Fastener News

Industry Update

Carbon and Alloy Steel Threaded Rod from Taiwan Injures U.S. Industry, Says USITC



The United States International Trade Commission (USITC) determined that a U.S. industry is materially injured by reason of imports of carbon and alloy steel threaded rod from Taiwan that the U.S. Department of Commerce (Commerce) has determined are sold in the United States at less than fair value.

Chairman David S. Johanson and Commissioners Rhonda K. Schmidtlein, Jason E. Kearns, Randolph J. Stayin, and Amy A. Karpel voted in the affirmative.

As a result of the USITC's affirmative determination, Commerce will issue an antidumping duty order on imports of this product from Taiwan.

USITC Makes Determination in Five-Year (Sunset) Review Concerning Steel Threaded Rod from China

The U.S. International Trade Commission (USITC) determined that revoking the existing antidumping duty order on imports of steel threaded rod from China would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time.

As a result of the Commission's affirmative determination, the existing antidumping duty order on imports of this product from China will remain in place.

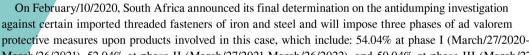
Chairman David S. Johanson and Commissioners Rhonda K. Schmidtlein, Jason E. Kearns, Randoph J. Stayin, and Amy A. Karpel voted in the affirmative.

This action comes under the five-year (sunset) review process required by the Uruguay Round Agreements Act.

The Commission's public report Steel Threaded Rod from China (Inv. No. 731-TA-1145 (Second Review), USITC Publication 5019, February 2020) will contain the views of the Commission and information developed during the review.

The report will be available by March 12, 2020; when available, it may be accessed on the USITC website at: https://www.usitc.gov/commission_publications_library.

South Africa Announces Final Determination on AD Investigation Against Certain Imported Threaded Fasteners of Iron and Steel



March/26/2021), 52.04% at phase II (March/27/2021-March/26/2022), and 50.04% at phase III (March/27/2022-March/26/2023). Products involved are 7318.15.41, 7318.15.42 and 7318.16.30. The investigation period is between July/01/2014-June/30/2018.

This investigation was launched after South African Iron and Steel Institute submitted its application on March 01, 2019.



US DCMA Reveals F-35 Stealth Combat Aircraft Could Have the Wrong Bolts in Critical Areas

Loaded with the latest technology, F-35 is considered the most unrivaled combat airplane in the world for its aerospace electronic technology and stealth design. Lockheed Martin Corporation, the maker behind F-35, estimates this airplane will be in service for 50 years and become the best sold stealth combat airplane in the world.

No one would have thought something would go wrong with this high-tech airplane. Defense Contract Management Agency (DCMA) exposed in an email to Air Force Magazine that all F-35s could have the wrong bolts in critical areas. DCMA says F-35s could have mistakenly used titanium alloy fasteners

on positions that call for Inconel fasteners. The former cost USD 20 per piece and the latter is only USD 5 per piece. This leads to a significant impact on the three models of F-35. F-35A has a total of 48,919 fasteners installed, and 1.7% of them are Inconel fasteners (848 pieces). F-35B has 50,603 fasteners, and 1.7% of them are Inconel fasteners (877 pieces). With wings that are 30% larger than the other models, F-35C is heavier and has to take a higher load impact. It has 51,353 fasteners, and 3.5% of them are Inconel fasteners (1,813 pieces).

The fasteners on F-35s, called "Eddie-Bolt 2 Fastening System", are manufactured by Arconic. The mistaken bolts look almost the same in size and appearance as Inconel bolts. The only distinction is the different head marks making it difficult to tell which is which.

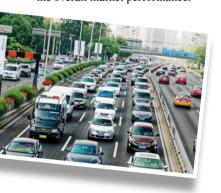
Titanium alloy bolts have a shear strength of 95KSI, and Inconel bolts have 108KSI or 125KSI. Although the airplanes' design keeps enough strength capacity, it overlooks a characteristic of Inconel: corrosion resistance. The 400 units of F-35 delivered recently could have a shortened service life due to wrong use of materials, because the compatibility of titanium alloy in use with the airplane's body materials is different from the use of Inconel. Using the wrong one could very well cause corrosion to appear between the materials.

