



Novacem Uses Autodesk Design Software to Produce Zero-Carbon Cement

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Autodesk Clean Tech Partner Program Enables UK Company to Increase Plant Efficiency to Develop Cleaner, Greener Products

SAN RAFAEL, Calif., Mar 15, 2011 (BUSINESS WIRE) --

[Autodesk, Inc.](#) (NASDAQ:ADSK), a leader in 3D design, engineering and entertainment software, announced that Novacem, the carbon-negative cement company based in London, is using its [AutoCAD Plant 3D](#) software to optimize its plant design and production process, enabling it to develop a new magnesium silicate-based cement that will offer carbon-negative production.

Enabling start-ups like Novacem to better design products and processes, the [Autodesk Clean Tech Partner Program](#) provides powerful software for emerging clean tech companies in North America, Europe and Japan, all working to address the world's most pressing environmental challenges. The Clean Tech Partner Program offers [Digital Prototyping](#) software licenses to clean technology companies, helping them innovate more rapidly.

"Being able to develop the process using state of the art layout design tools allows Novacem to effectively and efficiently scale up the technology," said Howard Simons, Novacem vice president of engineering. "This approach enabled us to explore different concepts by giving our design team more freedom to be creative, while pioneering new and innovative production techniques. This helps Novacem optimize the process design of its plant technology, as well as provide vital information associated with costing and visualizing the technology for investors. We value the opportunity to be part of the Autodesk Clean Tech Partner Program."

Constructing Carbon-Neutral Cement with Novacem

Novacem developed a new generation of carbon-negative cement that will offer cost and performance parity with the most common type of cement, Portland cement. The cement is based on magnesium oxide produced from magnesium silicates and is a scalable, transformational alternative to current carbon-intensive cement production. Current technology creates an average of 800 kilograms of carbon dioxide per metric ton of cement. Novacem can go beyond eliminating all of these emissions and can achieve up to 50 kilograms net absorption of carbon dioxide per metric ton of cement.

To help increase production and improve efficiency in its pilot plant, Novacem is using AutoCAD Plant 3D software to digitally design and visualize the performance of the plant's planned automated control systems under simulated real-world conditions, all before the systems are physically built and installed. AutoCAD Plant 3D brings modern 3D design to plant designers and engineers to help streamline the placement of piping, equipment and support structures, reduce complexity and enable them to evaluate designs quickly and easily.

"Novacem's product and manufacturing process has positive environmental implications for materials used in construction around the world," said Mark Strassman, vice president, construction and plant for Autodesk's Architecture, Engineering, and Construction Solutions. "Autodesk is pleased to support companies like Novacem, a prime example of how software can help solve design and engineering challenges that address environmental problems, while decreasing time to market."

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, Europe and Japan that 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 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 Novacem

Novacem, the carbon negative cement company, is a spin-out from Imperial College London and has developed a new generation of carbon negative cement that will offer cost and performance parity with Portland cement. The cement is based on magnesium oxide produced from magnesium silicates, and is a scalable, transformational alternative to current carbon intensive cement production. In 2010 the company announced its Green Cement Bond with Lafarge, the world leader in building materials, as the first subscriber. Novacem is a World Economic Forum Technology Pioneer for 2011.

Novacem is currently working on a development programme to design construct and operate an Industrial Pilot Plant (up to 25,000 tonnes per year) to be co-located with an existing cement plant. It will work closely with Green Cement Bond subscribers and other industrial partners in this project and the first Commercial Volume Plants which will follow. Thereafter the technology will be rolled out to companies in and around the cement industry to ensure its full potential to reduce carbon emissions is realised.

The company raised a £1.1m Seed Round in 2009 from Imperial Innovations, the Royal Society Enterprise Fund and the London Technology Fund. It raised a further £1.6m in 2010 when Laing O'Rourke joined its investor group. It has also received financial and other support from the Technology Strategy Board, the Carbon Trust and industrial collaborators.

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 16 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.

**Value is based on up to five commercial licenses of each application.*

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