Emerging Fastener Markets



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Emerging Fastener

Markets News

Russian Companies are Approaching "Industry 4.0"

俄國企業朝工業4.0路線邁進

The jump to "Industry 4.0" gives the Russian enterprises a chance to overtake the lag. As examples: "ODK-Saturn", "Kalashnikov Concern", "RosElectronics".

On the basis of "ODK-Saturn" the first "smart factory" is being created in Russia. At the enterprise a testing ground for development of innovative production technologies will be created. The ground

site is planned to be launched before the end of the year. At the site the prototypes of high-tech solutions will be developed and adapted for mass production. Domestic ideas and developments of "Industry 4.0" format will be tested at the real production conditions.

Similar technologies are being introduced in other industries as well. In the automotive industry the production of a fundamentally new UAZ "Patriot" car of the 2020 model line has already equipped with "the factory of future", and the company "VolgaBus" works with the help of a new program to create the unmanned commercial vehicles.

The largest nuclear icebreaker "Arctic" at the "Baltic Plant" is also built using electronic systems. Several other projects are being implemented in the aircraft industry and the rocket and space industry. By 2035 it is planned to create 40 smart "factories of future" in Russia, as Denis Manturov, Industry and Trade Minister, said during the industry forum "Innoprom".

Strategy for Development of the Automotive Industry Until 2025 is Approved

2025年前俄羅斯汽車產業發展方針確立

Strategy for development of the automotive industry until 2025 is approved by the Order of the Russian Federation Government on April 28, 2018 (hereinafter - the Strategy). The Strategy is a continuation of the Strategy for development of the automotive industry for the period to 2020 (approved by the Order of the Ministry of Industry and Trade of the Russian Federation in 2010) and contains new actual priorities for the industry development in the context of the changed parameters of macroeconomic development and the development trends of the automotive market. The strategy identifies the following objectives:

- satisfaction of 80-90% of domestic demand for the modern automotive equipment by the Russian manufacturers;
- growth in exports of automotive equipment and components;
- upbuilding technological competencies of national manufacturers of automotive equipment and components by deepening the localization of manufactured cars to 70-85%:
- bringing to the market the products with fundamentally new properties in the field of electric driving, autonomous driving, connected vehicles, gas engine equipment, incentives for such equipment, the organization of after-sales service and the creation of the necessary engineering and transport infrastructure.

As one of the key mechanisms of upbuilding productive and scientific potential, it is envisaged the creation of technological consortiums.

At the 3rd International Forum of Engine Building the Details Made of New Alloys were Presented

第三屆國際引擎打造論壇探討採用新型合金等議題

"All-Russian Institute of Light Alloys" and "United Engine Building

Corporation" presented their joint developments at the 3rd International Forum of Engine Building, which was held in Moscow at VDNH from April 4 till 6, 2018. At the stand of "VILS" the visitors could see the workpieces for the advanced aviation and marine gas turbine engines. The semimanufactures were made of the series granulated heat-resistant EP741NP alloy and new granulated alloys of the "VVP" class. This was reported by the press service of JSC "RT-Project Technologies".

At the moment, "VILS" conducts research work on the order of "ODK". The work is aimed at the creation of a scientific and technical reserve for the production of details of the modern aviation turbojet engines and the development of new high-temperature granulated nickel alloys. "In addition, the technology for the production of fasteners with an increased level of performance for the new engine "PD-14" will be developed", - it is said in the report.





Confirmed Increase in Brazilian Automotive Production and Licensing 巴西汽車生產及掛牌數上升

In a press release, the Brazilian national automakers association (Anfavea) reported that the domestic automotive production reached 431.6 thousand units of vehicles in Feb./Mar. 2018, which is 15% up from the 375.1 thousand units in the same corresponding period of 2017. At the same time, 338.2 thousand units of vehicles were licensed in the domestic market, which means an increase of 19.5%



from the record of 282.9 thousand units in February/March last year.

The export showed a growth of 7.2% as well: 112.7 thousand units against 105.1 thousand units in 2017. In the production of trucks and buses, it ended with 14.5 thousand units of trucks in the two months, 47.8% higher than the 9.8 thousand units produced in the same corresponding period last year.

