# **Fastener World News**

## Fastener Market Value in the World is Forecast to Reach \$120 Billion by 2023

Prior to the release of offical Market Reports, according to China's fastener sales Jan. to Oct.'s data shown in 13th China Fastener Economy Trade & Technology Forum, experts forecast the growth of China's fastener industry for 2017 which shows an increase by 3~4% in sales from 76-80 billion USD and 2-3% in production capacity from 7.4-7.5 million tons. They also expected a 5 % jump to 5 billion USD in exports with 2.85 million tons of production capacity and a 6.5% rise to 0.31 million USD in imports with 2.85 million tons.

The global fastener market has reached 82.9 billion USD in 2016. As reported by GVR (Grand View Research), a U.S. based market research and consulting company, the market will grow to 104 billion USD by 2020 and 120 billion USD by 2023. The yearly demand rate will increase on average by 4-5%.



### Former CMCA Fastener Subdivision President Feng: There is Still a Long Way to Go for Transformation of Chinese Fastener Industry

The former president of the Fastener Subdivision of China General Machine Components Industry Association (CMCA) Mr. Jingyao Feng pointed out that in 2016 China imported around US\$ 3.2 billion worth of fasteners (around 0.31 million tons) and most of these imported fasteners were high-end fasteners with the avg. price of US\$ 10.3 per KG. As for export, China exported around 3.98 million tons of fasteners to the world (around US\$ 6.3 billion) and the avg. price was US\$ 1.582 per KG.

However, former president Feng also noted that although the entire fastener industry of China is seeking more business transformation and technological innovation, it still faces lots of challenges in issues like quality of materials, manufacturing technology and recruitment of talent. As a result, he suggests that Chinese fastener industry should try to make its business scope bigger and more specific to enlarge the market share and should go toward the development of smaller and more precision parts in order to facilitate the healthy growth of the entire fastener industry. At this moment, there is still a long way for Chinese fastener industry to go achieve its business transformation and upgrade.

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### **Industry Activities**

### Five Regions Fastener Association Conference 2017- Association Chairmen Hold Optimistic Expectation Toward Future Market Growth



More than 100 fastener association reps from Taiwan, Hong Kong, China, S. Korea and Japan attended the Five Regions Fastener Association Conference held in Sapporo, Japan on Oct. 20th. Chairman of

the Fastener Institute of Japan addressed in the conference that he hoped the understanding and friendship among members could be strengthened through this event. Association reps also reported the current conditions of their regional industries.

TIFI Chairman Anchor T. H. Chang reported that in 2016 the total fastener export of these five regions reached 4.76 million tons (about 53% of the world's total) and the export value amounted to US\$12 billion (about 35% of the world's total), making the five regions one of the most important roles in the global supply chain. He also called upon the industry to refrain from price cutting competition in order to achieve sustainable growth.

Int'l Committee Director of FIJ Mr. Ookawa reported that the Japan economy has been gradually turning well. He added that in 2016 the fastener production of Japan was about 3 million tons (up 4.2% from year 2015) and that with the upcoming Olympic Games Tokyo in 2020 the market demand will definitely grow.

CMCA Executive Director Mr. Wang reported that in 2016 the fastener production of China was 7.4 million tons (up 2%) and that the next step of Chinese fastener industry must follow the guidelines of the "Made in China 2025" policy in order to march toward innovation and upgrade.

KFFIC Chairman Mr. Cheng reported that the investment of companies is increasing and the economy is in recovery; however, due to protectionism, interest rates increase of USA and the unstable situation in Northeast Asia, the uncertainty still remains.

HKSFC Chairman Wu Wai-Yee reported that the economy this year has been turning well and boosted by improved technology, business transformation and intelligent/green manufacturing, we could expect a better future for the fastener industry soon.

### Shanghai University Establishes Fastener Innovation Platform with Government in Haiyan

On 17th Dec. the "Fastener Innovation Platform" project was finally officially sign by Shanghai University and CSICE( Chinese Society for Internal Combustion Engines). The platform will be built in Haiyan to improve and help transform the local industry.

It'll be a 5-year project with cooperation between the Haiyan Civil Gov., Shanghai University and City Civil Gov. The plan is to establish a platform intergrating a technical service center, a fastener manufacturing base and a Haiyan fastener research company.



The platform will optimize fastener production and inspection technology, and formulate the industrial principles of the business with the goal of becoming a leader at the national advanced level stage upgrade the fastener industry in Haiyan.

### The Launch of Changshu Changli Fastener Association of Science and Technology



Changshu Changli Fastener Association of Science and Technology was officially established on Nov. 24th in 2017. In the meeting the charter was passed and 9 members were elected in the 1st committee and Bao Cheng-Fang took over the chairman role of the association.

