

THE INTERNATIONAL DESIGN MAGAZINE — **2007 Annual Design Review** ... Consumer Products ...
Graphics ... Packaging ... Environments ... Furniture ... Equipment ... Concepts ... Interactive

July/August 2007 — \$34.99 US / \$44.99 CAN; www.id-mag.com

I.D.

53RD ANNUAL DESIGN REVIEW



F+W PUBLICATIONS, INC. — \$34.99 US / \$44.99 CAN



Display until September 3, 2007

“This category is about equipping people to do things beyond their natural means.”

—Anna Rabinowicz

EQUIPMENT / Moderated by Noah Robischon

The equipment category can be summed up as the story of the hammer and the hematoma detector. By the end of the first round of judging, Tucker Viemeister, Anna Rabinowicz, and Mark Frauenfelder had already chosen this year’s top winner: The S2 split-head hammer—with its brushed carbon-steel head and its hickory wood handle adorned with two dark dots forming the ATOMdesign logo—is so pretty the jurors wondered whether workmen would be brave enough to tote one on the job site. Not only was the tool fun to hold, but its innovations were obvious (the hammer earned a utility patent with 28 separate claims). “I bet do-it-yourself home-improvement-types are going to be the first ones to buy this,” said Frauenfelder. He wanted one too.

Bresslergroup’s Infrascanner Handheld Brain Hematoma Detector, on the other hand, was an utterly alien object. It could have passed as a toy rocket ship or a desktop subwoofer, but its function was literally lifesaving: The device provides medics in the field with a way of detecting brain bleeding by wirelessly sending images to a handheld computer. Sounds like something from an episode of *Battlestar Galactica*.

Tools thousands of years old butting against instruments that could have been ripped from a science fiction show. “This category is about

equipping people to do things beyond their natural means,” said Rabinowicz. X-ray vision: The Luminetx VeinViewer, designed with Integrated Design Systems, gives doctors a way to make patients’ veins appear on top of their skin. Green energy: BMW Group DesignworksUSA’s Aerovironment Architectural Wind turbine looks like an old-fashioned box fan but generates kilowatts of electricity each month. Bionic legs: The Ideaz-designed Skywalker drywall stilts have an articulated spring-loaded ankle joint, and the wearer can adjust the height without taking them off.

Too bad the form didn’t always live up to the function. In many cases, the jurors lauded a particular innovation but decried the lack of beauty. Some devices were hobbled by usability requirements; others were backward-looking. And there were plenty of me-too designs as well—call it the iPod effect. “Professionals now expect their equipment to look just as inviting as what they would use at home,” said Viemeister. “All the boundaries are crumbling.”

The jurors would have liked to see even more blurring of consumer and professional. Take the Kembo Examination Table by StudioMOM: The panel thought that educational institutions might find the \$200 price tag rather steep, but all agreed that the wood-grained Formica tray would make a fine addition to the Design Within Reach catalog.



S2 SPLIT-HEAD FRAMING HAMMER

To really understand how this hammer ascended to the top of its category, you have to watch users after they pick it up. Viemeister held the sustainable hickory wood handle behind his neck with a hand on each end, like a batter warming up in the on-deck circle. Frauenfelder tested the center of gravity (lower than expected) and studied how to replace the user-serviceable split head. Rabinowicz slung the S2 onto one shoulder and then gave it a few test swings with both hands, sizing up whether it better suited her as a tool or a protective weapon. All three jurors said they wanted to take it home, even though none is a professional carpenter. The waterlogged entry form ("looked like they filled it out on the worksite," said Viemeister) only added to the product's charm.

ATOMdesign was granted a utility patent with 28 claims for the S2, and the innovations are evident to anyone who has used a hammer before. "Shock gaskets" sitting between the modular heads and the wooden handle are for dampening vibrations during a strike. The dual carbon-steel heads appear easily customizable for different hammer-head types, which will become available this year. The heads also have long chins, or "overstrike plates," to reduce the damage caused by missing a nail. The long ergonomic shaft translates into more powerful strikes. And the curvature along the top of the hammer offers increased leverage for removing bent nails. The only mystery was a grooved notch in the top of the front head—a magnetic nail starter, it turned out, which frees up a hand for holding a board (and it's the only framing hammer on the market that will hold a two-headed duplex nail).

"There's a reason for everything," Frauenfelder said.

"And all the reasons are functional," added Rabinowicz.

The S2 is also beautiful. The blue elastomeric shock absorbers could have been hidden entirely; instead, they are used as a decorative addition. The bottom of the handle has two dark wood circles on one side, ATOMdesign's logo, set off by the V-shaped brushed steel bas-relief on the overstrike plate. "A lot of branding here," said Rabinowicz. Which got the jurors to wondering if the S2's one flaw might be that it's just too pretty for a construction worker. "Maybe they'll think this is like a sissy hammer," Frauenfelder said. "Maybe they made the handle longer so you could hit people with it when they call you a sissy," Viemeister answered.

As it turns out, the hammer is not just for sissies. "We've put it in the hands of framers," says ATOMdesign president and founder Yani Deros, "and they were all fighting over it."

Design ATOMdesign, Inc. (Phoenix): Yani Deros, president and founder;

Thomas H. Turner, director of engineering

Client Vaughan & Bushnell

Materials Sustainable hickory wood, carbon steel, rubber

Software Adobe Illustrator, Pro/Engineer, Alias Sketchbook Pro, Rhino 3D

Q+A WITH YANI DEROS, ATOMDESIGN

What did professional carpenters tell you during the field tests?

The first time we took the hammer to a construction site, the crew instantly congregated around it, talking about how balanced it was. Then they started hammering: They put the nail into the nail set, swung the handle with all their might, and buried the nail halfway into the wood. In framing, time is money, and instead of banging a nail in seven or eight times, these guys were sinking it in two shots.

They also told us that the handle design helps keep their forearms loose. It's precision-balanced front and back, not weight-forward like most hammers. It feels as light as titanium, but it's stronger. One foreman said that if he'd had this hammer 15 years ago, he wouldn't have blown out his elbow; he would have extended his career.

Was it daunting to reinvent a tool that's essentially been the same for 1,000 years?

Vaughan & Bushnell approached us. They're one of the oldest toolmakers in the country, but they haven't been able to innovate, and their margins are getting whittled down by all the imports. We considered this an opportunity to change a cultural icon. Vaughan required us to use a wooden handle, which framers prefer for its vibration-dampening characteristics. The company has its own hickory tree farm for harvesting wood, and they've been farming sustainably for generations, so we thought, "Why don't we take the wood's inherent value and build it into the head?" We've separated the head elements, and put in a gasket, so the handle is an intermediate interruption to the shock and vibration.

How did the aesthetics of the hammer evolve, and how were they integrated with the functionality?

The handle is an oblong shape, with enough edge to accommodate different sizes of hands. The top is flat, so you can easily yank or ratchet out a nail. The gaskets are visible—that's intentional so that everybody who picks this up will instantly say, "Oh, this must have shock absorption." We made a deal with Vaughan & Bushnell that our dotted logo would be branded onto the end of the handle, and they had no problem with it, since our design helped transform the product. And we made the Vaughan name more prominent than they usually do, molding it into the gasket. That's how the hammer is seen on the shelf, inside a shrink-wrap with icons that show all the benefits and functionality of the product.



BEST OF CATEGORY