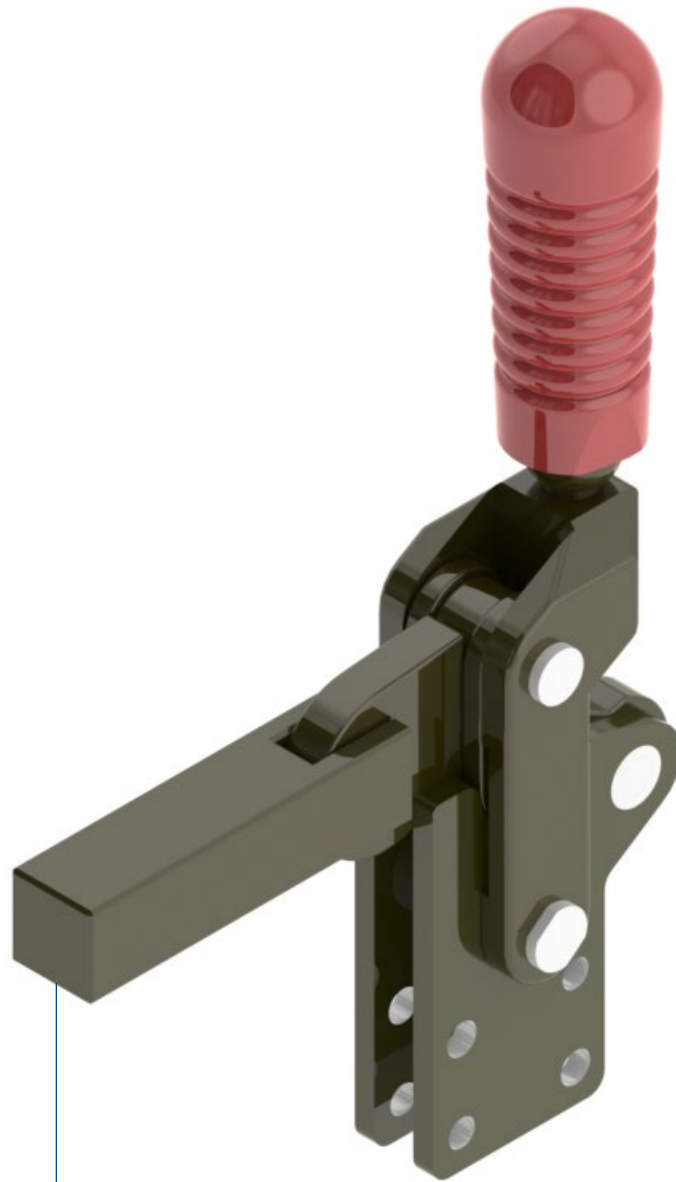


STEEL-SMITH

INCREASING TOGGLE CLAMP DEVELOPMENT PRODUCTIVITY WITH SOLIDWORKS SOLUTIONS



The transition to SOLIDWORKS 3D design software enabled Steel-Smith to shorten design cycles, reduce development costs, and accelerate time-to-market for its toggle clamps and clamping solution products.

Challenge:

Improve the development of an expanded line of toggle clamp products and clamping solutions by increasing accuracy, reducing design cycles, and enhancing design communications.

Solution:

Implement SOLIDWORKS Professional design software, Solution Partner Modo for SOLIDWORKS rendering software, and eDrawings for Android design communication software solutions.

Results:

- Cut design time by 50 percent
- Shortened time-to-market by 40 percent
- Reduced development costs by 40 percent
- Improved catalog imagery and design communications

Steel-Smith is the largest manufacturer of toggle clamps and clamping solutions in India. The company pioneered the development of toggle clamps in India 40 years ago and produces the country's broadest and most widely recognized line of these useful, adaptable tools, which serve a range of applications requiring different shapes, sizes, and holding capacities.

Since its inception, Steel-Smith has striven to continuously improve product quality and introduce innovative, effective clamping solutions. The toggle clamp manufacturer's focus on product development has enabled Steel-Smith to grow from a small setup consulting firm to become India's largest manufacturer and exporter of toggle clamps and other industrial accessories.

Steel-Smith's success rests on its commitment to leveraging the latest product development technologies to overcome challenges related to product design, innovation, and productivity. In 2012, the company decided to re-evaluate its use of AutoCAD® 2D and Solid Edge® 3D design tools. According to Design Manager Ravi Panchal, Steel-Smith wanted to identify a new 3D solution that would help the company improve design accuracy, reduce development time, and enhance design communications.

