our experience and capabilities enable us to identify, create and deliver more value on your investment. Our dedicated manufacturing teams understand the nuances of the industry and help deliver value throughout the engagement. The four primary supporting areas where we offer services are Production Engineering, Industrial Engineering, Quality Engineering, and Engineering Analysis. Our service offerings include Procure to Pay, Production & Industrial Engineering, Global Enterprise Technical Support, Customer Management and Data/Document Processing Services.

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