

“ As an organization working to highlight the East Bay’s remarkable assets and advantages for innovative companies, East Bay EDA knew that the trophy had to reflect the innovative spirit and creative character of the region. Having a design company like FATHOM with 3D printing expertise was a perfect opportunity for East Bay EDA to demonstrate the power of partnership and collaboration available right here in our neighborhood. FATHOM’s immediate receptiveness to the concept and willingness to build on the inaugural effort in 2013 was just phenomenal. ”

— Scott Peterson, Deputy Director
East Bay Economic Development Alliance



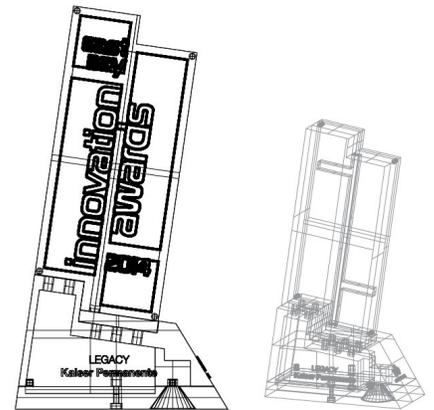
ILLUMINATE AND INSPIRE

CREATING THE 2014 EAST BAY INNOVATION AWARD WINNER TROPHIES



CHALLENGE

For a second year in a row, FATHOM took on the challenge of creating a unique trophy for the 2014 East Bay Innovation Awards hosted by East Bay EDA (Economic Development Alliance). The team envisioned an illuminated 3D printed award that represented the winners' innovative contributions to the community, as well as provide inspiration through FATHOM's creativity and advanced manufacturing technologies. FATHOM also included its technology partner, Lawrence Livermore National Labs, as a true demonstration of the collaborative culture among East Bay innovators and industry leaders.



SOLUTION

Initial concepts were hand sketched then developed in CAD using Rhino modeling software. The internal electronic light assembly was modeled in SolidWorks. The team then combined the rough concepts and hosted the design on GrabCAD to include Lawrence Livermore National Labs scientists in the iteration process, leveraging each contributors' expertise and strengths.

A prototype of the agreed upon design was then 3D printed for form, fit and function testing. The finalized design was 3D printed in PolyJet multi-materials using VeroCyan, VeroYellow, and VeroClear. Lawrence Livermore National Labs determined a proprietary photopolymer was complementary to the lighting system in the trophy and provided FATHOM with the solution. The team applied the material to the 3D printed back plate and cured it with UV lights. Nine trophies were completed and distributed at the award ceremony in February.



INTRODUCING OBJET500 CONNEX3

Achieve smooth surfaces, thin walls, and complex geometries in PolyJet Technology multi-materials in a vibrant range of colors on the Objet500 Connex — more than 46 material characteristics in an individual part, assembly, or multi-part job. The Connex3 does not rely on saturating a base material with “ink.” The unique 3D printing system supports three new base color materials: VeroCyan, VeroMagenta, VeroYellow which can be digitally combined with existing rigid, translucent, and flexible color parts (VeroBlackPlus, VeroWhitePlus, and VeroClear). Mix materials together to get rigid and soft-touch components or overmolding in one build cycle.