Fastener World News

25.769 Million Cars Sold in China, Down 8.2%

China Association of Automobile Manufacturers (CAAM) published the car sales statistics for 2019. The country produced 25.721 million cars, down 7.5%, and sold 25.769 million cars, down 8.2% from the previous year, hitting an 18-month new low for the world's largest car market.

With an enormous domestic demand, the Chinese automotive market quickly rose as the world's largest automotive market, but as the market waned, so did the car sales which returned to a normal level and then in 2018 were met with the first negative growth in the past 28 years. In 2019 there were the transformation and upgrade of the Chinese automotive industry, the U.S./China trade war, the transition to new environmental regulations and a large cut on subsidies for new energy cars that seriously impacted the overall market performance.



Fastener World Exhibited of Fasteners World Middle East

On January 13-16, 2020, Fasteners World Middle East was given at Expo Centre Sharjah and was enthusiastically attended by exhibitors specialized in a variety of fasteners, pipes & tubes, tools, metal processing machines, etc. and many distributors and buyers from the Middle East. This year exhibitors from 35 countries/regions and visitors from 69 countries/regions participated at the Exhibition.



During the four days of exhibition, professional buyers from the Middle East and N. Africa (such as Dubai, Abu Dhabi, Jordan, Egypt, etc.), who were mostly from gas & oil, construction, machinery, electronics industries, gathered together at the venue. Many of them came to

look for suppliers info of high-strength large-size screws and construction screws. As most of the local demands for fasteners are satisfied by imports, traders are, as a result, quite active in the region. On the other hand, local buyers seem to

prefer collaborating with companies having local operations. The crosscountry shipment costs are also one of the major concerns a few buyers will take into account when they are seeking for collaboration.

One local fastener manufacturer told Fastener World at the Exhibition that due to lots of benefits that was brought by infrastructure projects in many countries across the region or that may be brought by Expo 2020 Dubai, the regional market has continuously demonstrated fast growing demands and inquiries for fasteners in recent years. Fastener World's Global Purchase Network is also a very useful online business to business platform to local buyers. Many buyers are also pleased to look for specific products through this platform and recognize it as a time and labor saving cross-country collaboration platform.





Top 10 Fasteners (Incl. Nails) Export Destinations of Taiwan in 2019

Country		Weight (KG)			Value (USD)						
		Weight	Share	YoY Ratio	Value	Share	YoY Ratio				
1	USA	675,606,983	43.67%	-3.23%	1,873,736,037	41.56%	-1.97%				
2	Germany	132,939,387	8.59%	-14.59%	395,909,093	8.78%	-13.28%				
3	Netherlands	80,987,763	5.23%	-12.97%	2230,740,698	5.12%	-12.80%				
4	Japan	74,532,873	4.82%	3.75%	253,318,338	5.62%	3.57%				
5	UK	56,048,577	3.62%	-6.14%	176,008,541	3.90%	-3.55%				
6	Canada	51,634,694	3.34%	-15.32%	148,053,452	3.28%	-10.22%				
7	Italy	32,571,065	2.11%	-21.88%	84,244,716	1.87%	-21.64%				
8	Poland	31,682,273	2.05%	-7.33%	68,094,646	1.51%	-4.68%				
9	Mexico	31,520,058	2.04%	-0.06%	99,767,583	2.21%	2.65%				
10	Sweden	29,114,718	1.88%	-3.14%	95,469,400	2.12%	-4.27%				
Source: TIFI											

Top 10 Exported Fasteners (Incl. Nails) Categories of Taiwan in 2019

	<u> </u>									
Category		Weight (KG)			Value (USD)					
		Weight	Share	YoY Ratio	Value	Share	YoY Ratio			
1	7318159000 Other Screws & Bolts	828,109,317	53.52%	-8.17%	2,284,978,330	50.68%	-7.71%			
2	7318160000 Nuts	274,831,232	17.76%	-12.33%	895,520,332	19.86%	-9.95%			
3	7318140000 Self-tapping Screws	203,605,796	13.16%	-5.06%	536,633,005	11.90%	-5.71%			
4	7318120000 Wood Screws	99,254,548	6.42%	13.57%	253,840,686	5.63%	12.64%			
5	7317009010 Steel Nails	57,564,471	3.72%	-22.93%	90,122,838	2.00%	-16.40%			
6	7318190000 Other Threaded Articles	19,527,816	1.26%	-2.66%	86,056,416	1.91%	-7.99%			
7	7318220000 Other Washers	17,881,808	1.16%	-8.46%	87,617,322	1.94%	-6.66%			
8	7318290000 Other Non-threaded Articles	17,660,818	1.14%	-6.69%	79,910,623	1.77%	-7.43%			
9	7318230000 Rivets	7,586,302	0.49%	-5.36%	33,130,107	0.73%	-8.31%			
10	7318240000 Pins & Cotter Pins	6,617,966	0.43%	-9.69%	33,637,802	0.75%	-6.64%			
Source: TIFI										

