

ARIHANT INDUSTRIAL CORP. LTD.

SLIDING THROUGH WATER PARK AND PLAYGROUND EQUIPMENT DEVELOPMENT WITH SOLIDWORKS



Arihant leverages SOLIDWORKS design solutions to support its meteoric growth in the development, manufacture, and sale of water park and playground equipment.

Challenge:

Increase product development throughput by shortening design cycles to support rapid growth.

Solution:

Implement SOLIDWORKS design software.

Results:

- Grew annual revenues by 250 percent in two years
- Cut design cycles by 50 percent
- Tripled product development throughput
- Improved design visualization and presentation

Spending a sunny afternoon at a local water park or the neighborhood playground has become an enjoyable part of the lives of children and families around the world, and Arihant Industrial Corp. Ltd. is committed to making the experience safe, fun, and exciting. As a leading designer and manufacturer of water park and playground equipment for customers worldwide—including Festival Fun Parks of California and Turku Park of Finland—Arihant draws from experience gained in creating equipment for its own popular, local water park: The Great Escape in Mumbai, India.

Offering over 300 products with more than 150,000 installations worldwide, Arihant focuses on leveraging the latest product development technologies to design and engineer safe, innovative pieces of water park and playground equipment. Since its founding in 1985, the company has seen dramatic growth sparked by its commitment to product quality.

To address product development challenges related to supporting explosive growth, Arihant management decided in 2010 to switch from the Pro/ENGINEER® Wildfire™ design system that the company had been using to a new 3D development platform. According to Assistant Manager—Design Mithun S. Mandal, Arihant sought a design solution that was easier and faster to use so the company could boost productivity to sustain growth. “We needed to become more efficient to increase throughput,” Mandal says. “Other goals related to switching platforms included better graphical representation of product designs, shorter design cycles, and enhanced recruitment.”

Arihant chose SOLIDWORKS® design software as its new platform, acquiring 16 licenses. The company selected SOLIDWORKS because it’s easy to use, improves design visualization, and includes robust surfacing capabilities. “SOLIDWORKS is quite popular in India,” Mandal notes. “In addition to providing greater accuracy and a much better graphical representation of our products, it’s much easier to recruit talented designers and engineers who already know how to use SOLIDWORKS.”

SUPPORTING RAPID, GLOBAL GROWTH

Since implementing SOLIDWORKS software as its primary development platform, Arihant has realized meteoric growth, boosting annual revenues by 250 percent in just two years. The water park and playground equipment manufacturer has leveraged SOLIDWORKS to support this substantial increase in business with the same number of designers and engineers by shortening design cycles by 50 percent and tripling production throughput. Mandal attributes roughly 70 percent of the expanded throughput to efficiencies associated with the move to SOLIDWORKS.

“By standardizing on SOLIDWORKS, we’ve found it much easier and faster to complete product design cycles,” Managing Director Rajen S. Shah stresses. “Modeling parts and assemblies more quickly—using mates and assembly capabilities—enables us to support greater throughput without having to add resources. With SOLIDWORKS, we can design a new slide in just three or four days.”

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— Rajen S. Shah, Managing Director



SURFACING AND CONFIGURATION TOOLS SPEED DEVELOPMENT

Arihant takes advantage of SOLIDWORKS advanced surface modeling and configuration tools not only to achieve significant productivity gains, but also to instill innovation in new product development. For example, during the development of the Arihant Aqua Disc, the world's first themed underwater discotheque in the shape of a spaceship, Arihant designers made great use of SOLIDWORKS surfacing and configuration capabilities to create an innovative addition to its Infinite Fun water park equipment line.

"With SOLIDWORKS, we are able to focus on innovations like the Aqua Disc because design becomes very fast," Mandal explains. "With the software's advanced surfacing capabilities, we can tackle complex, curvilinear shapes like the Aqua Disc while still utilizing existing parts from our design library. Using design configurations, we can automatically adjust the size, height, and angle of different parts from existing designs, saving time and money in the process."



Arihant relies on SOLIDWORKS surfacing and configuration tools to more efficiently design the many complex, curvilinear shapes and sizes required for its products.

LIKE VISITING A VIRTUAL WATER PARK OR PLAYGROUND

The move to SOLIDWORKS has also improved visualization and communication of design aesthetics during development of products for the company's Infinite Fun water park and Playtime playground equipment lines. In addition to allowing designers to share concept graphics among themselves and with customers during development, SOLIDWORKS enables Arihant to utilize eDrawings® files to communicate technical details with customers and partners.

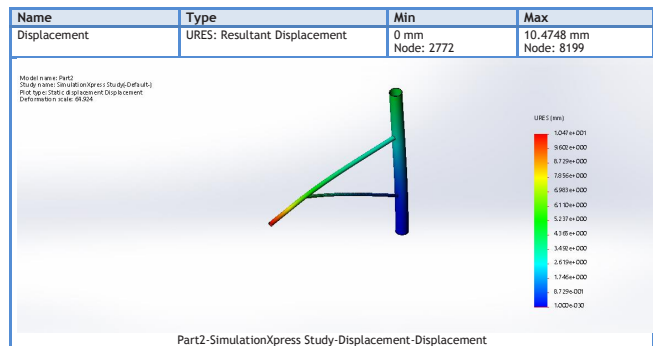
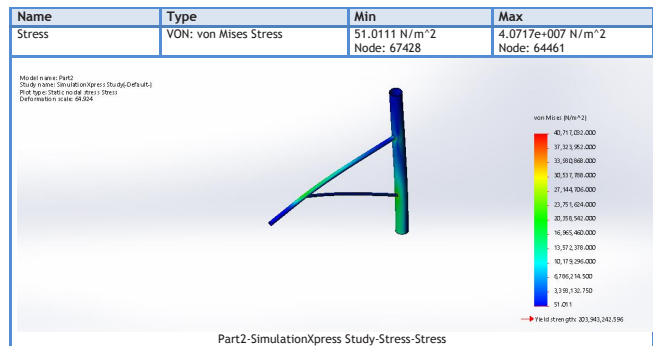
"The ability to quickly create and send eDrawings files to customers has been extremely helpful," Mandal says. "We use eDrawings to highlight specific features and dimensions with customers, who can then view the model, rotate it to evaluate a design from all perspectives, and indicate requested changes or unique requirements without the need for a CAD system. This helps us refine designs well in advance of production, resulting in faster throughput and more satisfied customers."

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