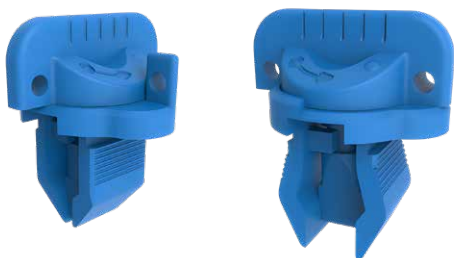


## New Quick Access Panel Fastener

### 新型快速取用式板材紧固件

The plastic quarter turn panel fastener by Euro Locks is manufactured from high strength PA6 GF15 V0 material, making it corrosion resistant and fire resistant to level V0.

The ergonomic design allows for easy installation and removal of cover panels without the use of additional tools, making it the perfect fastener for rack and data cabinets, or any enclosure in the power industry where a durable fastener with a high V0 fire resistance level is required.



## Heavy-duty Retractable Ball-lock Fasteners

### 重型可伸缩球锁紧固件

Fixtureworks has augmented its One-Touch Fastener lineup with the addition of a heavy-duty version of the retractable clamping/knob locking fastener. The heavy-duty version provides a high clamping force up to 450 lb. (2000N) and a holding force up to 1120 lb. (5000N). These heavy-duty retractable fasteners provide positive locking in quick change applications where there is frequent insertion and removal of a fixture.

The retractable pin feature allows the fastener to safely slide off from the base without interference, making it ideal for slide and door applications. The new fasteners will not release until the knob is turned to the “OFF” position, allowing the balls to retract into the shank and allowing the shank to be raised out of the way of the base plate for no interference.



## Strong-Drive SWD Double-Threaded Screw

### 强力驱动式SWD双螺纹螺丝

Simpson Strong-Tie is extending its line of structural fasteners with the launch of the Strong-Drive SWD Double-Threaded screw. With its innovative design, the SWD wood-to-wood screw can replace some interior and exterior connectors, potentially reducing installation times and labor costs.

Designed for stealth, strength and speed, the SWD Double-Threaded screw is a low-profile structural screw with a compact, cap-style head to reduce its visibility. The screw's unique double-thread design with differentiated thread geometries and smooth mid-shank holds wood members together tightly. It features a black exterior double-barrier coating for corrosion resistance and a chisel tip for fast starts, easy driving at any angle and reduced splitting.

The new screw is suitable for applications including beam-to-post, beam-to-joist, purlin-to-truss, guardrail-to-post and roof-to-wall connections; multiply assemblies; knee bracing; cap connector replacements; and post-frame connections.



# FASTENER INNOVATION ALLEY

扣件新品大道

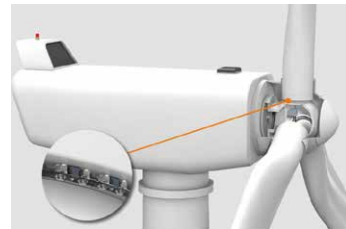
compiled by Fastener World

## New Bolt Monitoring System for Wind Turbines

### 风力涡轮机的新型螺栓监控系统

BOLTcontrol is a monitoring system by Weidmuller USA that detects broken bolts or studs in the wind blade root that connects to the hub. BOLTcontrol will alert operators immediately of any issues.

With BOLTcontrol, broken bolts are held securely in place with detection plates, which prevents consequential damage that would result if the pieces fell into the hub and ricocheted as it rotated. By continuously monitoring the rotor blade bolts, BOLTcontrol minimizes downtime, reduces repair costs and ensures the safe uninterrupted operation of the turbine.



“The bolted connections between the hub and rotor blade are constantly subjected to dynamic loads in a wind turbine,” said Pete Tecos, director of new energy solutions at Weidmuller USA. “Stud and bolt failures have become more common, and BOLTcontrol not only alerts operators to blade root fastener failures, but also prevents the fractured components from falling into the hub, thereby avoiding costly damages to pitch systems and other critical components.”





## i-Marker 1000 Bolt Marking Sprayer

### 「i-Marker 1000」螺栓标记用喷雾器

The "i-Marker 1000" is a bolt marking sprayer by Japanese NichEr for marking wheel bolts on large vehicles like trucks and buses. Place the sprayer on a wheel nut, and push once to complete the marking. This is a workload saver for operators, faster, cleaner and convenient. The sprayer makes the work 4 times faster compared to manually marking with a marker pen.



## Remote Screw Loosening Detection System

### 远端螺丝松动检测系统

In recent years, reducing the burden of screw maintenance has become a social issue in Japan. With the shortage of labor and the need to deal with aging infrastructure, it is becoming more difficult to secure sufficient workers, and improving safety when working at high altitudes or in dangerous locations is also an issue.

To solve these issues, by collaborating with Momo Co., Ltd. which has strengths in IoT, Japanese Ikeda Metal Industrial has built a system in which IoT sensors that detect loosening are embedded in screws and the status can be checked from a remote location. By working only when and where necessary, this leads to improved work efficiency and reduced accidents.

An IoT sensor that detects loosening is embedded in the screw and the loosening status is sent to a database on the cloud. The data can be referenced from a remote location to check which screws are loose.

It is intended to be used in places where people cannot easily access, such as steel towers in mountainous areas, offshore power generation, and large-scale plants.



## PEEK Screws

### PEEK螺丝

Among resin materials, PEEK is a super engineered plastic that exhibits particularly high performance. It is a highly functional resin that boasts high performance in terms of heat resistance, abrasion resistance, and chemical resistance, applicable in a variety of environments.

Japanese Maruemu Works can produce and supply Phillips screws and cap screws made of this material.

#### Features:

- Heat resistance: Suitable for continuous use at a maximum temperature of 260°C.
- Abrasion resistance: Low friction coefficient, minimizing abrasion.
- Chemical resistance: Withstands various acids and alkalis, and performs well even in hydrocarbons and organic solvents.
- Mechanical strength and dimensional stability: High strength and rigidity even at high temperatures, and excellent creep resistance and fatigue resistance over a long period of time.
- Excellent electrical properties: Consistent physical properties over a wide range of frequencies and temperatures.

#### Application fields:

- Semiconductors, medical, automotive, aerospace. □