BRAZILIAN AUTOMOTIVE	Passengers cars, light commercial vehicles, trucks and buses (by thousand units during February/March)		
MARKET 2018	2017	2018	Variation
Production	375.1	431.6	15,00%
Domestic licensing	282.9	338.2	19.5%
Export	105,1	112.7	7,20%

Brazilian Fastener Export Shows Growth in Feb./ Mar. 2018

2018年二三月巴西扣件出口呈現成長

According to the Ministry of Industry, Foreign Trade and Services (MDIC) of Brazil, Brazilian companies exported US\$ 18.29 million worth of fasteners in Feb./Mar. 2018, 41.5% up

Brazilian Fastener Market (Febr./Mar. 2018)	Value	Quantity	Fob price average
Export	US\$ 18.29 million	4.064,45 tons	US\$ 4.5 p/kg
Import	US\$ 112.47 million	20.880,15 tons	US\$ 5.386 p/kg

from the total value recorded in the same corresponding period of 2017. 4,064.45 tons (an 89.2% increase) of bolts, screws, nuts and similar articles were sold to other countries. The average FOB price was US\$ 4.50 per KG, a fall of 25.2%.

In terms of import, the result was superior, which shows US\$ 112.47 million worth of products were bought (an increase of 11.1%). Among these products, fasteners represented more than 20.8 thousand tons, an increase of 20.8%. The FOB price was US\$ 5.38 per KG, dropping by 8.2%.

Brazilian Fastener Import Grows 9.2% in 2018

2018年巴西扣件進口成長9.2%

The effects caused by a strike of the transport sector occurred last May are, of course, not considered. However, the activities in Brazil continue oscillating, but on a growing trend. Whoever disagrees, consult our source, the Ministry of Industry, Foreign Trade and Services (MDIC). As it produces more, the country consumes more, which expands activities for all, including the consumption of fasteners, whether produced domestically or imported. The monthly average of fasteners imported in 2018 exceeds

Fastener import: monthly average	In value	In ton
2017	US\$ 49.63 million	9,349.36 tons
2018	US\$ 56.57 million	10,212.28 tons

the figure recorded in 2017 by 9.2% in ton, and the same thing happened in monetary value, with a 13.98% increase of purchases in US dollars. Dividing

the total registered by the MDIC, in 2017 a little over US\$ 595.55 million (US \$ 49.6 million/month) was destined for this importation segment, corresponding to 112,192 tons (9,349 tons/month). From January to May 2018, the MDIC recorded US\$ 282.85 million (US\$ 56.57 million/month), corresponding to 51,061.192 tons (10,212 tons/month).

The upcoming audits will show how much the transport strike has rocked the market. Historically, the second half of a year in Brazilian economy is often better than the first half, and if the scenario keeps so, it will be so good, especially if we compare the clouded and recent times.

Update for Taiwan's Fastener Export in Q1 2018

台灣2018第1季扣件出口統計快報

According to the statistics of Taiwan Customs, in Q1 2018 the main product categories in Taiwan's fastener export were: Other Screws & Bolts (7318159000), Nuts (7318160000), Selftapping Screws (7318140000), Wood Screws (7318120000) and Iron Nails (7317009010). Except for the category of iron nails showing a significant decline of 23.80%, other top 4 categories all showed a growth between 7-9%. The total export volume of Other Screws & Bolts (7318159000) and Nuts (7318160000) represented more than 70% of the total export volume (about 0.4 million tons) of Taiwanese fastener industry to the world in Q1 2018.

If viewed by export destination, in Q1 2018 the top 5 destinations for Taiwan's fastener export were: USA, Germany, the Netherlands, Japan and Canada. More than 40% (about 0.16 million tons) of Taiwanese fasteners were exported to USA in the period.



