How Cleaver-Brooks Used Automation to Significantly Reduce Lead Times

THE COMPANY
Backed by their commitment to environmentally friendly technology, Cleaver-Brooks brings an innovative twist to hot water and steam generation products. In recent years, they've designed unprecedented products, which have set the standard for the future of compact and high-efficiency boiler room design.

THE CHALLENGE
Cleaver-Brooks is often sought out for their technological breakthroughs in the generation of steam and hot water. Increasing demand for customized designs soon led to Cleaver-Brooks looking into automation to meet market demand. Once a customer had approved a design and issued a purchase order during the sales planning stage, which could take an average of 10-15 days, designers would receive the project to start work on the full design stage. Due to the siloed nature of the plan and design stages, designers found themselves spending time taking the customer approved design package and converting it into manufacturing drawings. The lead times for customers varied between 10-15 weeks for all products made at this location.

SOLUTION
Cleaver-Brooks established the business initiative to reduce this upfront engineering time by 10-15% for a large portion of their portfolio. Immediately, the key players at KETIV could see that both teams were working independently, with many manual tasks, that caused re-work, and wasted time and resources.

In a process called automation, KETIV templatized 5 designs that could be interchanged and slightly customized from project to project. These 5 designs accounted for 80% of Cleaver-Brooks product portfolio at one production location. KETIV created a master library of common products that could be used to create unique configurations for potential customers. This master library was utilized by the design team to create a 3D designed general assembly within Autodesk’s Inventor product during the planning stage. Once a customer approved the design, this assembly could be easily modified by designers to create the fabrication drawing for manufacturing.

THE RESULT
Implementing automation reduced the time spent in the plan stage by 20%. This reduction in the planning stages results in a 10% reduction of up-front engineering time for the released jobs. With this faster turnaround, Cleaver-Brooks is now able to complete more bids and win more work.

WHAT’S NEXT
Cleaver-Brooks isn’t stopping there; they plan to add more product parts to their master library in order to increase the percentage of their product line that can be used for automation. In addition, continued use of the automation tool will likely help shave off another 10-15% of upfront time as the tool is iterated upon.