Taiwan's Fastener Export to Japan Hikes 24.17%

In November 2019, Taiwan's fastener export to Japan reached more than 7,000 tons, making Japan the 2nd largest fastener export destination to Taiwan. This result was up 24.17% from October 2019 and up 23.07% from the same period of 2018. In terms of average price, it was USD 3.37 per KG, down 0.34% from the same period of 2018. In the past, Japan used to be the 4th or the 5th largest fastener export destination to Taiwan. The significant increase this time was mainly affected by the drop in Taiwan's fastener export to Germany and the Netherlands.



Taiwan's Wood Screw Export to USA Grows 80%

In the first 10 months of 2019, Taiwan exported 22,532 tons of wood screws to the U.S., which is a significant increase of 82% compared to the same period of 2018. Its average export price was USD 2.81 per KG, down 6.5% from the same period of 2018. Many market analysts attributed such a result to the significant decline in China's wood screw export to the U.S. According to relevant statistics, in the first 10 months of 2019, China only exported 10,742 tons of wood screws to the U.S., down 46.8% from the same period of 2018 and the average export price was down 8.9% from the same period of 2018, reaching USD 1.36 per KG.

Companies Development

Japanese MIZUKI Achieves IoT Implementation on Fastener Manufacturing Machines

MIZUKI (Ayaseshi City, Kanagawa Prefecture) has successfully implemented IoT on 84 headers and thread rolling machines at the headquarters. Mr. Onodera, Director of the management department, recalled the process of the implementation saying "our machines look the same on the outside, but each of them has a different internal structure. Setting up the machines gave us enough hard time." Installing sensors to each long-operating machine and connecting them to telecommunication devices was a lot of hard work, but eventually the company can digitalize daily operation reports and the production management system to monitor machine status at any time. MIZUKI will analyze the data collected from the machines and come up with the best operation schedule to improve production efficiency.

The company mainly produces automotive and electronic screws at a daily capacity of 2 million pieces. Each machine has a different electric route, so any mistake in electrical wiring during the IoT

implementation would cause the machines to malfunction. To avoid short circuit, the Director had to carefully think about the positions to drill holes and the vibration of the machines. There was a lot of workload and he could only complete one machine per day. He completed 7 machines in 2018 and added up the number sequentially last year.

It was a rough time for him to cope with production management, digitalize account books and enable access to machine operation data. He even created a program for data access, saying with a smile that he had learned the know-how and could help other companies with IoT implementation.

After the implementation, the data upon measuring screw specifications directly goes to the daily operation report. The data is combined by the production management system and the company will know the status of which machine produces which product. Through visualized machine operation status, the company will know which machine has frequent brief stops and come up with a countermeasure in advance.

MIZUKI will implement IoT on its machines in overseas bases in the future. It is looking for ways to find out low operating machines and optimize the production line, and wants to adopt artificial intelligence to utilize data. The company is aware that it would be knocked out of the market if it doesn't make a change, so it will continue to increase productivity in the future at every cost.



Japanese Fastener Welding Machine Maker Koyo Gigen Expands Plant

Koyo Gigen expanded its plant in September 2019 by one fold to 1,500 square meters. The president said the demand for welding machines increased drastically over the past 5 years, so the company invested 700 million years in moving and expanding its plant. Reaching a monthly capacity of 40 sets, the new plant manufactures large welding machines and automatic welding machines. In terms of the domestic demand, the company said, "The demand for automatic machines, which feed and weld bolts and nuts is growing in Japan. Our welding machines are highly acclaimed for a feature that they produce great and uncharred appearance after welding." "Overseas revenue is down to 15%. The European demand is recovering but slowly, and the American demand is not growing as much as expected. Demand exists in China but is mostly for previous machine models. In the future we are looking to sell our automatic models abroad."