Taiwan Fastener Export to USA Over 106 Thousand Tons in the First 2 Months of 2018

2018前兩個月台灣螺絲銷美餘10.6萬噸

Taiwan fastener industry exported 46 thousand tons of screws to USA in the first 2 months of 2018. Although the volume is less than the volume in January 2018, it still shows growth if compared to the same corresponding period of 2017. Plus, the avg. price for Taiwan's screw export to USA increased by 13.28% to USD2.743/KG (compared to 2017). The total volume of screws Taiwan exported



to USA in the first 2 months of 2018 reached 106 thousand tons. The volume and the price both show significant growth. On the other hand, with U.S. economic growth being continuously stable and USA being the biggest screw export destination for Taiwan, it is expected that Taiwan will continue to perform really well in its screw export to the whole world this year.

Avg. Price of Taiwan's Fastener Export to Europe in Q1 2018 Increases by 17.37% YoY

2018第一季台灣螺絲銷歐價格較去年 同期上升17.37%

According to the statistics of Taiwan Customs for fasteners in Q1 2018, this March Taiwan exported nearly 50,000 tons of fasteners to Europe, which shows

a two-digit growth if compared to the same corresponding period last year or this Feb. If reviewed by the whole quarter, Taiwan exported 137,866 tons of fasteners to Europe in total, up 5% from the same corresponding period last year. The average export price per KG reached 2.8 USD, up 17.37% from the same corresponding period in 2017.



Taiwan's Fastener Export to Iran in Q1 2018 Slumps

2018第一季台灣螺絲銷伊朗大幅下滑

According to Taiwan Customs' import/export statistics, from 2014 to 2017, Taiwan exported roughly 10,000 tons of fasteners to Iran per year (It exported 9,014 tons in 2014 with the avg. price of 2.057 USD per KG; it exported 10,264 tons of fasteners in 2015 with the avg. price of 1.95 USD per KG; it exported 10,087 tons of fasteners in 2016 with the avg. price of 1.813 USD per KG; it exported 10,013 tons of fasteners in

2017 with the avg. price of 2.034 USD per KG). However, in Q1 2018, Taiwan only exported 1,663 tons of fasteners (avg. price:2.18 USD/KG) to Iran, a significant slump of 73.4% from last year's corresponding period. Plus, after USA withdraws from the nuclear agreement with Iran, the economy of Iran may be negatively influenced. As a result, many Taiwanese companies do not think that they could reach the same level of 10,000 tons this year in the export to Iran and the export to Iran is not promising in the short term.

Kamil Başaran has Become the CEO of Norm Holding

Kamil Başaran先生接任土耳其Norm集團新任最高執行長

Norm Holding, the leader of fasteners market of Turkey with over two thousand employees and annual production capacity of approximately 94 thousand tons, has assigned Kamil Başaran, one of the experienced directors, to the CEO position.

Fatih Uysal, the Chairman of the Board of Directors of Norm Holding said, "Kamil Başaran has been in the automotive sector for most of his professional life. We, as a group of companies working with automotive giants of the Word, wish to extend our market more in this sector. We have every confidence in Mr. Başaran in carrying Norm Holding to future targets."





India Continues to Show Strong Demand for Taiwanese Screw Forming Machines 印度對台螺絲成型機台採購需求續強

According to relevant statistics, in Jan. and Feb. of 2018 Taiwanese machine tools were mainly exported to Indian customers (total export value to India: USD 26 million; YoY ratio: up to 98%), making India the biggest purchasing country of Taiwanese machine tools. The 2nd biggest purchasing country of Taiwanese machine tools was Italy (total export value to Italy: USD 17 million; YoY ratio: 45.1%). Some machinery suppliers said that the market for Taiwanese small screw forming machines in China has been nearly saturated and the amount China purchased from Taiwan is only half the amount India purchased from Taiwan. As a result, it is expected that India may become a dark horse in the fastener industry in a couple of years.



EFC Accelerates Growth Into Mexico

美國EFC加速成長布局墨西哥

EFC International, a leading supplier of engineered fasteners, with their corporate office in St. Louis, Missouri, continues to expand their global presence with the establishment of their office and warehouse in Mexico, EFC Global, S de RL de CV.

