



AS FEATURED IN *BUSINESS IN FOCUS*  
MAY 2015



David Saltman  
CEO and Chairman of Malama Composites  
demonstrates the company's line of  
advanced materials made from bio-based  
and recycled resources at the 5th Annual Port  
Tech EXPO 2014 in Los Angeles, CA.



*As we all know, polyurethane foam is present in a wide range of products for both household and commercial purposes. Unfortunately, the petroleum it's made from makes it largely unsustainable. In addition, foams are filled with toxic agents, catalysts and fire retardants that are harmful to people's health and damaging to the environment. Malama Composites is looking to end that by commercializing their newly developed line of non-toxic, rigid urethane foam made from sustainable resources.*

**Written by Leon Bracey**

**M**alama means "to care for and protect" in Hawaiian, and the company is living up to this philosophy by offering cost-competitive, recyclable foams made from renewable resources that don't generate any water or air pollution during manufacturing or use.

Chairman and CEO David Saltman spoke to Business in Focus about Malama Composites. As an advocate for cleantech innovation and sustainable business development for two decades, Mr. Saltman founded Malama Composites, Inc. back in 2009.

Headquartered in San Diego, a city noted for its beautiful beaches and surfing culture, Malama got its start when surfboard manufacturers in the area were looking for alternatives to construct their boards out of non-toxic materials. Saltman soon began to explore whether there were other larger markets for bio-based, non-toxic, structural foam.

# MAKING OUR HOMES AS SMART AS OUR PHONES

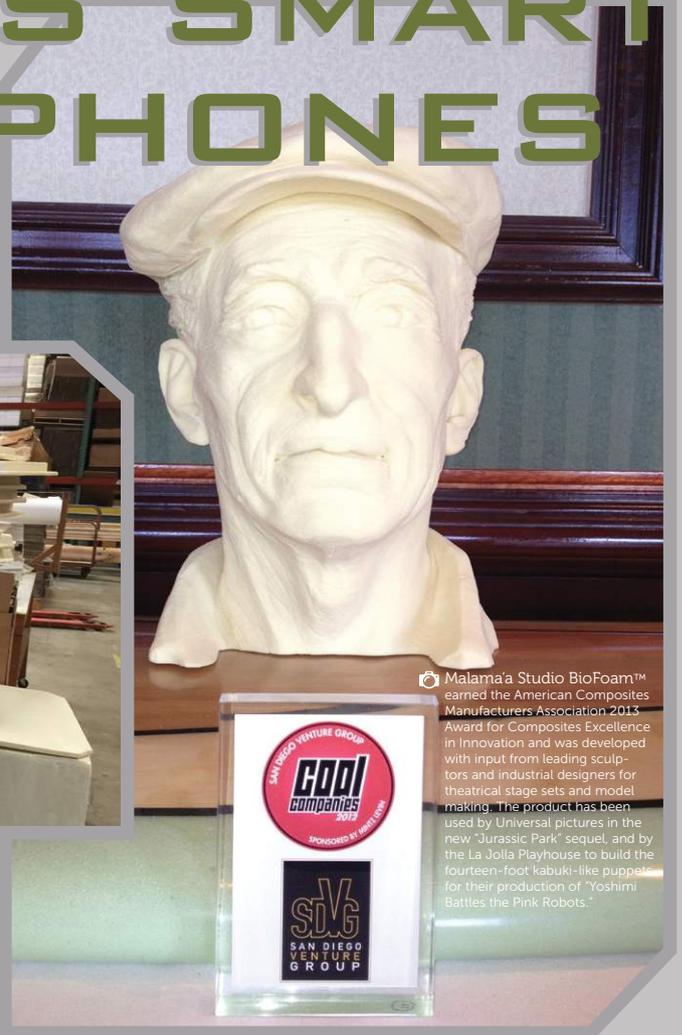


David Saltman  
Chairman and CEO of Malama Composites preparing Pacific BioFoam™ shipping "coolers" at Landsberg Orora. Pacific BioFoam™ provides resistance and impact strength that DNA and pharmaceuticals require for shipping plus a healthier work environment.

"Over the last four years, we have managed to develop a set of products that can address the entire marketplace for rigid polyurethane foams," Saltman explains. "We are proud of the fact that our products can be high performance and cost-competitive with existing petroleum based products and yet have far superior features in regards to their human health and environmental impact."