Fastener World News



Portable Torque Testing Device by Wiha Receives German Design Award 2020

No more surprises after calibration – a decisive advantage for professionals who regularly work with Wiha torque screwdrivers and use the Wiha Torque QuickCheck, the German Design Award Winner 2020. The German Design Award is one of the world's most respected design competitions and imposes exacting standards when it comes to selecting its award winners. This year's winner from Wiha outperformed the competition due to its design quality and was selected as the winner in its Excellent Product Design - Workshop and Tools category during a jury session lasting two days.

The practical, portable Torque QuickCheck allows users to perform a quick, easy check on a daily basis to ensure that Wiha torque screwdrivers function precisely. This guarantees safe and controlled work and helps businesses to save time and money by avoiding warranty claims and eliminating the need for reworking. Operation is extremely simple: users insert their Wiha torque screwdriver into the Torque QuickCheck together with the enclosed adapter blades and check the torque tool at 2.8 Nm. The LED light then clearly indicates the result using traffic light colours. Thanks to its compact, handy shape, the Torque QuickCheck is the ideal companion when out on jobs. It prevents any inaccuracies in screw fastenings before the next calibration, which must be performed after 5,000 operations or after one year at the latest.

The Wiha Torque QuickCheck sees itself as a rapid testing device, guide and auxiliary component to ensure greater safety in torque fastenings. It should be noted that Wiha's quick test device cannot replace the need for documented calibration. However, it does mean that the user will no longer doubt that the torque tool is still operating within tolerances on a daily basis.

WURTH # GROUP

WÜRTH Group Continues to Grow

According to the preliminary annual financial statement, the Würth Group reported a sales volume of EUR 14.27 billion in 2019 (2018: EUR 13.62 billion). This corresponds to a growth of 4.8 percent. Adjusted for foreign currency effects, growth comes to 4.2 percent.

Sales developed in an unusually heterogeneous way in 2019. The different development of both the individual regions and individual business units of the Group reflects this. In Germany, sales growth was rather modest, at a rate of 2.1 percent. This is above all due to the struggling automotive industry. The development of business units such as the Würth Elektronik Group or manufacturing and tool trading companies, all serving the customers in this industry, was affected as a result. These units reported declining sales in 2019. Contrary to that, Adolf Würth GmbH & Co. KG, parent company of the Würth Group and German sales organization of the Würth Line, was able to report growth of 5.8 percent.

The Group achieved sales growth of 6.8 % outside of Germany. Satisfactory growth rates were achieved in Southern Europe (15.3 percent; 4.9 percent if adjusted for acquisitions), South America (8.0 percent) and Eastern Europe (6.6 percent).

The Electrical Wholesale companies even grew at double-digit rates, in part thanks to the acquisition of Grupo Electro Stocks S.L.U., a leading Spanish electrical wholesaler, in 2019.

E-business sales experienced above-average growth and amounted to EUR 2.6 billion in 2019, thus increasing their share in overall Group sales to 18.3 percent.

PennEngineering® Earns Spot in Inaugural Class of

Fastener Innovation Awards from Worldwide Fastener Sources

On the strength of PennEngineering®'s dedication to innovating through ongoing research and design, global fastening technology expert Worldwide Fastener Sources has recognized industry leader PennEngineering® with a Fastener Innovation Award for its excellence in new product development.

Worldwide Fastener Sources President Mark McGuire said criteria for the recognition included continuous improvement with innovative solutions for fastening applications. A driving force in the evaluation process was that fasteners be innovative in assemblies today and that they will become tomorrow's standard.

"There are thousands of types of fasteners," McGuire says. "We want to recognize companies that are innovating fastening throughout numerous applications and industries globally."

Worldwide Fastener Sources bestowed the award for the first time in 2019. Nine companies, including PennEngineering®, received the recognition and earned a spot in the first class of honorees.

"We are honored by this recognition from Worldwide Fastener Sources," says Brian Bentrim, VP, New Product Development and Product Engineering at PennEngineering®. "This award indicates that the industry recognizes the need for ongoing investment in research and development. Through our dedication to innovating fastener technology, PennEngineering is able develop fastening technologies that don't just meet specific needs but are also strong, light and easy to install."

