



PearLED Designs Cool, Green Lightbulbs with Autodesk Inventor Software

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Beneficiary of Autodesk Clean Tech Partner Develops Pearl-30 Bulbs Generating 90 Percent Less Heat Than Conventional Bulbs

SAN RAFAEL, Calif., Sep 29, 2010 (BUSINESS WIRE) --

PearLED is using [Digital Prototyping](#) software from [Autodesk, Inc.](#) (NASDAQ:ADSK) to help design a new breed of lightbulbs that shine brighter, run cooler and last 35 times longer than conventional bulbs. These bulbs enable retail customers and businesses of all sizes to experience powerful, sunlight-quality light while reducing their environmental footprint. PearlLED is a beneficiary of the Autodesk Clean Tech Partner Program, which provides software for emerging clean tech companies in North America and Europe.

Conventional incandescent and halogen bulbs convert only 10 percent of their energy into light -- the other 90 percent is given off as heat, which is why these bulbs can be extremely hot. The Pearl-30 light emitting diode (LED) bulb is designed to convert a full 90 percent of the energy directly into light, allowing it to shine brightly while giving off very little heat.

Less heat means Pearl-30 has an ultra-long life and can shed light for as much as 70,000 hours -- while conventional lightbulbs typically last less than 2,000 hours. The Pearl-30 contains no mercury or lead, and is made with 95 percent recyclable materials. That can save companies as much as \$1,500 in replacement costs over the life of the product.

Rapid Iteration with Digital Prototyping

The Autodesk [Clean Tech Partner Program](#) helped PearlLED take advantage of the benefits of [Digital Prototyping](#) software such as [Autodesk Inventor](#) to rapidly design and engineer the Pearl-30.

After digitally modeling the Pearl-30, the company sends both 2D drawings and 3D digital models -- which it manages with [Autodesk Vault Professional](#) software -- to its suppliers, who benefit from seeing the physical product as it is meant to eventually look. In addition, PearlLED uses [Autodesk Showcase](#) software to create near photorealistic 3D marketing materials that help sell its products before they even roll off the manufacturing line.

One of the cornerstones of the Pearl-30's energy efficiency is a uniquely engineered heat sink capable of evacuating twice as much heat as competing products. Creating the heat sink via extrusion rather than through a more common die-casting process ensures that the aluminum is not porous, giving it better thermal characteristics and providing the best heat-sinking performance.

"We are a relatively small company, and we need to work efficiently, effectively, and quickly," said Trinh Nguyen, CEO of PearlLED. "Without Digital Prototyping with Autodesk Inventor, and 3D rendering in Autodesk Showcase, it would take us months instead of hours to complete our many iterations. Without Autodesk software, it would simply be impossible for us to properly design our products."

"Autodesk is pleased to support companies like PearlLED who are rethinking the products we use every day to make them both more eco-friendly and cost efficient," said [Robert "Buzz" Kross](#), senior vice president, Autodesk Manufacturing Industry Group. "As the Pearl-30 bulb demonstrates, Digital Prototyping empowers clean tech companies to freely explore their ideas, iterate them, and ultimately bring better products to market faster."

About the Clean Tech Partner Program

The Autodesk Clean Tech Partner Program supports early-stage clean technology companies by providing design and engineering software that accelerates their development of solutions to the world's most pressing environmental challenges. Clean tech companies in North America and Europe who can benefit from Autodesk solutions for Digital Prototyping are invited to apply to receive up to \$150,000* worth of software for only \$50. Access to a collection of Autodesk industry-leading software applications includes up to five licenses of [AutoCAD Inventor Professional Suite](#), [Autodesk Showcase](#), [Autodesk Vault Professional](#), [Autodesk Revit Architecture](#), [Autodesk Alias Design](#), [Autodesk Algor Simulation](#) and [Autodesk Inventor Publisher](#) software. For additional information, visit www.autodesk.com/cleantech.

About PearlLED Inc.

PearLED Inc. offers unique energy-saving lighting products for business, office, and retail. Designed and manufactured in the USA, PearlLED's lightbulbs are the most powerful, energy efficient, and eco-friendly lighting products on the market. For additional information, visit www.pearlLED.com.

About Autodesk

Autodesk, Inc., is a leader in [3D design](#), engineering and entertainment software. Customers across the manufacturing, architecture, building, construction, and media and entertainment industries - including the last 15 Academy Award winners for Best Visual Effects - use Autodesk software to design, visualize and simulate their ideas. Since its introduction of AutoCAD software in 1982, Autodesk continues to develop the broadest portfolio of state-of-the-art software for global markets. For additional information about Autodesk, visit www.autodesk.com.

Editorial Note:

An interview with PearlLED is available on the Autodesk YouTube Channel at <http://www.youtube.com/watch?v=77PZ7jJ0ZPM>.

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