## New Eco-friendly Option for Collated Screws GUANG ZHE Releases Patented Assembly Integrating Paper Tapes and Washers





by Naiwen Chang, Fastener World

Guang Zhe Enterprise Co., Ltd. has recently released a new paper tape, which is recyclable, safe-to-use, eco-friendly and of a pleasing appearance. This tape can be painted and heated at the temperature of up to 200 degrees Celsius for 30 minutes. The tape, on the other hand, endures and functions well at as low as minus 20 degrees Celsius. More importantly, it is water-proof. The tape can be also painted together with screws and washers, and can be assembled with hex washers and the entire tool peripherals. Guang Zhe has had these products patented in Taiwan and is also applying for other patents in Europe and America.

## Paper Tape Made From a Special Material, Which Can Replace Original Plastic Ones

"We've got 6 patents for the entire assembly, including 2 for paper tapes, 2 for washers, and 2 for the tool peripherals. We also plan to apply for 2 more patents for our mechanical assembly tool, which is still in the process of development," said President Fu-Cheng Su. "The current wood screw demand in Europe and America is huge, so we are currently developing an assembly of paper tapes and tool peripherals for wood screws. The final test is expected to be completed by late Feb. 2020 and this product is very likely to catch eyes of users considering replacing their plastic tapes with more eco-friendly options. We hope that our effort could lead to a better change in the environment we live."

## **Saving Costs and Time Effectively**

In terms of the application in the global hardware and fastener market, screws and rubber washers are usually assembled one by one. As a result, they fall off when they are picked up or installed, causing waste or safety concerns, work delay, or difficulties in installation.

Thus far, Guang Zhe has successfully rolled out the patented assembly integrating hex washers, paper tapes, and tool peripherals, which saves use of materials, time, labor, relevant costs and is safe to use, eco-friendly and of a pleasing appearance.

According to the statistics of Guang Zhe's R&D team, the new patent can save at least 1/2 of the original required labor force, 3/5 of the work time, and 1/8 of materials used. Moreover, the paper tape can be painted together with products and can be recycled and reprocessed without causing environmental pollution. Its installation is safe and convenient, and can be easily used in different weather.

## Drawing Inspiration from Daily Life for Continuous Product Development

Inspired by Acer Founder Stan Shih, President Su established Guang Zhe in 2011, which is specialized in the packaging & OEM of hardware/fasteners and the assembly service of screws/washers. Adhering to the principles of "innovation, top service and high quality," the company continues to strive for sustainable operation and growth with the idea of creating innovative products of superior quality. In an interaction with a foreign customer Guang Zhe noticed that environmental protection and aesthetics were particularly focused in the EU, USA and Japanese market, so the company continued to develop products which are of pleasing appearances, eco-friendly and of high performance.

"I've spent much time and money on trying new materials and design for developing new products. After times of trials, I unwittingly discovered the paper tape, which is now one of our patents. Later, with several times of tests for paper properties, we finally have this product developed," Su said, "We continue to draw inspiration from our daily life to create several patented products. In the future, we'll also continue to develop more eco-friendly products in line with market trends."