FASKIN

MAKING THE WORLD SIMPLER

The development of a Vacuum Cleaner Range

Keith Faskin reflects on how five designers at VAX developed a shared design language for a new product range in nine months.

INTERVIEWER

If AI gives me twenty concepts, why pay a designer?

KEITH FASKIN

To decide what the product should express and judge whether the design actually does it. The Dirt Devil Rebel Multi Cyclone is a good example.

At VAX, five of us had nine months to design a whole range. We started with a blank sheet. I put together a top-down system design approach to give us a common foundation. We built a shared design language, and each of us took responsibility for our own product.



FASKIN

MAKING THE WORLD SIMPLER

INTERVIEWER

How did five designers agree what the range should look like?

KEITH FASKIN

We looked at other products, trends, who we were selling to and the price points. We built mood boards, sketched individually and came together to critique the work. That's the most stressful part. People feel strongly about their ideas. Cost, size and ergonomics gave us common ground.

That continued in CAD. You might see a detail in someone else's design and adapt it for your own. That was how we stayed aligned.



FASKIN

MAKING THE WORLD SIMPLER

INTERVIEWER

What made the five designs look like a family?

KEITH FASKIN

The flowing side profiles, rear grille shape and pattern, curved switches and the treatment of the nozzle connector. The switches were different parts, with the same visual language. The motor, cable reel and wheels were the only shared components. The wheels gave us a visible link as well.



FASKIN

MAKING THE WORLD SIMPLER

INTERVIEWER

What did you want the Rebel itself to express?

KEITH FASKIN

I wanted a haunch at the back, rising towards the multi-cyclone. That's where the motor sat, and I wanted you to read it as the powerhouse. That was my hero shot. I wanted it to convey a sense of quality beyond what you'd expect at that price.



FASKIN

MAKING THE WORLD SIMPLER

INTERVIEWER

What could you judge on a physical model?

KEITH FASKIN

Working with car designers at PSA taught me how much depends on surfaces and light. A freeform curve can tighten or open out. That's what I mean by visual acceleration. Where two surfaces meet, the reflection can flow through or break at a sharp edge.

In front of the physical model, you can see where a form looks weak or two surfaces clash, even when the CAD analysis supports the direction. That's where your eye for proportion and visual balance comes in.



FASKIN

MAKING THE WORLD SIMPLER

INTERVIEWER

What did you still have to work out inside the Rebel?

KEITH FASKIN

I had to work out where the air duct could go, how we could make it, and how to keep its cross-sectional area as consistent as possible. I drew on earlier work in hydraulics, turbochargers and exhaust manifolds. Controlling that area in CAD was tedious.

Adding sound-deadening material can add cost, assembly time and shipping weight. If it restricts the air path, it can make the noise problem worse.

FASKIN

MAKING THE WORLD SIMPLER

INTERVIEWER

What did the working prototype prove?

KEITH FASKIN

We built a prototype and measured noise and efficiency. The Rebel was the quietest vacuum cleaner the company had made at that point, and that work helped it earn one of its two design awards.



FASKIN

MAKING THE WORLD SIMPLER

INTERVIEWER

What are you proudest of looking back?

KEITH FASKIN

The range, first. I thought the team did a fantastic job. You could see five individual designs and still recognise them as a family. I haven't seen another manufacturer do quite what we did.

Personally, I was proud that the Rebel won two design awards. And when the company used my original sketches as the backdrop at its exhibition, seeing them up there was a very proud moment for me.

FASKIN

MAKING THE WORLD SIMPLER

INTERVIEWER

What would you hand to AI, and where would you come in?

KEITH FASKIN

I'd bring AI in at the blank sheet. It could gather references, bring costs and component dimensions into the conversation earlier and speed up CAD. That could help more inventors get direction before they have the budget for a whole development team.

I'd come in when they need someone to decide what the product should become and lead it through design, engineering and manufacture. On the Rebel, that meant knowing why I wanted that haunched form, judging it on the model, and using what I knew from another industry to rethink the airflow. That's where I come in through Faskin Associates. I help founders see the whole picture and make the next decision clear.