Bao pointed out the demands and the association's resolution on the strategic

importance of managing the firm's external cooperation, personnel development and technological innovation.

Changshu Changli is the backbone of the fastener technology industry. The firm is strongly focused on tech transformation and has created around 35 new products and acquired 11 patents. Furthermore, it's been recognized as a high-tech enterprise of the province.

### North American Auto Parts Procurement Service Center Settled in Wenzhou



At the joint press conference of China-US automotive aftermarket cooperation platform held in Shanghai, Automobile & Motorcycle Assembly Industry Association became one of the first 'NAAP Auto Parts Purchase Service Centers for North America' in China, the industry will accelerate the deployment in the two major after-sales markets in North America and China.

"At present, we are ready to fully enter the automotive market." Zhang

Xiaoping, president of China Automobile Motorcycle Industry Association and chairman of China Ruili Group, said at the press conference that the automobile and motorcycle industry in our city is actively exploring new market management, creating a car culture town, and taking the lead in deploying the automobile market. It is also putting up the 'Auto Parts Standardization Technical Committee' to enhance the enterprise's information management and intelligent Manufacturing level.

On the day of the press conference, Wenzhou Automobile and Motorcycle Industry Association, Ningbo Auto Parts Industry Association and other five associations won the auto parts industry award and contract. At present, there are more than 3,000 auto parts manufacturers in the automobile and motorcycle parts industry in Wenzhou. The products cover more than 5,000 types in 15 major categories covering automotive transmission systems, control systems, driving systems, engine parts, electrical appliances, GM and automotive supplies and other spare parts in various fields. Automobile and motorcycle distribution is one of the city's major industries. In 2016 the output value was 65 billion yuan, the total export value was 705 million US dollars, and the North American market sales was 116 million US dollars. Wenzhou's automobile and motorcycle industry will be the world's largest. Both sides will not only cooperate in the supply and marketing channels, but also conduct in-depth cooperation in new post-market formats. By integrating resources and complementing each other's advantages, the two parties will further explore the international market to achieve a win-win situation.

### Shitelao Manufactures the Best Performing Lock Washers



Shitelao, a company in the metal production field, has the best performing lock washers. During the developing stage, Shitelao hired a group of experts to analyze steel features through the tests on fatigue, tensile strength, yield, environment and temperature, and improve the compositions to a higher level of adaptiveness. At last it has finally developed the lock washers made of different steels.

In making these functional lock washers, Shitelao uses mainly fine steel and special steel made by Baosteel and Ansteel, both of which are competitive companies exporting quality steel to the West.

### Taiwan CSC Raises Domestic Price of Steel Products for Q1 2018



On November 24th 2017, Taiwan CSC held a meeting on domestic

steel price for Q1 2018. It is estimated that the global economy growth will continue to accelerate in 2018. Taiwan benefits from the thriving export, as well as the strong and stable industrial production. According to Directorate-General of Budget, Accounting and Statistics, the economic growth rate in 2018 is projected to reach 2.27%, better than 2017's performance. Thus Taiwan CSC made the following price adjustments.

Product Category	Avg. Price Adjustment (NTD/ton)
Steel Plates	+455
Wire Rods	+641
Hot Rolled	+214
Cold Rolled	+0
Galvanized Steel Rolls	+0
Electromagnetic Steel Rolls	+0
Hot-Dip Galvanized Steel Rolls	+100



### FIJ Reports 2016 **Results of Japan Fastener Industry**

The Int'l Committee Director of Fastener Institute of Japan

(FIJ) Mr. Ookawa, on behalf of FIJ, reported on the production and fastener trade of Japan fastener industry in 2016. In 2016, Japan produced 3,010,056 tons of fasteners (up 104.2% from year 2015) and the total production value amounted to JPY 851 billion and 90 million (up 102.7% from year 2015).

As for export, Japan exported 327,717 tons of fasteners (up 104.2% from year 2015). The export value amounted to JPY 268.5 billion and 3 million (up 97.1% from 2015).

As for import, Japan imported 228,744 tons of fasteners (up 98.0% from 2015). The import value amounted to JPY 80.2 billion and 89 million (up 87.2% from 2015).

Mr. Ookawa said that Japan's economy is continuously recovering and getting close to the level prior to the collapse of Lehman Brothers and that the fastener industry also shows a trend of recovery.



