PowerTALK



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Worldwide News & Analysis

Top Stories

Global Economies Power Ahead

Truck Production Index (TPI)
Declines

Data Point: 2018 TLB Production

Expanded Marine Database Available

Hydrogen Fuel Cell Primer

Florida Law Boosts Gen-Set Sales

European Business Climate Improves

Korea GM Faces Bankruptcy

US-China Trade War Heats Up

China Welcomes Tesla

Russia Truck Market Grows

About Us

Power Systems Research (PSR) is a world leader in providing power equipment information, whether it's pure data, analysis, forecasting or specific business intelligence. This product information ranges from IC engines to battery-electric and hybrid powertrain technologies. PSR has been providing world class business and market intelligence to industry leaders for more than 40 years. How can we help you? For details, call +1 651.905.8400 or email info@powersys.com. www.powersys.com

Power Systems Research: Data....Forecasts...Strategies

Data Point

By Carol Turner, Senior Analyst, Global Operations

7,500

This is the estimate by Power Systems Research of the number of Tractor/Loader/Backhoes (TLB) that will be produced in North America (US and Mexico) in 2018. This compares with 6,600 units in 2017 and 7,300 units in 2016. A TBL is a full-size combination machine that combines three pieces of construction equipment into one unit: tractor, loader and backhoe. The units are designed to handle multiple jobs in construction and agriculture.

Industry leaders in NA production of TLBs are John Deere (59%) and Case New Holland (37%).

From 2016 to 2017, production of Tractor/Loader/Backhoes in North America decreased 8.5%. Production is expected to rebound nearly 12.5% in 2018 over 2017. The 2017 decline was caused by weak demand for TLBs due to cost and the effectiveness and ROI of mini-excavators compared to backhoe loaders. The 2017 drop also was affected by foreign currency exchange rate issues.

The recent increase is attributed to new models that increase productivity for professionals on the job site. Overall, TLBs are still popular machines for construction use. We expect production to increase by 8% over the next five years. **PSR**





Commercial vehicle demand in 2018, is expected to be particularly strong in North America, Brazil, Russia and India while demand is expected to decline sharply in China after very strong sales in 2017.

Global Truck Production Declines 6.1%

By Chris Fisher, PSR Senior Commercial Vehicle Analyst. Jim Downey, PSR Vice President - Global Data Products.



The Power Systems Research Truck Production Index (PSR-TPI) decreased from 114 to 107, or 6.1%, for the three-month period ended March 31, 2018, from Q4 2017. The year-over-year (Q1 2017 to Q1 2018) loss for the PSR-TPI was one point (108 to 107), or .93%.

Jim Downey

The PSR-TPI measures truck production globally and across six regions: North America, China, Europe, South America, Japan & Korea and Emerging Markets.



This data comes from **CV Link™**, the proprietary database maintained by Power Systems Research.

Read and Download The Entire Report with region-by-region analysis and charts.

Chris Fisher

Global Index: Commercial vehicle demand in 2018, is expected to be particularly strong in North America, Brazil, Russia and

Power Systems Research



India while demand is expected to decline sharply in China after very strong sales in 2017. With the exception of China and Japan/Korea, medium and heavy commercial vehicle demand in the other regions is trending higher this year.

North America: In 2018, medium and heavy commercial truck production is expected to increase by 13.8% over last year, driven by extremely strong class 8 demand combined with continued strength in the medium duty (class 4-7) segment. Production levels for class 8 trucks are expected to exceed 300,000 trucks this year as a result of a very strong economy and high freight demand. Demand in the medium duty segment will be driven in part by continued strength in the vocational segment.

The next update of the Power Systems Research TPI will be in July 2018 and will reflect changes in the TPI during Q2 2018. **PSR**

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Expanded MarineLink™ Database Available

The expanded and updated MarineLink™ proprietary database of global boat builders developed by Power Systems Research is ready for distribution.

MarineLink™ now contains data on more than 400 boat builders and marine OEMs in Europe, Eastern Europe, Russia, and North America. It covers the power range from smallest saildrive at 10 kW to super yachts up to 10 MW.

Launched in 1990, MarineLink™ originally included information on all types of European pleasure boats powered with an inboard, sterndrive or sail drive diesel engine (motor boats and yachts, sports cruisers, sport fishing boats, sailing yachts, trawlers, canal boats, super yachts, etc.).

Gasoline engines have now been added, but boats with outboard engines are not included.

New information in the updated edition of MarineLlnk[™] this year includes about 100 North American marine engine OEMs and boat builders manufacturing recreational boats with an inboard, stern drive or sailboat engine, using gasoline or diesel fuel.

MarineLInk[™] is a powerful tool for boat and marine pleasure engine manufacturers, boat builders, component manufacturers and those tracking trends in the marine industry. For more information, email us at **info@powersys.com**, call at +1.651.905.8400, or **read more about MarineLink[™]** here. **PSR**

Alternative Power

Primer on Hydrogen Fuel Cells

By Dennis Huibregtse, PSR Chief Executive Officer



Hydrogen-electric trucks still have a fully electric powertrain—meaning there's no diesel or gasoline engine. But rather than being powered solely by electric batteries, the electric motor is powered by a hydrogen fuel cell, which allows the truck to use a smaller, lighter battery.

