# Best Quality Wire's New Product Tackles Bi-metal Screw Pain Points

## New Patent & Breakthrough!

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### Cross-Over Genius Inventing Ultra S.S. Anti-Corrosion Screw

Mr. Hsiang Wu, president of Best Quality Wire, is one of the classic Taiwanese figures breaking industry boundaries for innovation. He is a Taiwanese wire rod maker by profession, with a strong curiosity to learn about screws. He asked for advice from a fastener friend, who was touched by him, supported his creative concept and allowed him to learn about screw manufacturing. The opportunity led him to understand the pain points of certain screw products during production. In his decade-long journey of learning, he had moments of being looked down upon, but always believed he could contribute to the fastener industry. Eventually he was able to create a patented revolutionary technique called "Forming Method for Stainless Steel Screw Capable of Direct Drilling and Fastening".

Hsiang Wu found bi-metal screw production requires multiple procedures and is lower in speed and output capacity compared to stainless steel screw production. The pain point, he discovered, is the inability to form bi-metal screws in one piece. His new patent was born to tackle this pain point. Using his forming method, he successfully manufactured "Ultra S.S. Anti-Corrosion Screw"— a new product from Best Quality Wire.

### Patented Technique— Rust-Prevention Level Above S.S. 304/316 & Replacing Complicated Bi-metal Screw Procedures

The biggest feature of this stainless steel screw is the ability to be formed in a single process, not requiring dual-material welding, turning, threading, cleaning, surface treatment and other processes pertaining to bi-metal screws. Compared with bi-metal screws, "Ultra S.S. Anti-Corrosion Screw" has surface hardness up to 550HV, core hardness over 520HV, tension coefficient at 173kgf/mm<sup>2</sup>, resisting corrosion for over 3,000 hours and acid rain for over 50 cycles. The screw itself is rust proof and corrosion resistant, not requiring surface treatment.

With this patent, "Ultra S.S. Anti-Corrosion Screw" can replace bi-metal screws, with an added value of significant cost production reduction for clients, faster production, higher production volume, shorter lead time, energy saving and lower carbon emission. "I can guarantee the use of this screw for 20 to 30 years without rust. I hope to extend its use to yacht, wind/solar power, construction and automobiles. With global inflation and EU carbon tax pressing on, I hope this screw can help clients face the carbon tax challenge and be more cost-competitive, thereby contributing to environmental protection", said the president.



This technique has earned patents in Taiwan, Europe and the U.S. "Ultra S.S. Anti-Corrosion Screw" has officially appeared at Taiwan International Fastener Show this year, gaining many inquiries and acclaims from domestic and overseas buyers. The potential is not to be overlooked.

#### 3 Pillars to Go Along the Carbon Reduction Era

The president has been long focused on environmental protection. He previously invented the "Auto Sludge Discharging & Oil Recycling Machine" which separates oil and water sludge from production line. Following "Ultra S.S. Anti-Corrosion Screw", his next step is to focus on the revolutionary optimization of wire rod manufacturing process. He will develop a production line that integrates wire drawing, pickling, roughing and finishing, and phosphoric acid coating into a single process. In other words, his future production line will be able to form wire rods in one process. Additionally, he has been preparing for carbon inventory since five years ago. An inventor, Hsiang Wu has the new patent bolstering Green Manufacturing, the "Ultra S.S. Anti-Corrosion Screw", and a future optimized manufacturing processes, altogether ready to face the carbon reduction era!

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