### **Japanese Precise Gauge Develops Auxiliary Fixing Hardware to Improve Fastening Efficiency**

Optical measuring machine maker Precise Gauge developed and

launched sales of an auxiliary fixing hardware called "Inner Grip Ring". With the ring, the user can assemble or take out parts without removing the screws. After embedding the ring into a pre-dilled hole on the part and assembling the part with a screw, the ring expands and presses the inner portion of the hole and stays put. When the user loosens the screw, the pressing force weakens and the part can be taken out. This will prevent missing or dropping screws and improve operational efficiency.

### Japanese Sinwa Mekki Develops "Sinwa Zint" Zn-Ni Alloy Electroplating with 20 **Fold Corrosion Resistance**



"Sinwa Zint" is a result of the technical collaboration between Sinwa Mekki and the American Pavco. This electroplating technology has a 2 layer structure. The lower layer is the Zn-Ni alloy electro-

plating layer that is 10 times more corrosion resistant than Zinc electroplating; on top of that is "Topcoat" coating developed by Pavco. As such, corrosion resistance is leveled up to 20 folds. Iron rust resistance can last up to 2,000 hours, and zinc rust resistance up to 1,000 hours. This is the first time that the Japanese electroplating industry introduces Topcoat from a top American surface treatment company.

### **Japanese Fastener Industry Sees Rise** in Revenues



The Japanese media surveyed 13 local public fastener companies for their performance in the first half of 2017 financial year, finding that the majority reported rise in revenues with concerning profit issues. In revenue performance, all 13 companies reported growth. In the previous survey the majority reported revenue decrease, but this time in contrast the majority reported revenue growth.

In terms of operating profits, 7 companies reported growth and 6 reported decrease, which means 1 additional growth company compared with the previous investigation. However, this also means, among all the 13 revenue-growing companies, the ones that reported profit decrease have amounted to nearly half the proportion.

In terms of ordinary profits, 9 companies reported growth and 4 reported decrease, which means ordinary profits performance is better than operating profits. Ordinary profits is improving compared with the last investigation. In terms of net profits, 7 companies reported growth and 6 reported decrease, which is in sharp contrast to the last investigation and means net profit performance is improving.

Overall, revenue, operating profit, ordinary profit, and net profit performances are in good condition, but profits have not caught up with the rising revenues trend in all 13 companies. This could be attributed to high material costs, but fortunately the Japanese machinery industry is performing well and infrastructure investment is supporting from the back, so revenue decrease has not occurred. From now on, improving profit margin will be the task for the Japanese fastener industry.



### KFFIC Reports 2016 Results of Korean Fastener Industry

The Int'l Committee Director of Korea Federation of Fasteners Industry Cooperatives (KFFIC) recently reported the production and fastener trade statistics of Korea fastener industry in 2016. The domestic Korean fastener production in 2016 was 1.03 million tons and more than 80% of the production were for the automotive application. In 2016, Korea imported USD 0.493 billion worth of fasteners (down 16.6% from 2015). Main import origins were China, USA, Japan, Germany and UK (China and USA altogether represented 58% of Korea's total import). In the same year, Korea exported USD 0.911 billion worth of fasteners (up 19.7% from 2015). The main export destinations were China, USA, India, Japan and Mexico (China and USA altogether represented nearly 50% of Korea's total export). Both results in export and import show significant dependence of S. Korea on China and USA.

Lee added that, since H2 2016, there has shown significant recovery in business transactions and investment projects and Korea' economy in H1 2017 also showed growth in project investments and export. However, due to the influence from certain issues like N. Korea and the global situations, we still need time to tell the future development of the global economy.

### **Optimas Reinforces Commitment to Asia Market with Japan Market Expansion**



Optimas, a provider of fasteners, c-class components and supply chain solutions, has announced expansion into the Japanese market with a new warehouse facility. This new expansion offers Optimas customers in Japan increased local support, providing a

convenient single source to service almost any component or supply requirement.

The new facility will open in late November, and will immediately begin supporting OEM customers who currently operate supply frameworks with Optimas in the region. Located in Ageo City, the site will act as a local inventory warehouse backed by Optimas' global logistics capability, providing customers with a central source for components and improving the strength of supply.

Dan Jack, President of EMEA and APAC at Optimas commented on the new expansion: "As a business we blend global supply with local support, so this expansion in the Japanese market benefits us and our customers. With dedicated expert people on the ground and local supply, we can enhance our service and continue to deliver the efficiency, service and cost advantages that our customers expect."

#### Threaded Fasteners Acquires Bolt & Nut Inc.

Threaded Fasteners Inc is expanding business in Florida with its acquisition of Bolt & Nut Inc in Tampa on Jan. 5. Financial terms of the deal were not disclosed. The Bolt & Nut team staff a 45,000-square-foot manufacturing space and a 5,000-squarefoot sales office space. The recent acquisition marks a season of growth for the company as it recently acquired Stateline Fasteners in Georgia and the inventory of a company in Mississippi.



