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Tire Log™

Purdue ECT Team

Purdue University, ectinfo@ecn.purdue.edu

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TIRE LOG™

THE NEED

The need for practical recycled tire products that utilize a large quantity of waste tires while producing a value added product has been a high priority of solid waste administrators on the national and international level. The Tire Log™ is an excellent substitute for chemically treated timbers and other conventional building materials in a variety of building applications.

The possible applications for this product are as vast as the imagination and creativity of its different end users. The Tire Log™ will be able to replace and last much longer than chemically treated wood in a variety of applications without the use of toxic chemicals that leach into the environment. Commercial applications cover a wide variety of construction, civil engineering, flood and erosion control projects. Due to its extreme strength, resistance to decay, chemical inertness, and lack of toxins the Tire Log™ is well suited for use in the most unforgiving environmental conditions.

The Tire Log's™ flexibility and energy absorbing characteristics make it ideal for applications that can cause other materials (such as concrete and lumber) to crack or break thereby losing their structural integrity and escalating their decomposition. Due to the Tire Logs™ “bends but doesn't break” characteristics it may have its most profound value in areas that are prone to earthquakes or other extreme forces such as wave action, ice damage, explosions or vehicle impacts.

THE TECHNOLOGY

The Tire Log™ is a patented innovation made from waste tires with a unique and energy efficient approach to recycling tires. Re-Tread Products (RTP) process takes full advantage of the embedded energy in tires that is wasted in conventional tire recycling that primarily involves the grinding, burying or burning of waste tires. The net result is a building material with unique benefits, combining the desirable characteristics of tire materials with the structural integrity provided by RTP's unique design.

THE BENEFITS





Due to its extreme strength, resistance to decay, chemical inertness, and lack of toxins the Tire Log™ is well suited for use in any marine or fresh water environment. RTP recycling process makes it more energy and cost efficient than the current methods of tire recycling. The Tire Log™ method of recycling waste tires is straightforward, efficient, and extremely effective.

The Tire Log's™ flexibility and energy absorbing characteristics make it ideal for applications such as levees, sea walls, bulkheads, erosion and flood control, as a replacement for sandbags, and other similar applications that are subject to extreme forces by moving water, wave action and ice damage. These extreme environmental conditions can cause other materials (such as concrete and lumber) to crack and buckle thereby losing their structural integrity and accelerating their decomposition.

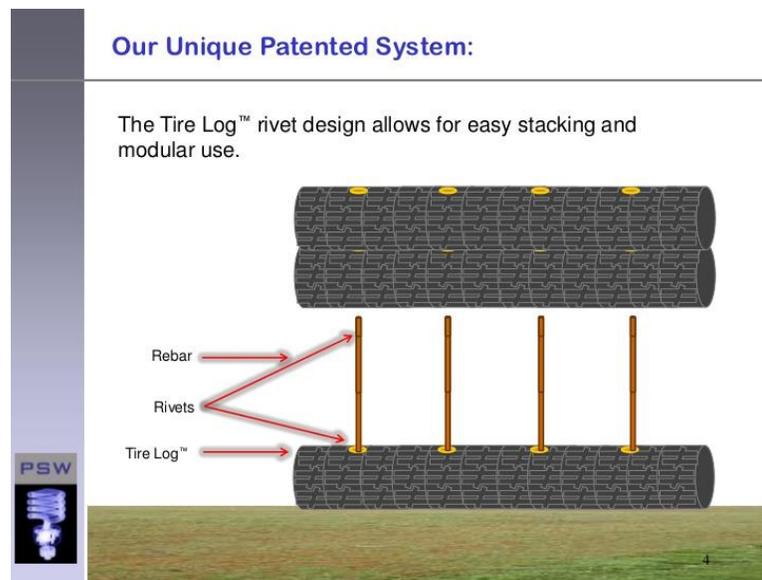


FIGURE 1 UNIQUE PATENTED SYSTEM

STATUS

RTP has successfully built prototypes of its original product concept, obtained a US Patent for the Tire Log™, and has been awarded two separate \$200,000 R&D grants from the [Environmental Services Unit of the New York Department of Economic Development](#) as well as other grants and awards for its accomplishments. The Tire Log™ has advanced through various stages of engineering, refinement and testing. The Tire Log™ has been utilized in several different commercial applications and demonstration projects.

BARRIERS

Once the usefulness and high value potential of the Tire Log™ was verified, the next priority became how to manufacture the Tire Log™ as cost effectively as possible. Due to the success of the initial R&D feasibility



studies of the Tire Log™ as a viable building material RTP was awarded a second R&D grant from the New York Department of Economic Development to conduct R&D on automating the manufacturing system to enable RTP to mass produce the Tire Log™. The systems and machinery developed with that grant verified the capabilities of the manufacturing system and have enabled us to prove its functionality.

Our current efforts have focused on determining what the market potential is for the variety of applications that we have already successfully demonstrated (see; [Uses on website](#)) along with many other applications that we haven't been able to demonstrate yet. This market analysis and third party verification is crucial to the completion of our business plan, which is critical for raising the funds needed to open a pilot factory to mass produce the Tire Log™ to meet the anticipated market demands.

POINTS OF CONTACT

Tom Hansen, Re-Tread Products, Inc.

Tel: (716) 244-8084. E-mail: rtp@retreadproducts.com

REFERENCES

1. See [publication page](#) on [Re-Tread Products website](#).

REVIEWERS

Peer reviewed as an emerging construction technology

DISCLAIMER

Purdue University does not endorse this technology or represents that the information presented can be relied upon without further investigation.

PUBLISHER

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