"Our recently established legal entity and operations in Mexico, including a warehouse in Querétaro, outside sales engineers, customer service and support staff in Mexico, enables EFC to enhance our service level in the region. We're able to respond more quickly and hold inventory in closer proximity to our customer base. We also are positioned to act as a key channel partner into Mexico for our strategic partner suppliers. With our locations in the United States, Mexico, Germany, China and South Korea, EFC truly has become a global leader in the supply of engineered fasteners and components. EFC enables multi-national OEM customers and suppliers to utilize our services on multiple continents, taking advantage of our global network to mitigate supply chain risks and improve local service," said Mary Becker, Vice President of North American Sales.

Expanding its global footprint and investing in key strategic global markets, EFC ensures both supplier and customer needs are met. EFC's robust international growth is a tribute to the EFC team and to the strong international reputation of the world-class manufacturers who they have partnered with. These partnerships ensure customers receive the high-quality service they've come to expect from EFC – anywhere in the world.





Bossard China Signed a Research Cooperation agreement with Shanghai University of Engineering Science

Bossard中國分公司與上海工程技術大學簽署研究 合作協定

Bossard China signed a research cooperation agreement with Shanghai University of Engineering Science. Bossard China will provide "Scholarship" & internships, jobs for the students and also will support students accomplish their graduation project and other work.

Prexy Cai introduced the foundation of cooperation to the teacher and student delegates, she said the professional skill of Bossard on the engineering application is a very important support for mechanical engineering department.

Secretary Mao's speech affirmed the strategic significance of the cooperation. Shanghai University of Engineering Science and Bossard signed a strategic framework agreement which covers education base "industry-university-institute" cooperation, off-campus practice base and scholarship. This will make a solid foundation for product and technology development, student education and training as well as enterprise employment.

Bossard China looks forward to working with students and professors of Shanghai University of Engineering Science.

Best Lightweight Solutions Innovation Award for Bossard China

柏中緊固件(上海)獲頒最佳輕量化緊固方案創新獎

Bossard China was honored with the "Best Lightweight Solutions Innovation Award" at the 8th China International New Energy Vehicle Forum 2018.

May 17-18, 2018. Nearly 800 professionals including vehicle manufactures, electric control companies, battery manufacturers, component suppliers, core technology providers and government agencies from around the world attended the forum, discussed the challenges, opportunities and countermeasures in depth and constructively.

Since the weight of the car has a direct impact on its fuel efficiency, the automotive industry seeks advanced materials and technology to reduce vehicle weight. However, traditional fastening solutions are difficult to use with new materials. Bossard's regional engineering & business development manager spoke about lightweight fastening solutions bigHead® Lean Bonding & ecosyn BCT®. These solutions won "Best Lightweight Solutions Innovation Award."

Vossloh Wins €30 Million Order for Rail Fastening Systems in China 德國Vossloh獲中國3,000萬歐元鐵道扣件訂單



With its Group company Vossloh Fastening Systems China Co. Ltd., Kunshan, Vossloh has won another tender

for the supply of rail fastening systems in China. The order amounts to a converted volume of about \notin 30 million, underscoring the continued strong market position of Vossloh with rail fastening systems in the high-speed segment in the focus market China.

A sub-section of the route currently under construction from Zhengzhou, in eastern China, to Wanzhou, a district of the megacity Chongqing, located southwest of Zhengzhou, is to be equipped. Deliveries for the so called "Zheng Wan Chongqing section" project are primarily scheduled for 2019.

Vossloh has been present in China since 2006. Kunshan-based Vossloh Fastening Systems China Co. Ltd. is one of the locally leading providers of rail fastening systems for use on high-speed lines. In China, the world's largest and most modern rail network is located. Since the end of 2017, more than 23,000 kilometers of track for high-speed trains have been in operation. Additional high-speed projects are under construction and should expand the rail network to 38,000 kilometers by 2025.

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Sundram Fasteners (Zhejiang) Limited Inaugurates a New Forging Plant in Haiyan

桑德蘭緊固件(浙江)海鹽新鑄造廠舉行開業典禮

On April 26th, Sundram Fasteners (Zhejiang) Limited inaugurated its new forging plant located in Haiyan Province of China. Important officials and the management from the local government, The Consulate General of India in Shanghai, and Sundram Fasteners all made their presence in the grand ceremony.