Threaded Fasteners was founded in 1979, and with 42 million parts in stock, has locations in Alabama, Florida, Georgia, Mississippi, Oklahoma and Tennessee. With more than 140 employee owners, it supplies customers from industries such as power generating

utilities, chemical and electrical, commercial marine, construction, stainless steel fabricators, and metal building manufacturers.

#### **Fairmont Supply Acquires Fastener** Distributor THB Inc.

MRO supplied distributor Fairmont Supply Company announced that it has acquired Salt Lake City, UT-based fastener distributor THB Inc.



Terms were not disclosed. THB is also a service provider of kitting, packaging and quality control. Founded in 1986 the company carries more than 400,000 products. In 2004 they added ASME NQA-1 compliance for the nuclear industry. THB president and CEO Corey Bell will continue to lead the Salt Lake City location, while John Plazier — Boise branch manager — will also continue in that role. The two locations will become part of Fairmont Supply's Western Regional team.



### **Stanley Black & Decker Opens York Location**

Stanley Black & Decker, one of the world's largest tool companies, is opening a new manufacturing facility in York

County. The new operations are projected to bring \$31 million in capital investment and lead to the creation of 500 new jobs. Stanley Black & Decker is a diversified global provider of hand tools, power tools, and related accessories; electronic security solutions; and fastening systems. Stanley Black & Decker will be occupying a new 345,000-square-foot facility for the manufacture and assembly of DEWALT cordless power tools. The new facility will be located in the Lakemont Business Park in Fort Mill.



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According to Product Manager, Tim Haper, "Some of our customers experienced a 40% reduction in their cycle times and a dramatic improvement in quality. The auto feed systems are easy to use and add a level of safety and ergonomics. These systems also allow easy integration into existing production lines."

The Premium Auto Feed System is available in two models, Forward Stroke and Telescoping, both of which offer smooth, quiet operation. The Forward Stroke model is for restricted access application. The Forward Stroke model allows for "no surface touch" applications. The Telescoping model is intended for standard applications, and it allows for operator control of final screw height. Beyond these two models, there are many configurations available to suit any application needs.



### **Loose Screw Likely Caused Marine Harrier Crash Off Carolina Coast**

A Marine Corps AV-8B Harrier's cross-country training flight on May 6, 2016, was abruptly cut short when the aircraft suffered catastrophic engine failure and crashed in the water off Wilmington, North Carolina, shortly after takeoff.

According to a newly obtained command investigation, the disaster was likely caused by debris damaging the engine -- and the suspected culprit was a screw fastener with a 5/16ths-inch hexagonal bolt head. The mishap totaled more than \$64 million in damage for the Corps, including the totaled Harrier and an expensive Litening advanced targeting pod that was mounted on the aircraft.

[The Harrier fleet support team] believes it is likely that the fastener had been lodged inside a boundary layer door for an indeterminable amount of time. Departure from Wilmington was normal but, shortly after takeoff, as the aircraft flew over the Atlantic, the pilot heard an unusual "thump" noise. Concerned, the pilot did an instrument check. There was a second "thump," and then a third, more powerful noise. "This time, it was more violent and I felt as if it shook the aircraft," the pilot recalled. By now, the throttle had also stopped responding. The plane went down in the Atlantic about 12 miles southeast of the Wilmington airport.

The investigation called for further investigation of the object, believed to be a screw, that caused the engine to fail, citing possible changes to maintenance and preflight inspections that might result.

### **Fastenal Museum to Showcase Humble Beginnings**



On Nov. 28, 1967, a small hardware store opened for business at 69 Lafayette St. in downtown Winona. Now, 50 years later, Fastenal is a Fortune 500 company and the largest fastener distributor in North America, supplying nuts, bolts, screws and more to residents of Winona and people of Taiwan. Winonans are invited to see the old brick store where it all started, now a museum filled with stories and artifacts from the earliest days of Fastenal.

Visitors can see a prototype of founder Bob Kierlin's creative but unsuccessful hardware vending machine, a recreation of a typical Fastenal branch circa the early 1980s, and a lineup of some of the strangest fasteners and components the company has ever produced.

### Omnes Capital Invests in Aero Negoce International

Omnes Capital has acquired a minority stake in the ANI group through a EUR11.7 million investment. Based in Béziers (Occitanie region in France) and created in 1993, the ANI group is a fasteners distributor dedicated to the



aerospace industry. Its main customers are aircraft manufacturers (eg Airbus, Dassault) and their main suppliers (eg Zodiac, Safran). The group, which employs 25 staff, generated annual revenue of EUR16 million as of 30 June 2017, up 17 per cent compared with the previous financial year.

