

# HARDLOCK: the ultimate fastener for safety critical applications

From indispensable industrial machinery to towering bridges, the HARDLOCK Nut has an unbeatable track record in tough operational environments.



Shinkansen E7 series

Founded half a century ago, HARDLOCK Industry has a mission and vision to contribute to people, companies, and the industry by providing unparalleled self-locking nuts, or solutions incorporating them, that ensure safety and assurance. To give just two examples: the company's nuts have been used on Japan's Shinkansen high-speed trains for over 30 years, boasting a zero-percent failure rate, and have remained



securely in place on The Great Seto Bridge since 1988.

"Our HARDLOCK Nut, applying the wedge method, offers unique advantages in terms of self-locking capability, reusability, versatility with different materials, and stability in various environments," explains company chairman Katsuhiko Wakabayashi. "We continue to focus on research and development to provide innovative solutions for our customers across a wide range of industries."



"For fail-safe fastening performance in the most demanding vibration environments, trust HARDLOCK."

Katsuhiko Wakabayashi,  
Chairman, HARDLOCK  
Industry Co., Ltd.

That focus includes global infrastructure growth, particularly in developing nations, where expertise and experience in maintenance are crucial. "Overseas partnerships are vital for overcoming challenges and expanding reach," Mr. Wakabayashi says. "We are seeking local partners to jointly grow the market, aiming to create a safe and sustainable society while supporting infrastructure growth, encompassing both hardware and software."



Shinkansen underfloor devices

The chairman's vision is to eliminate any issues caused by bolt loosening by increasing partnerships with companies that share HARDLOCK's goals, in order to provide safe and reliable bolted joint mechanisms for the international society.

"We are focused not only on pursuing profits for our company, but also thinking globally about how we can contribute and support society altogether," he adds. "In five years' time, we envision that the high tensile resin fastener mechanism will be established and it will revolutionize the worldwide industry."

"Within this framework, we aim to continue our global contribution."

**HARDLOCK®**  
hardlock-nut.com

## The pierce nuts behind next-generation industries

Since its foundation, Shinjo has continued to provide technology and products that can respond to any situation.

As the company celebrates 70 years, Shinjo is not striving to increase its size but instead maintain its place among the top of its field.

"Our specialty and core focus is on the type of fasteners that pierce a sheet and clinch and allow you to mount and stabilize items in place, with no need for a pilot hole," explains company president Isao Shinjo. "We listen to the needs of our customers and increase our efficiency through a strict production design and control process."

The automotive sector is



Isao Shinjo, President,  
Shinjo Manufacturing Co., Ltd.



www.shinjo-int.co.jp/en

where Shinjo has its core activity, and it's a rapidly evolving one as electric vehicles play an ever greater role. Collaboration, however, is on the president's mind.

"Our partnership with Arnold Umformtechnik GmbH & Co. KG has been very successful in expanding our business, and we have contracts with distributors across the U.S. and EU for pierce nuts. There are possibilities to develop in Asia, but conventional nuts are still the major market so we need to consider how best to progress."

Innovation and sustainability form a crucial aspect of the company's goals, with a unique press machine and their smokeless pierced nut good examples of each.

"The product is called Miracress, which was inspired by construction companies looking for a nut in a square pipe, and we are identifying applications for this with our automotive customers. For all our production we aim to minimize energy consumption."

Looking ahead, Mr. Shinjo points to the continued transition to electric vehicles.

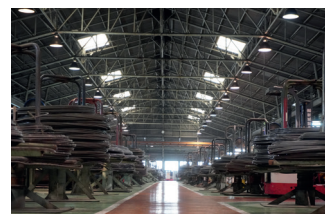
"It is more likely that the number of screws and fasteners will be reduced significantly. We will change the product mix and follow the shift to EVs."



Pierce nut:  
a handy  
tool for  
small-sized  
applications



Various nuts for various functions



Clean and organized production