PSM 2019 Year-End Global Conference

PSM International held their Year-End Global Conference on January 14-17th, 2020, in Wuxi China. The conference was attended by global PSM leaders from Europe, the USA, Taiwan, and China. While 2019 saw the impact of Brexit, the US-China trade war, and the slowdown of the China automotive market, PSM responded with global scale restructuring initiatives and operational improvements. With the concerted efforts of all PSM employees and partners, PSM gained new strategic programs from the EV, battery, and consumer electronics sectors, and achieved growth in sales and profit in 2019.





Arconic Reports Full Year 2019 Results

Full Year 2019 Highlights

- Revenue of \$14.2 billion, up 1% year over year; organic revenue up 7% year over year
- Net income of \$470 million, or \$1.03 per share, versus net income of \$642 million, or \$1.30 per share, in the full year 2018
- Net income excluding special items of \$971 million, or \$2.11 per share, versus \$676 million, or \$1.36 per share, in the full year 2018
- For the full year, cash provided from operations of \$406 million, cash used for financing activities of \$1.6 billion, and cash provided from investing activities of \$583 million
- Adjusted Free Cash Flow for the full year was \$815 million, or \$870 million excluding separation costs



Tower Fasteners Supports Local State University with Product Donation



Tower Fasteners is pleased to announce their sponsorship of Stony Brook Motorsports, an organization first established in 1987 for Stony Brook University students to take part in real-world engineering design projects sanctioned by SAE International (Society of Automotive Engineers).

Still continuing today, each year Stony Brook Motorsports students from a variety of academic backgrounds, standings, and experience work together to design, build and test an off-road vehicle which they will then race in the Baja SAE competition against hundreds of college students from around the world. This exciting project sees to it that team members develop skills in design, manufacturing, electronics and even business, as the students must also manage the administrative and financial aspects of a project of this scale.

Tower Fasteners considers it a privilege to support Stony Brook Motorsports by donating our first-rate fastener products for students to use in the building of their vehicles. We wish them much success, and applaud their ambitions to follow their engineering pursuits while working to balance their academic coursework responsibilities.



TriMas Aerospace Awarded New Fastener Contracts by Airbus

TriMas announced that TriMas Aerospace has been awarded multi-year contracts with Airbus of Toulouse, France. TriMas Aerospace's Monogram Aerospace Fasteners and

Allfast Fastening Systems operations were both awarded new supply contracts by Airbus, expanding the company's engineered fastener sales activity in Europe.

TriMas Aerospace designs, engineers and manufactures engineered fasteners, solid rivets, temporary fasteners and standard fasteners for the global commercial and military aerospace industry under the Monogram Aerospace Fasteners, Allfast Fastening Systems and Mac Fasteners brands.

"TriMas Aerospace's engineering, commercial and manufacturing teams have worked diligently with Airbus during the past few years to qualify additional TriMas Aerospace products," said John Schaefer, President of TriMas Aerospace. "We look forward to launching production and further collaborating on fastener solutions for Airbus. Airbus is an important fastener solutions customer to TriMas Aerospace and we are proud to have secured these additional awards to support our growth."

Association News

Taiwan CSD Signs MOU with Toyota for Toyota Production System Implementation

Corporate Synergy Development Center (Taiwan CSD) signed a memorandum of understanding with Toyota Engineering Corporation (TEC) to collaborate and promote the all-in-one Toyota Production System (TPS), the most impeccable production method in the world integrating flexibility, lean manufacturing, digitalization and creativity.

DA—WANG Screw Industrial Co., Ltd.

No.56, Xingfu E. Rd., Xinzhuang Dist., New Taipei City 242, Taiwan Tel: 886-2-2992 8333 Fax: 886-2-2994 4117 / 886-2-2990 2366 E-mail: service@dwscrew.com http://www.dwscrew.com

Taiwan Quality. Reliable Service.