The construction of this forging plant was started in March 2017 and was completed in April 2018. The total investment value was around USD 13 million and the manufacturing site spans the area of 19,600 sq m in total. The annual capacity of various forged parts is planned to be 20,000 tons.

After the inauguration, the management from Sundram Fasteners also led all attending guests to visit the new forging plant.



Japanese Fastener & Hardware Trader Eto Opens Offices in China and Vietnam

日本扣件五金貿易商衛藤在中國與越南開設事務所

To open up its world market, Eto Co., Ltd. set up bases in Dongguan City of China and Hanoi City of Vietnam that have started operation since April. The Guangdong office is titled Eto (Shanghai) International Trading Co., Ltd. Dongguan Officee. The Hanoi office is titled "The Representative Office of Siam Eto Co., Ltd. in Hanoi City".

BSW Exports to 118 Countries

白俄羅斯BSW出口突破118國

In the four months of 2018, BSW exported \$384 million worth of metal products, which is 36 percent more than the value recorded in the similar period of 2017. In total, it has shipped more than 596 thousand tons of metal products.

Since the beginning of this year, BSW has not only increased its export, but also has expanded its presence in the steel world market. Its wire rod has been shipped to the 118th country – Guatemala, absolutely new for BSW export. With new kinds of metal products for specified period BSW also has entered the markets of Denmark and Mali.

The markets of Europe, the USA and the CIS all shared significant values in BSW export during the 1st quarter of 2018.

3M Company Begins Retail Sales of Industrial Adhesive Tape in Russia 3M公司開始在俄羅斯販售工業用黏著膠帶

3MTM VHBTM tape has appeared in the stores of "VseInstrumenti.ru" network. Previously, the industrial adhesive tapes of 3M were available mainly for wholesale orders of industrial enterprises, now they can be purchased at retail for the needs of small businesses and household

needs. "Now 3M products, which have proved themselves at the world market, will become more accessible to the Russian consumers. We are confident that they will be in demand among buyers", - Gleb Trofimenko, director of the 3M industry business group, commented. The trademark VHB TM was registered in the Russian Federation in 2017. VHB tapes are widely used in Russia.



More Than 100 Thousand fischer Anchors were Used at the Construction of a Stadium in St. Petersburg 聖彼得堡足球場建設使用超過10萬支fischer錨栓

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Markets News

Football stadium "Saint Petersburg" was designed by the Japanese architect Kisho Kurokawa. The arena is equipped with a sliding roof with a diameter of 286 meters and a retractible field weighing 8,400 tons. Stability and reliability of the innovative construction worth 43 billion rubles are provided by a great amount of steel and chemical anchors of fischer.

The injection molding fischer FIS EM and FBN II anchor bolts are used to fasten the metal structures of the sliding roof and reinforce the grillages. " The choice in favor of the fischer systems for fixing the stadium structures was made primarily due to the proven technical efficiency of the fischer systems and their ease of installation. At the moment Arena is the most innovative stadium in Russia, therefore it is especially important the fasteners to guarantee the high reliability of the facilities", - Andrey Egorov, General Director of "Fisher Fixing Systems Rus" comments.

BSW Has Shipped Million Tons of Goods Made in the Hardware Workshop BSW五金廠出貨量達百萬噸

The workshop No.2 of Belarus Steel Works shipped for export the first million tons of metal rolling.

Now BSW in workshop No.2 is producing over 50 types of bars, 27 - types of wire-rod, 5 types of reinforcing. More than 75 % of metal rolling is going for the export to over 30 countries. Among customers of these goods are companies, which produce accessories for leading automobile concerns.





SHIFT NEXT 100

次の100年へ、大きく動き出します



Steelworks Unit Reactivated at Mogi das Cruzes After Recession

因應市場回溫 位於Mogi das Cruzes 的鋼品工廠將再度重啟



The Gerdau Group announced the unit in Mogi das Cruzes, a town located in the metropolitan region of São Paulo, has been

in operation since earlier this March, which also immediately opens 110 direct new jobs. Driven by the recovery of the local automotive production, the steelworks has an installed capacity to make 375 thousand tons of special steels per year. Also, Gerdau has two other special steel mills: one in Pindamonhangaba town (SP state) and another in Charqueadas town (Rio Grande do Sul state), totaling an annual installed capacity of 1.4 million tons, with full conditions to meet the expanding demand of the automotive industry.