ANI's executives, say: "Our group is experiencing very rapid growth through the signing of new long term supply agreements. The quality of our products and services combined with the flexibility of our structure, makes us very competitive and encourages industrial companies to award us an increasing number of contracts. We were looking for a motivated partner, capable of supporting us in our development, in particular internationally. It was for these reasons that we decided to work with Omnes Capital."

# Indutrade Acquires Dutch Company Tradinco Instruments



Indutrade has on 22 December 2017 signed an agreement to acquire all of the shares in the Dutch company Tradinco Instrumenten-Apparaten B.V. The agreement was signed after the market closed on Friday.

Tradinco Instruments was founded in 1963 and designs, manufactures and distributes test and calibration equipment for industrial applications and laboratories. The company is specialized in measuring pressure, temperature and electricity. The global customers are in a variety of industries, such as electronics, chemistry, power generation and medical technology. Tradinco Instruments has around 30 employees and sales of approximately EUR 7 million.

The closing took place on 22 December 2017 and Tradinco Instruments will be included in Indutrade's Business Area Special Products. The acquisition is expected to have a marginally positive impact on Indutrade's earnings per share.

### Würth Group Achieves Records in Sales and Operating Result



Sales grow by 7.5 percent to new record level of EUR 12.7 billion

- -Operating result also at record high
- -E-business share continues to grow

According to the preliminary annual financial statement, the Würth Group reports a sales volume of EUR 12.7 billion in 2017 (previous year: EUR 11.8 billion). This corresponds to a growth of 7.5 percent. Adjusted for foreign currency effects, growth comes to 7.9 percent. In particular, companies in Eastern and Southern Europe grew dynamically. With respect to the business units, Electronics and Production show above-average growth rates.

According to preliminary calculations regarding the operating result, a new record amounting to EUR 760 to 770 million is expected. This is a considerable increase over the previous year (2016: EUR 615 million). "These figures motivate us and prove us to be on the right track implementing our multi-channel strategy. Ebusiness is gaining momentum: so with our developments and services, which we tailor to the needs of our customers, we have our fingers on the pulse of time. We

must ensure speed, reliability and availability. These aspects are important to our customers," Robert Friedmann, Chairman of the Central Managing Board of the Würth Group, declares himself satisfied with the preliminary figures. In 2017, e-business sales grew above the average by 19.3 percent.

#### Würth Group Takes over Lubricant Specialist Liqui Moly

The Würth Group is taking over the Ulm-based company Liqui Moly GmbH, purchasing all shares from the managing partner, Ernst Prost, effective as of 1 January 2018. With this transaction, the Würth Group will become the sole owner of Liqui Moly GmbH, a globally operating and successful manufacturer of high-quality lubricants, engine oils, additives and other vehicle care products. The Würth Group will continue operating Liqui Moly as an autonomous company with an independent brand within the Würth Group. In fiscal year 2016, Liqui Moly generated sales of approximately EUR 500 million with more than 800 employees. The transaction still needs to be approved by the responsible regulatory authorities.

To ensure continuity in the management in the long term, Ernst Prost (60) will remain managing director of Liqui Moly after the sale of his shares. In addition, the long-standing head of sales at Liqui Moly, Günter Hiermaier (52), will be appointed second managing director, effective as of 1 March 2018. Together, Günter Hiermaier and Ernst Prost will form the management team of Liqui Moly.

#### Dimac, Always on the Move

Dimac Srl aims to be the favorite partner of fasteners OEMs, manufacturing a complete line of sorting & inspection systems which incorporate mechanical, laser & vision and eddy current latest technology for detecting metallurgical not conformities and for dimensional measurement as a method for achieving zero defects.

Because of its 30-year history specializing in working with the higher and higher standard criteria for the most demanding application domains, it is today recognized as a reliable benchmark for the fasteners manufacturers looking for 100% quality.

Actually, the Italian company has improved its facilities, performing an overhaul of its machines: 8 new models, covering a complete working range, from standard dimensions and geometries to the most customized ones, and a wide spectrum of fasteners, from micro screws to large size special parts.

8 special controls guaranteeing to detect any small localized defect with high accuracy and the highest sorting rates in the market are the outcome of R&D investments, remaining key to Dimac success.

The solidity and user-friendliness of its machines, combining efficiency and functionality, mirrors also the passion for high precision mechanics and state-of-the-art solutions.

Dimac attitude is dynamic, young. Its most important goals are always to find out fresh solutions and new developments, continuing to revolutionize the inspection technology.