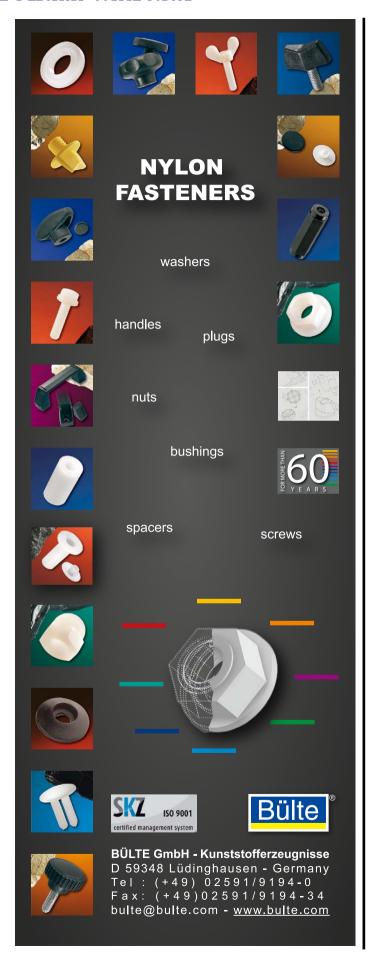
Customized Products.

Many critical industries such as hand tools, machine tools, aerospace, bikes, automotive electronics, and fasteners are the targets for Taiwan CSD counselling and could be the targets for TPS implementation in the future. The companies listed as the targets for TPS counselling are Aerospace Industrial Development Corporation, Victor Taichung Machinery Works, Tier 2 bike suppliers and domestic machine companies.

TEC is formed by a group of excellent consultants with over 35 years of work experience at Toyota. They have been counselling the American aerospace industry, the Japanese manufacturing industry, and the Chinese electronics and automotive industries since its inception.

A large portion of electronics and automobiles are assembled in China. With the continuing U.S./China trade war and the outbreak of COVID-19, some Taiwanese businesspeople in China will have to move production back to Taiwan. Taiwan has a strong component supply chain and it will be listed as a critical target for TPS implementation.





Acquisitions



Shimtech Industries Acquires Fastener Technology Corp.

Shimtech Industries is pleased to announce the acquisition of Fastener Technology Corp.

(FTC), a North Hollywood based supplier of high-strength specialty fasteners for commercial and military aerospace applications.

FTC was founded by Bulent Gulistan in 1979 and has built a strong reputation as an innovative and reliable supplier serving more than 400 customers. Some customer relationships span multiple decades, including those with Lockheed Martin, Click Bond, Northrop Grumman, Boeing, Raytheon, and Wesco. The existing management team, led by President Dennis Suedkamp, will continue to operate and grow the business, now aided by Shimtech's additional group resources.

Shimtech is owned by Inflexion Private Equity and Auctus Industries. With headquarters in Santa Clarita (CA), its aerospace divisions include four manufacturing facilities in the US, three in Europe and one in Mexico. Their C-Class Components Division specializes in the manufacture of high-volume metallic and composite detailed components which are complementary with FTC's fastener products. This Division includes such well-respected companies as Lamsco, Attewell, and Bolsan which, together with FTC, will continue providing high-quality, on-time components to the commercial and military aerospace markets.

Elgin Fastener Group (EFG) Acquires Rockford Fastener

Elgin Fastener Group (EFG) is pleased to announce it has acquired Rockford Fastener, a manufacturer of specialty fasteners known for offering excellent turnaround times, quality and customer responsiveness.



Rockford

"The combination of Rockford and EFG creates an exciting opportunity for our company, for our customers, and for our shareholders," said Brian Nadel, EFG CEO. "The synergies from this move support our core markets and deepen our reach into key distribution channels."

Rockford Fastener is well-known for delivering quality products across several product categories over their 40-year history. Product diameters range from #4 to ½" and lengths up to 5". Markets served include agriculture, transportation, commercial construction, and general industrial end-markets. Unique to Rockford is their ability to rapidly quote fasteners and even begin production within a 24-hour window for rush jobs.

Rockford Fastener joins a group of well-known product brands under EFG including Holbrook Manufacturing, Leland Powell, Northern Wire, Quality Bolt, Chandler Products, Telefast, Ohio Rod Products and Best Metal.



EQT Greater China II sells PSM International

The EQT Greater China II fund ("EQT Greater China" or "EQT") announced that it has signed an agreement to sell its entire stake in PSM International ("PSM" or "the Company"), a multinational leading fastener manufacturer, to Bulten AB ("Bulten"), a full-service provider of fasteners solutions to the international automotive industry.

Established in 1931, PSM International is a leading provider of fastening solutions to a diverse customer base in the automotive, notebook, mobile phone and general manufacturing industries. The business has a strong presence in the Asia-Pacific, Europe and US markets. With manufacturing facilities in China, Taiwan and the UK, PSM's products include a complete range of inserts for plastics, as well as multiple fastening solutions for sheet metal. PSM works with customers throughout the product life cycle, from design conception through product launch and general production.