Source: Fleet Equipment Read The Article

PSR Analysis: Discussions related to alternative powertrain developments for medium and heavy commercial vehicles can be heard on a daily basis lately. Two technologies that dominate much of that discussion—battery-electric and hydrogen fuel cells—both employ electric-drive systems but differ quite significantly.





Alternative Power Continued from page 3

The battery-electric system is the basis for Tesla vehicles, both cars and commercial trucks, along with those from several other OEMs. Conceptually, it is relatively simple: the vehicle is equipped with one or more electric motors to deliver power to the drive wheels; electrical power is supplied to the motor(s) from an onboard battery pack, which is recharged while connected to an electric power source, usually while the vehicle is stationary (i.e. not operating).

Hydrogen fuel-cell drive systems are probably not as simplistic and certainly not as widely understood. They, too, employ electric traction motors, but the electricity to drive those motors is not coming solely from onboard battery packs. This article provides a good primer on fuel-cell powertrains. **PSR**

Customer Perception: A Major Challenge for Automakers

By John Krzesicki, PSR Business Development Manager

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John

Michael Martinez, in his *Automotive News* article entitled "Electrification, autonomy won't gain widespread adoption for decades, CAR study," says that although most major automakers are pouring billions into electrification and autonomy, the Center for Automotive Research predicts investments could slow in the coming years and that such vehicles will represent only a fraction of sales a decade from now. **Read The Article**

Krzesicki In a presentation to automotive media, the CAR research group predicts Level 4/5 self-driving vehicles will account for less than 4 percent of new-vehicle sales by 2030, although that number will increase steadily to about 55 percent by 2040. Below are the defined levels of Automation:

- Level 0: No Automation.
- Level 1: One degree of freedom is controlled, e.g., longitudinal Adaptive Cruise Control.
- Level 2: Readiness for hand-off requires constant vigilance from driver that may not be sustainable
- Level 3: Difficult for vehicle to ensure driver has sufficient warning to re-engage in time for hand-off
- Level 4/5: Human is always a passenger; the only distinction between 4 and 5 is operational domain (i.e. geofenced vs. unrestricted). PSR

Like what you see?





With the increase of economic activities, we expect to continue to see some rapid shifts in political situations and money capital between industries and markets going forward.

Global/North America Report

By Yosyf Sheremeta, PSR Director of Product Management and Customer Experience



Yosyf Sheremeta

Editor's Note: This global economic forecast prepared by Yosyf Sheremeta, PSR Director of Product Management and Customer Experience, is a brief summary of the five-year global forecast by region and by industry segment that is prepared quarterly by Power Systems Research for its clients. The 50+ page quarterly Update Bulletins are prepared exclusively for subscribers of PSR databases. For information on subscribing to PSR databases and receiving the Update Bulletins, contact us at +1 651.905.8400, or info@powersys.com. PSR

Global Economies Power Ahead

SUMMARY. This year started off with strong and solid economic growth that has carried over from 2017. Most global markets have been enjoying a positive outlook and an increasing level of business activities. PSR estimates that such strong conditions will last for at least 12 to 18 months.

European markets, and North America in particular, are enjoying low unemployment and continue to have very low interest rates and low inflation. However, several risk factors to this continued growth exist, including the geo-political environment, possible higher interest rates and inflation, as well as possible economic trade disagreements and policy tensions. The Fed hiked its federal funds rate by a quarter point to 1.5%-1.75% on March 20, 2018. More increases are expected this year.

With the increase of economic activities, we expect to continue to see some rapid shifts in political situations and money capital between industries and markets going forward.

This change certainly has benefited the oil and gas industries, infrastructure and financial sectors of the economy so far; however, this might not continue. The financial and stock markets, after reaching record highs in January, turned into a short-term correction in early February, which was very much needed and somewhat overdue. The correction was short-lived, and most markets already have recovered and are nicely set for new growth. The financial markets certainly will be volatile during 2018.

Overall, in the very near term, the global economic drivers will remain stable; oil prices regained ground in H2 2017 and continued to climb during Q1 2018, reaching US\$ 66 per barrel. Employment levels are at record highs, and interest rates, while climbing, remain near record lows.

As we look to the remainder of 2018, we are standing behind our previous forecast. We are not making significant changes to our previous projections, and we remain optimistic on overall global performance for the rest of the year.





Global/North America Report

Continued from page 5

2017 showed continued positive trends on a global basis; we also have seen the start of a turnaround in Brazil, which we expect will continue to accelerate in 2018. However, it will take some time to get to prerecession levels in that region. At the same time, positive news from China and India, as well as the developed markets of North America and Europe, helped drive growth in the global economy.

Most markets are growing at modest rates, and we are in the middle up-trend of the global growth cycle in the developed economies, such as Europe, and in developing markets, such as India.

