**THE CHALLENGE: STREAMLINE COMPLEX ENGINEERING PROCESSES WITH 3D SOFTWARE THAT IS FLEXIBLE AND FAST**

Dominator is typically asked by their customers to take on a full project from engineering to final production. This involves designing new concepts or making edits to existing designs, communicating with customers on pros and cons of approaches, and readying the final design for manufacture. Working with manufacturing partners, Robert and his team are also involved in assembly, testing, and documentation.

Before working with SpaceClaim®, the Dominator engineers were developing ideas in a mixture of 2D and 3D and design, as a result, projects often took many weeks. To receive final approvals involved building prototypes, which also added to the time and costs. When Robert and his team won a project that involved 200 different parts, he knew there had to be a better solution that would let him work in 3D with customers, other engineers, and manufacturing partners without the overhead or learning curve of traditional history-based CAD systems.

**MEETING ALL OF DOMINATOR’S COMPLEX ENGINEERING NEEDS IN ONE SOLUTION**

Dominator’s priorities in finding a new design solution were that it be easy to use as well as flexible with robust capabilities. The engineers knew that any software choice had to be able to handle the full range of projects and activities engaged in for customers. After reviewing several CAD systems, Robert and his team chose SpaceClaim’s 3D direct modeler.

From early concept ideas through prototyping, Robert and his team leverage the flexibility, functionality, and ease-of-use of SpaceClaim. When customers send Dominator CAD files with existing parts to update and change, SpaceClaim allows them to easily make revisions in 2D or 3D.

“From brainstorming ideas to presenting concepts to customers and finishing the design, SpaceClaim is exactly what we need,” said Robert Tindgaard Knudsen, CEO, Dominator.

**ABOUT DOMINATOR**

Dominator is an engineering and manufacturing company, specializing in a broad range of technologies, including fluids, composites, and polymers. Dominator provides solutions to complex engineering issues as well as producing a range of metering and mixing equipment and specialized systems. Projects include solutions to relining existing equipment – such as pipes embedded within walls – by creating coatings that can be applied inside the pipes without taking down walls. Dominator might additionally be asked to develop the equipment to provide the installation of the coatings.

Robert Tindgaard Knudsen is the CEO of Dominator and an engineer who works closely with the company’s customers.

---

*Figure 1:* SpaceClaim allows fast concept creation in 3D around existing parts from customers or vendors.

*Figure 2:* SpaceClaim drawings allow Dominator to easily communicate or edit in 2D or 3D.
Projects tackled by Dominator run the range of being able to apply coatings to remote locations, such as oil and gas, to creating metering controls to manage flow rate, to developing corrosion protection equipment to mix polymers. Initial design concepts are created in SpaceClaim, providing Robert and his team with the opportunity to explore several options easily. They can then discuss the ideas with the customer by turning their concepts into realistic renderings, without taking two weeks of work to do it.

“We used to have to create prototypes for the customer to visually understand what we were recommending. With SpaceClaim we no longer have to go through that time and expense,” said Robert Tingaard Knudsen.

Robert has found that SpaceClaim has made a huge difference in customer communications. He can more clearly represent the concepts and make design edits live with the customer. When designs are approved, SpaceClaim enables clearer communications with Dominator’s partners to highlight final specifications for machined parts and easily explain any tricky parts prior to manufacture. This approach ensures that everyone in the value chain stays connected and that no major gaps exist between customer requirements and manufacturing.

“In one case, we discussed a proposed solution to a foreign distributor, sketching out the idea in drawings. They weren’t sure if they had enough visual representation to sell it to their customers. We then created the design in SpaceClaim, rendered it in KeyShot, and put the images into our marketing materials. After that, the distributor saw they had a saleable product,” said Robert Tingaard Knudsen.

Dominator doesn’t always have the marketing muscle of much larger competitors. SpaceClaim has enabled them to compete very effectively and keep their customers close.

“Working with SpaceClaim is the difference of night and day compared to other 2D and 3D products we’ve used.”

Robert Tindgaard Knudsen
CEO
Dominator