EQT invested into PSM in 2007 and during EQT's holding period, the corporate governance and management have been strengthened with the addition of key management hires and experienced board members. PSM has leveraged EQT's network and expertise in the industrial sector to support the Company in further developing its manufacturing capabilities, sales channels and supplier networks.

Martin Mok, Partner at EQT Partners and Investment Advisor to EQT Greater China, commented: "During EQT Greater China's

ownership, PSM has continued to strengthen its cold-forming capabilities, upgrade production facilities, improve efficiency and expand sales and supplier networks. We are grateful for the insightful contribution of the board members and the management team's relentless pursuit of excellence and business development. We are convinced that PSM will continue its growth path with Bulten as their new partner."

The transaction was signed on 20 December 2019.

PennEngineering® Announces Acquisition of Eurotec Ltd.

PennEngineering® announced that it has acquired Eurotec Ltd., a specialty technical reseller of metal fabrication



equipment, fastener installation systems and clinch and sheet metal fasteners. Eurotec is based in Tokyo, Japan.

The acquisition will provide the Japanese market with permanent access to PennEngineering's PEM® and PROFIL® fasteners and installation equipment.

"PennEngineering's acquisition of Eurotec reflects our steadfast commitment to strategic expansion in Japan. Eurotec is an innovative company with highly technical fastener expertise, and true system installation capabilities," shared Leonard Kiely, CEO of PennEngineering.

"We look forward to partnering with Eurotec and investing in additional resources dedicated to introduce our unique technologies to consumer and automotive electronics, as well as the automotive OEM market," added Kiely.

Eurotec will maintain operations in Japan and join the existing brands under the PennEngineering corporate umbrella.



Fastener World News

MiddleGround Capital



MiddleGround Capital Acquires EDSCO Fasteners

MiddleGround Capital ("MiddleGround"), a private equity firm that makes control investments in North American middle market B2B industrial and specialty distribution companies, is pleased to announce that it has completed its acquisition of EDSCO Fasteners ("EDSCO"), a leading manufacturer of mission-critical anchoring systems for power transmission poles and other large steel structures. This is the fifth acquisition in MiddleGround's inaugural fund and the fourth platform investment MiddleGround has made in the past nine months.

EDSCO's anchoring systems are predominantly embedded in concrete foundations and custom engineered to allow structures to be securely placed on top of them. Each anchoring system is specifically designed

for its location and usage, factoring in soil, weather conditions, temperature, and angle. Predominantly serving utility transmission and distribution (T&D) structure manufacturers, EDSCO's product offering includes anchor cages, 18J rebar bolts, smooth bar bolts, bolt hardware, plates, and other fabricated products.

MiddleGround co-founder Lauren Mulholland commented, "EDSCO has done an excellent job of establishing itself as a market leader by offering best-in-class product and service to its customers and positioning itself for expansion into adjacent end markets. We're thrilled to be partnering with EDSCO's management team to continue this legacy and support the company's next phase of growth."



Unique to EDSCO is its national geographic presence, industry-leading quality protocols, and flexible production capabilities. EDSCO is well-positioned to benefit from continued robust spending on infrastructure projects across T&D, telecommunications, transportation, and wind power.

EDSCO President and CEO Richard Butler said, "EDSCO has a long history as a trustworthy supplier to its customers, reputation for excellence, and track record of growth. Our team really valued MiddleGround's highly operational approach and culture of continuous improvement. Their values and experiences align well with our own, and we are excited to have MiddleGround as a partner in helping us to achieve our goals."



FDH Acquires BTC Electronic Components

FDH, a portfolio company of Audax Private Equity ("Audax"), announced that it has acquired BTC Electronic Components ("BTC"), a Wake Forest, NC based specialty distributor of high-performance connectors and accessories focused on aerospace, military and industrial end markets. BTC provides a complimentary product offering to FDH's and further expands the business into the electronic connectors space.

Scott Tucker, CEO of FDH, said "Paul and the BTC team have built an outstanding business, on a foundation started and nurtured over 32 years by Bob Barnett, and we are excited for them to join the FDH family. Their strong OEM business provides a strong position in the electrical connectors space."

BTC is FDH's sixth acquisition, and fourth completed since Audax invested in the company in 2017.