In 2015, there were around 350 direct employees in this unit, in which around 250 were laid off later and the furnaces were turned off, keeping just 100 employees to work in other divisions, such as maintenance and commercial operations. However, in the end of 2017, the company scheduled the restart under the trust on a new economic phase in Brazil.

Ultimately, not just in Gerdau, several industries and automakers have also begun to hire new employees as a routine. In the second week of March 2018, the industrial plant of Mercedes-Benz in São Bernardo do Campo city - SP, announced the opening of 400 jobs to assembly lines for trucks and buses.

VW Announces Recall Due to Improper Fastening of Ball Joint 因部件不恰當接合 福斯汽車巴西分 公司宣布召回特定車款檢修



Earlier this March, the subsidiary of Volkswagen in Brazil announced a recall

involving the compact models Gol, Voyage and Up, year/model 2018, to a maintenance service due to improper attachments on front suspensions. The service will take about 30 minutes. According to the automaker, there is a possibility of ball joint loosening and evident risk of accidents. However, the recall this time involves only 15 units.

Risk of Wheel Bolts Loosening Results in Recall of Ford Fusion Imported to Brazil



輪胎螺栓潛在鬆脫風險導致進口至 巴西的福特Fusion車款進行召回

More than 32 thousand units of Ford Fusion "made in Mexico" during 2014-

2018 sold to Brazil, are involved inside the same big recall that hit around 1.4 million from this model and another similar model, the Lincoln MKZ, in USA.

According to the Automaker, the technical reason is the possibility to cause a loss of fastening force of the bolt that keeps the steering wheel to the steering column of the vehicle securely. In this situation, the driver will initially notice a vertical oscillation of the steering wheel and, in case of prolonged use of the vehicle; the steering column steering wheel could detach. The repair and replacement of the bolt is fast and will take just 20 minutes.

Chin Well to Make Vietnam Focal Point for Fastener Ops 馬來西亞晉緯控股公司將越南定為扣件事業發展的重點

Vietnam will play a key role in Chin Well's plans to grow its fastener business. Group executive director Tsai Chia-ling said that Vietnam is where the group would focus its resources as the country offered cheap labour who could be trained cost effectively. Tsai said the group is now planning for its Vietnam operations to produce more do-it-yourself (DIY) and other types of



fasteners. "In July, the Vietnam facility will start to manufacture a new range of fasteners for South-East Asian market. "These new fasteners will be used to connect reinforced concrete bars used in high-rise buildings," she said.

According to Tsai, the group will also raise the production volume of DIY fasteners at its Vietnam plant in the third quarter. She said it is talking to a big DIY customer in the United States who could take up about 15% of the group's annual output of fasteners in Vietnam. "We have plans to tap into the European market with our DIY fasteners. Currently, the Vietnam facility produces about 60,000 tonnes of fasteners per year. "We foresee the operations in Vietnam to contribute about 50% to Chin Well revenue in two years, compared to 30%-40% now," she added.

Moving on, the group expects to perform better in the financial year ending June 30, 2018 compared with the previous year. "This is due to the higher prices of hot-rolled coil, which hovers between US\$650 and US\$750 per tonne now, compared to US\$500-\$600 per tonne a year ago," she said. The group is forecasting an output of 140,000 tonnes for the financial year ending June 30, 2018.



Japanese OTC Enhances Coating Service at Thailand Plant 日本OTC公司強化泰國製造廠的塗佈加工服務

OKUYAMA Technical Center Co., Ltd has a manufacturing plant in Thailand that is highly rated within the industry for its coating that exerts excellent antiloosening and sealing performance. In light of this, the Thailand plant will expand the applicantion range of its coating service in 2019 by adding a coating line for products of small diameters to increase productivity. After the addition, there will be two coating lines in total to provide better contracted coating service.

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