Detroit Brothers Custom Cycles

“Working in CimatronE is my favorite part of the day. I was able to start using the software in a matter of hours, and the support I’ve been getting from Cimatron has been like none I have ever experienced.”

Dave Kaye, Co-Owner

Industry: Custom motorcycles
Location: Ferndale, MI, USA
Website: www.detroitbros.com

With a passion for motorcycles and expertise in engineering, industrial design, welding and fabrication, brothers Dave and James Kaye provided the perfect combination to start Detroit Brothers Custom Cycles, a small scale manufacturer of custom motorcycles with distinct designs.

The Challenges
- Replace manual design and drawings with a single CAD software that would be easy enough to use in a small shop environment, yet powerful enough to enable quick design of everything from the entire motorcycle to every small part
- Find a single software package that can be used for a complete design and visual presentation to customers as well as the detailed design required to manufacture the parts

The Solutions
The Detroit Brothers use CimatronE in every step of the design process, from complete motorcycle assemblies to single parts.

The Results
CimatronE enables the Detroit Brothers to design a motorcycle from concept to final product in a single package. The customer can see upfront exactly what the final product will look like in a 3D model; and the fabrication of every part is done from the same design to ensure smooth and satisfactory completion.

For more information, please visit www.CimatronE.com
“Our bikes are very unique,” says Dave Kaye. “They appeal to riders like me and my brother, the generation that used to snowboard and ride BMX bikes when we were younger.”

“Customers come to us because they want something fun and exotic that no one else will have,” explains Dave. “If you look at our bikes, they are totally different than anything else on the market.” With that in mind, the brothers’ approach to each bike design is all about differentiation. “While all of our bikes are similar in some characteristics, none of them is exactly the same as the other,” says Dave.

The first step is talking to the customer to get an idea of what they’re looking for. Whether it’s a color scheme or a type of engine, this initial process is what will point the Kaye brothers in the right direction. Then it’s all in their hands.

With a strong background in industrial design and engineering, Dave has the flair for designing bikes and parts that are both creative and technologically innovative. James, a classically trained sculptor and fine artist from the Center of Creative Studies in Detroit, brings years of welding and fabrication experience. This unmatched combination is what sets the Detroit Brothers apart and allows for each bike they build to become a one-of-a-kind work of art. “I will do a lot of the initial design and conceptualization of the bike,” explains Dave, “and then James will come in and do the fabrication.”

Challenges: Communicating unique product designs
Because everything the Detroit Brothers do is custom made, communication is essential. The customer cannot walk into the showroom and see the bike they are buying. They are investing a considerable amount of money into a product that they will not see until it’s done, so there is some natural apprehension that comes with it. “The more accurate a model we can show the customer of what they are getting, the more it helps the customer understand upfront what they’re getting so there are no surprises along the way,” says Dave.

The Solution: Using CimatronE designs to communicate externally and internally
To support Dave Kaye in his designs, no other software has been as helpful as CimatronE. “Doing design work in CimatronE is my favorite part of the day,” he says.

The transparency and ease of CimatronE was a key factor for Dave from the get go. “It has great functionality, and working in 3D makes the entire process more efficient, not to mention the end-result. The user interface is very easy to use, very simple to understand. I was able to start using the software in a matter of hours. I find it very intuitive,” explains Dave, “unlike some of the other software that I used before.”

“I started out designing parts and frames. Then one customer really wanted to see what the bike will look like so I decided to put the entire bike into CimatronE. The customer loved it, and since then I have been doing it for every bike we make,” says Dave.

Results
“It gives me the ability to really show the customer what we’re talking about. This is what I want to build for you. This is what you’re agreeing to. Once they agree to it, I have everything ready to go right there.”

CimatronE has also helped streamline the internal process of taking the design into production. “Once we go into production, there’s no guesswork. My machinist can load my files directly into the milling center, and the people at the shop know exactly what they’re supposed to be doing because they know what the bike will look like.”

“Because CimatronE is so powerful yet easy to use, it has enabled us to become more customer-friendly and more efficient in our internal processes, while still allowing us to maintain the small shop environment that makes us unique,” says Dave Kaye.

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