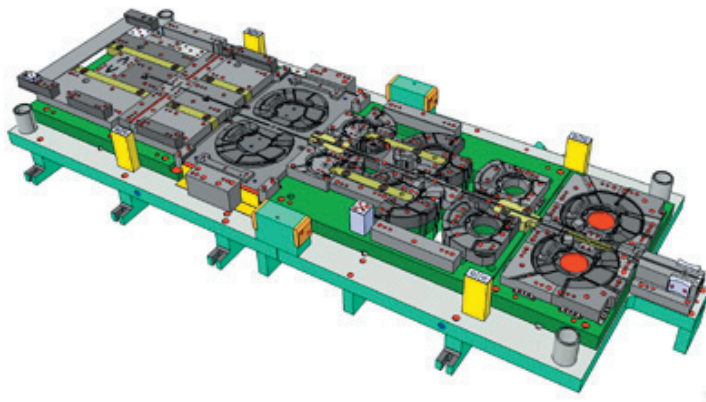


CATIA V5 helps new automotive die designer get up and running fast



"With CATIA V5 we can offer so much more than our competitors. And we can do it without a big jump in price and production time." Corey Chamberlain, Co-owner of 3D Solutions Design Services LLC www.3ddiedesign.com

Overview

- *Start-up 3D Solutions needed a robust, trouble-free CAD solution that would make it cost- and speed-competitive against established progressive, line and transfer die design sources*
- *CATIA V5's catalogue, templates and ability to virtually simulate allowed the firm to offer clients quicker turn-around, better designs and more value*
- *One year after launch, 3D Solutions is debt-free and growing and its CATIA V5-built tools catalogue is already earning significant revenues.*

Advantage CATIA

When progressive tool and die designers Corey Chamberlain and partner Mark Hansen decided to go out on their own in the competitive Detroit and Grand Rapids area automotive market, they knew they'd need an edge if they hoped to survive. CATIA V5 gave it to them.

In fact, CATIA inspired the partners to form 3D Solutions Design Services LLC in the first place, and to put it right into the company's mission statement. The two first learned the software while working for their former employer (a progressive die shop).

"Mark and I realised then that with 3D solids software this good, we could be competitive and offer customers so much more," Mr. Chamberlain says.

Using CATIA, 3D Solutions delivers 3D solid models as well as 2D drawings for customers' progressive, line and transfer dies, eliminating much of the need for clients to generate 2D detail prints prior to building. Yet with CATIA's productivity features, it can produce designs as quickly as 2D sources, for the same price or less than other 3D sources.

"Once they see what we offer," Mr. Chamberlain says, "they're very excited."

Better than the competition

When the partners were planning the company, they briefly considered a competitive product, but opted for CATIA V5's superior interface and ease of learning.

Mr. Chamberlain says he was able to produce his first designs with CATIA a week after returning from training by IBM Business Partner EADS Matra Datavision. One current client using the competitive product had not produced a design after more than a month.



The CATIA V5 feature that gives 3D Solutions its biggest edge is the ability to define a catalogue. Mr. Chamberlain and Mr. Hansen used it to create a comprehensive catalogue of manufactured die parts. Now they can fetch the 3D model of a tool from the catalogue in seconds rather than recreating it from scratch, cutting design time from weeks to days or hours.



"It means we can focus on design now rather than how to operate the software," Mr. Chamberlain says.

Generating revenue

The company is also licencing the catalogue to tool and die shops – a risk given that it's part of 3D Solutions' competitive advantage. But Mr. Chamberlain is confident there will be plenty of work for his firm. And he expects the catalogue to generate as much as 25 percent of revenues this year.

3D Solutions is making good use of other CATIA features to speed design and improve quality – including the template functionality. Designers load a client's parameters and specifications into a template and then use the data to quickly design new tools to spec.

"Once we've created a template (for one tool), we can sometimes

do a similar tool (not including surfacing) in as little as 10 minutes," Mr. Chamberlain says. 'To do it from scratch could take two to three weeks.'

More time savers

3D Solutions also appreciates CATIA's unique ability to work in the entire die assembly without taking hours to display and bringing the hardware to its knees.

What's more, using CATIA, 3D Solutions can display virtual simulations of transfer dies, another time-saver. Transfer dies built from 2D plans are sometimes flawed, with finger clearance issues and components interfering with one another. If the stamper can't fix it in house, the die goes back to the tool and die maker.

"You can imagine how much time that costs," Mr. Chamberlain says.

"By simulating in CATIA, you can run through those processes virtually and head off clearance issues before the tool is built."

Chamberlain and Hansen needed an edge to get 3D Solutions out of the blocks fast and CATIA was just the ticket. Now, using CATIA V5 and their parts catalogue, the firm is out-performing much more established rivals.

For more information

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