The market for sustainable urethane foam products is there, but Saltman admits that it can be challenging for Malama Composites to compete with larger companies that sell traditional, petroleum-based products. He feels, however, that once customers learn the value of using foams made from renewable resources, they will lean toward using them.

"It's a competitive marketplace," Saltman says. "We're up against some of the largest petrochemical companies in the world. Their access to capital and customers is much greater than ours, so we have to prove ourselves in a real way."



Malama's Studio BioFoam™ earned the American Composites Manufacturers Association 2013 Award for Composites Excellence in Innovation and was developed with input from leading sculptors and industrial designers for theatrical stage sets and model making. The product has been used by Universal pictures in the new "Jurassic Park" sequel, and by the La Jolla Playhouse to build the fourteen-foot kabuki-like puppets for their production of "Yoshimi Battles the Pink Robots."

In its mission to constantly improve upon its products and capabilities, Malama Composites offers a number of products that are used in a variety of industries and applications. In the building and construction industry, the accelerated adoption of green building practices combined with rising utility costs, as well as recent federal funding for weatherization and improved energy efficiency of government buildings has made the sector attractive for Malama. The company's low emission, high performance materials, domestically manufactured from renewable resources, have made Malama Composites' products attractive for builders seeking LEED certification and government purchasing programs.

For example, the company's AinaCore foam can be deployed as a core component of structural insulated panels (SIPs) in residential and commercial developments. Pre-fabricated SIPs combine AinaCore foam cores with exterior and interior sheathings made of OSB, plywood, reinforced concrete or steel. Thanks to AinaCore's industry-leading insulation value, and class A fire rating, the resulting structures built with AinaCore are stronger and far more energy efficient than traditional stick frame and drywall methodologies. They can be erected quickly, with zero waste at the job site.

Government agencies and NGOs around the world have deployed SIP systems in disaster relief and affordable housing projects. They are designed to increase efficiency and reduce power loads on the local utilities, and they are resilient to fires, floods and hurricanes. They can also be disassembled and redeployed as needed, making them well suited to this kind of application. "AinaCore is now being specified into building systems that combine our structural insulation panels with light gauge steel framing and geo-composite coatings to create low-cost, high-performance, energy efficient homes and buildings," says the company.

---

**"All of us have a role to play to find sustainable ways to do business."**

---

The company's Advanced Composite and Steel Architecture (ACASA) building system delivers high performance, zero energy homes and light commercial buildings. The system meets IBC steel-framed construction standards, utilizing ICC approved steel studs, Malama's AinaCore Class A structural foam insulation, and fire and waterproof coatings by GigaCrete, according to the company's website, <http://www.malamacomposites.com/>.

ACASA is engineered to withstand both hurricane force winds and seismic activity. The system utilizes fire rated interior coatings and finishes as well as non-combustible waterproof exterior finishes. It is ideal for all global climatic zones, and is fire, mold, mildew, insect

 David Saltsman  
Chairman and CEO of Malama Composites wins the 2014  
Port Tech Pitch Most Innovative Technology Award at Port  
Tech Los Angeles, CA.



and rot resistant, and ACASA homes are built to offer healthy, secure living environments with zero indoor air emissions. Malama plans to build modular ACASA factories and logistics centers in close proximity to ACASA developments, generating local jobs and encouraging near-sourcing of materials. The team works in conjunction with local developers, designers, politicians and community representatives to ensure the long term sustainability and success of ACASA communities.

As part of its agreement with local developers, Malama oversees the installation of the factories and logistics centers and provides ongoing training in their use, maintenance and operation. The company also provides training on the ACASA Building System and the operation and maintenance associated with utilities and municipal systems such as water, power, waste management, transportation, and security.

