

## A Powerful Partnership: Canfield Scientific, HS Design, Kenson Plastics, and KYDEX® Thermoplastics



## Experts in their Fields

Canfield Scientific and HS Design partnered to create the Vectra WB360, the world's first 3D whole-body imaging system. Kenson Plastics, the thermoformer partner of choice, knew they needed a thermoplastic material that would accommodate a large, deep mold. It would have to stretch across complex geometries, remain strong even with a severe undercut, and meet stringent safety regulations.

## KYDEX® T: The Perfect Fit for the Vectra WB360

"We told our client that KYDEX® T was the way to go," says Robert Boyer, Director of Product Development at HS Design. "We looked at structural foam, RIM, and thermoforming. There were many requirements, such as keeping it lightweight, and aesthetics were also a big part of it."

"KYDEX® T was ideal," explained David O'Leary, Kenson Plastics' founder and Vice President of Sales. "In fact, the project wouldn't have worked without it. We pushed it to its limits in terms of stretching and formability.

Other materials would have torn. We were all thrilled with the outcome."

## Elevating Technology Through Design

"KYDEX® T was perfect because it can handle deep draw and the undercuts," says HS Design's Senior Industrial Designer, Stephen Simantiras. "We wanted the injection molding/RIM look without the weight. Durability was also extremely important, if the final product is in a hospital or ER setting, someone wheeling equipment around could bump into it. If we'd used something like RIM or structural foam, the impact could chip or mar the paint."

"One advantage of KYDEX® Thermoplastics is colour," Boyer adds. "If you nick or scratch it, the material's colour is embedded, whereas with RIM you have to paint, which is another step and expense. Beyond aesthetics, another advantage was KYDEX® T's excellent V-O rating."

The Vectra WB360 project required design and manufacturing to meet the highest standards. The design is flexible in case a camera location changes and is precise so the system could deliver the highest-quality imaging.



"The cameras have to be in a specific spot at a certain angle," says Boyer. KYDEX® Thermoplastics pieces have to line up perfectly with the cameras, so some have unusual undercuts, and the bends and cutouts are intricate."

"In the end," adds Simantiras, "only the camera pods are injection molded. Everything else is thermoformed with KYDEX® Thermoplastics."

## Forming Partnerships

"One of the great things about working with KYDEX® Thermoplastics," Boyer says, "is that they're willing to try unique or difficult applications. Other vendors just say no."

"We have partnered with HS Design on many new programs in the past," says Canfield's CEO, Doug Canfield. "This program was especially challenging due to the size and volume of the system. Collaboration with KYDEX® Thermoplastics, HS Design, and Kenson Plastics allowed us to meet our objectives while satisfying the high-end look and feel that is associated with Canfield."

"Our experience working with KYDEX® Thermoplastics makes our projects achievable and easier," O'Leary says. "They address our needs quickly, provide fast turnarounds on colour samples, and respond to any issues right away. Partnering with them is a win-win for everyone."

Learn more about [Canfield Scientific](#), [HS Design](#), [Kenson Plastics](#), and [KYDEX® Thermoplastics](#).

## Award-winning Vectra WB360