"We believed moving to 3D would enable us to accelerate time-to-market," Panchal explains. "However, our initial attempt to use Solid Edge 3D design software didn't succeed, and we became dissatisfied with the level of support that we received. That experience led us to evaluate other 3D design solutions."

After evaluating available 3D design packages, Steel-Smith standardized on SOLIDWORKS® Professional design software and utilizes eDrawings® for Android™ and SOLIDWORKS Solution Partner software Modo® for SOLIDWORKS add-on applications. The company chose SOLIDWORKS because it's easy to learn and use; provides effective sheet metal, interference detection, and design configuration tools; includes PhotoView 360 rendering and eDrawings communication tools; and receives the strong support of SOLIDWORKS reseller Addonix Technologies.

"We were convinced that SOLIDWORKS would not only allow us to smoothly transition from 2D to 3D, but also enable us to achieve our productivity and customer satisfaction objectives," Panchal recalls. "Clearly, we made the right choice because we have realized substantial productivity gains in the design, marketing, and communication of our products."

FASTER DESIGN EXPANDS PRODUCT LINE, SHORTENS TIME-TO-MARKET

Since implementing SOLIDWORKS Professional software, Steel-Smith has realized efficiency improvements in all facets of development, including a 50 percent reduction in design cycles, a 40 percent drop in development costs, and a 40 percent decrease in time-to-market. These greater efficiencies have resulted in a dramatic expansion in the company's product offering: from roughly 200 to more than 500 products.

"SOLIDWORKS is a very beneficial and timesaving design solution," Panchal stresses. "About 60 percent of our toggle clamps include sheet metal components. Creating flat patterns in SOLIDWORKS saves time, as does the ability to use design configurations to create entire families of parts and assemblies. We also benefit from improved visualization by eliminating interferences and quickly determining weight and surface area for coating and manufacturing. SOLIDWORKS allows us to reduce development and product lead-times, as well as reduce the time required for research and development."



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— Ravi Panchal, Design Manager

PHOTOREALISTIC RENDERINGS REVOLUTIONIZE CATALOG DEVELOPMENT

Using PhotoView 360 and SOLIDWORKS Solution Partner software Modo for SOLIDWORKS rendering tools, Steel-Smith has revolutionized the development of its product catalog. Because updating the catalog required time-consuming and costly product photography in the past, Steel-Smith published new editions only every three or four years. With the efficiencies afforded by SOLIDWORKS photorealistic rendering tools, the company now produces a new catalog with higher quality images twice annually.

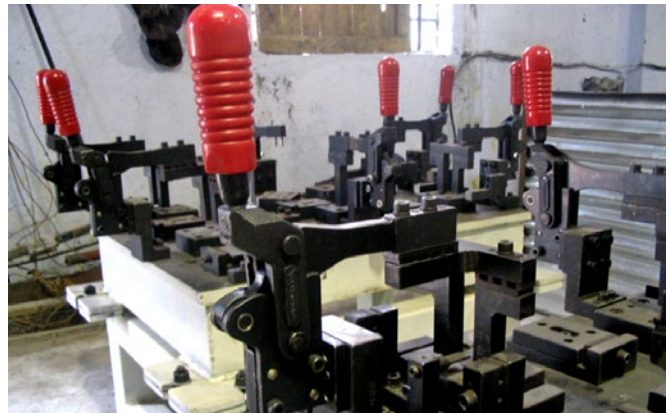
"PhotoView 360 is a big help because it enables us to create high-resolution rendered images of toggle clamps with many appearances, backgrounds, and textures. These renderings are used on our website and in our catalog, which makes it easier for customers to understand and use our products," Panchal notes. "Following the introduction of Modo Appearances, we were able to make rendered images even more realistic."

COMMUNICATING PRODUCT DESIGNS VIA SMARTPHONES

With the eDrawings for Android application, Steel-Smith can more effectively demonstrate how its products function to customers and prospects. By improving the company's ability to communicate product concepts, eDrawings files support Steel-Smith's growth.

"I use eDrawings on my mobile phone, which has a large screen, to show our products in 3D to customers and prospects at exhibitions," Panchal says. "I always have my phone with me because it's very easy, convenient, and beneficial to show product assemblies in 3D, particularly as our products grow in complexity."

▶ [Click here to view the SOLIDWORKS eDrawings model.](#)



With SOLIDWORKS software, Steel-Smith has expanded its product offering from roughly 200 to more than 500 products, while simultaneously using PhotoView 360 renderings to improve the quality of its product catalog.

Focus on Steel-Smith

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