For metal building systems, Malama's Pacific BioFoam is the solution. In this system, liquid foam is poured between sheet metal panels to create structural walls, comparable in quality to tilt-up concrete structures. The Pacific BioFoam is also highly effective for moldings and architectural millwork, insulated doors, window frames, columns, corbels and other pour foam applications. It can also be used in the packaging industry, enabling manufacturers to create insulated boxes and coolers that protect perishable or temperature sensitive products such as vaccines, blood samples, chemical reagents and medical devices. It is designed to be injection molded into forms using existing equipment, or shaped in post-production using CNC machines. Pacific BioFoam has also been used as an insulative material for spas and hot tubs as well as for appliances. The foam can be injected into the walls, doors or cavities of an appliance using traditional manufacturing equipment and fabrication techniques, and, at the end of the appliance's life, the foam can be removed, ground, and repurposed as a soil amendment or oil absorbent.

Malama Composites' Studio BioFoam is a castor-based, water-blown rigid PUR foam developed specifically for hand sculpting or three-dimensional shaping on CNC machines. Exhibiting uniform density and even cell structure, artists can use Studio BioFoam to produce consistent, high-resolution products, says the company's website. This foam can be painted or surfaced with various materials and, unlike polystyrene, will not degrade when exposed to solvent-based paints, coatings or adhesives. Malama worked closely with Disney, Universal, DreamWorks, Paramount and several independent production studios to develop a bio-based foam that performed to their specifications, and the resulting product has been used for theatrical stage sets and model making. Universal Pictures used Studio BioFoam in the new Jurassic Park sequel to make full-scale models of



Malama's Studio BioFoam™ earned the American Composites Manufacturers Association 2013 Award for Composites Excellence in Innovation and was developed with input from leading sculptors and industrial designers for theatrical stage sets and model making. The product has been used by Universal pictures in the new 'Jurassic Park' sequel, and by the La Jolla Playhouse to build the fourteen-foot kabuki-like puppets for their production of "Yoshimi Battles the Pink Robots."



EternaTile Inc. is able to manufacture the first foam roof tile to pass California's rigid fire codes thanks to Malama's AinaCore® SI product



Camille Sobrian (Malama President and CMO), David Saltzman (Malama Chairman and CEO)

dinosaurs. "The reason they used our foam is that it won't expose workers sculpting these foams to VOC emissions," says Saltman.

Studio BioFoam substitutes plant-based carbohydrates for petroleum-based polyols, lessening the dependence on fossil fuels. The manufacturing process utilizes no toxic chemicals or additives and in tests, exhibits zero volatile organic compounds (VOC) emissions, providing safer workplaces and healthier living environments.

---

**"Malama Composites has been able to revolutionize the way urethane foams have been manufactured."**

---

Malama Composites' dedication to sustainability is reflected not only in its product line, but in its approach to team members and suppliers as well. "The people we hire are dedicated to the cause of preserving the environment," says Saltman. "All of us have a role to play in finding sustainable ways to do business. In terms of our staffing, we are interested in people who are dedicated to a more sustainable planet and we teach them about that. We educate our supply chain managers as well; if we're buying from big companies, we want them to adopt those same types of standards in their products and workplaces, and we look for customers who want that, as well. We have been fortunate to find customers who are dedicated to these values."

Malama Composites has recently been involved in the development of the first foam roofing tile product to pass Class A fire rating. "Eternatiles' product is designed to keep houses warm in the winter and cool in the summer. This will help homes use less energy, saving people money," Saltman shares.

Of course, this kind of innovation doesn't go unnoticed. Malama Composites has been recognized by a number of industry organizations. In 2014, the company won an

award for Most Innovative Technology at the PortTech Los Angeles 5th Annual Port Tech EXPO. In 2013, the company won in the Energy / Green Category of the San Diego Business Journal Innovation Awards, as well as the American Composites Manufacturing Association Award for Composites Excellence in Innovation.

In just four years, Malama Composites has been able to revolutionize the composition and also the manufacturing of bio-based urethane foams using sustainable and environmentally friendly production methods. Saltman sees the need for these products only increasing in the future, which will hopefully translate into ongoing success for his company.

"We appreciate the fact that the US Secretary of Agriculture predicted that bio-composite materials will grow into a \$200 billion industry in the next five years," he says. "We are not a fringe product; we are part of a growing industry and part of a very large international movement to transition from hydrocarbon-based chemistry to a carbohydrate-based economy where we grow the means of our building materials."



***Malama Composites Inc.***

7756 St Andrews Ave,  
San Diego, CA 92154

**P:** 619-661-1111

**E:** sales@malamacomposites.com

***www.malamacomposites.com***