In North America, while the general economy is doing very well, we believe the overall consumer markets are rapidly approaching their peaks, and we expect to see some slight decline in production activities as final numbers are reported at the end of 2017 for some consumer-oriented segments. Still very low interest rates and low unemployment help support this trend.

Nevertheless, we have already started to see warning signs in some segments; a few production assembly plants for passenger cars and minivan/SUVs were idled for short periods during the first part of 2017, mainly to align inventories and current demand levels, as the trends from previous years peaked and began losing steam. Such trends may continue in 2018. However, personal transportation markets still show very healthy levels of demand.

Last year (2017), the U.S. auto industry suffered its first annual sales decline (dropping 1.8%) since the financial crisis nine years ago, but a streak of strong profits is expected to overshadow a slowdown in dealership traffic. On the other hand, the Agricultural and Construction segments saw no growth in previous years prior to 2017; however, year 2017 was quite promising, especially for Construction, and small Agricultural equipment, which gives optimism for the near future and we expect this trend to carry over into 2018-2019.

Other regions such as Brazil, China and Russia, due to various factors, have already approached the bottom of their downturn cycles, and have started to see improvements in 2017 which should further improve and continue in 2018-2019. Key countries in Central America and South America will be busy in 2018 with elections, which could bring more uncertainty and could postpone recovery.

We have seen a slowdown in demand from emerging markets for equipment and products made in the well-developed regions of North America and Europe. However, the solid demand from domestic markets compensated for losses from export activities for these developed countries.

China continues to experience a slowdown in some segments, such as Agricultural, Marine, and Power Generation, but the growth estimates should be in line with our earlier projections from Q4 2017. At the same time, Construction, Industrial and the Medium-Heavy Vehicles segment reported solid performance in 2017, and we expect that trend to continue in 2018 and 2019.

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Global/North America Report

Continued from page 6

With both domestic sales and exports increasing, truck production grew 55% in Q1 2018 over Q1 2017. According to the association of the automakers (Anfavea) from January to March more than 24,400 units were produced.

Florida Mandates Backup Gen-Set Power

New Florida legislation mandates that nursing home and assisted living facilities install gen-sets capable of maintaining facility temperatures at 81F or lower for at least four days. The legislation is a response to the deaths of 12 nursing home residents after Hurricane Irma. Florida's 685 nursing homes and 3,089 assisted living facilities must be in compliance by the June 1 start of hurricane season. State agencies can grant an extension until Jan. 1, 2019, for facilities that would face delays in installing equipment or need zoning or other regulatory approval.

Source: Daily Journal Read The Article

PSR Analysis: Through Power System Research's proprietary PowerTracker™ survey series, we heard from numerous gen-set dealers during Q3 2017 and Q4 2017 that their sales were up significantly (20% growth in Q3 2017) and their inventories were being depleted as they met the demand from areas hit by hurricanes. This new legislation should provide a further boost to gen-set sales in Florida during 2018. —*TW* PSR

Brazil/South America Report

By Fabio Ferraresi, PSR Director, Business Development, South America

Truck production in Brazil grows 55% in Q1 2018



Fabio Ferraresi

With both domestic sales and exports increasing, truck production grew 55% in Q1 2018 over Q1 2017. According to the association of the automakers (Anfavea) from January to March more than 24,400 units were produced. In March, production lines increased their volumes by 28% over February, reaching 9,900 units. When compared to March 2017, this volume was 67% higher. However, the plant idleness still is above 70%.

Source: Automotive Business Read The Article

PSR Analysis: Improved confidence in the economy and better financing conditions are helping local sales (OEMs are forecasting a of 30% increase), and the increase in production also is driven by exports that should grow 25% in 2018 over 2017, which was a positive year for exports.



♠ Click Here To Go To Page 1

Brazil/South America Report Continued from page 7



Deere Produces Skid Steers for Export

John Deere said it will produce three skid steer models that have never been produced outside the US. The Brazil Plant will build a platform to serve 80 countries, such as Russia and Eastern European, the Americas and Southeast Asia countries.

Source: Istoé Dinheiro Read The Article

PSR Analysis: Brazilian idle capacity, currency depreciation and a positive track record in exports of CE in 2017 gives OEMs confidence to build export platforms in Brazil. John Deere has an interesting position in the market and excess manufacturing capacity, and it will be in a better position for the upcoming growth cycle in CE that should come in Brazil after political/public investment crisis, given the pent up demand in infrastructure and housing.

Mercedes-Benz Adds Workers To Fill Production Needs

The recovery of the automotive sector that started last year is continuing strongly in 2018. This led to the hiring of 700 workers by Mercedes-Benz to produce trucks and buses, reaching a total of 9,800 employees.

Source: Valor Econômico Read The Article

PSR Analysis: While announcing US\$ 1 Billion of investment on Technology 4.0 to increase efficiency, Mercedes trucks in São Bernardo do Campo (SP) had to hire heavily to fill new production shifts. The launch of the new line that generated a 15% increase in efficiency and labor will allow Mercedes and other OEMs to fill capacity. On the other hand, the supply chain especially for Medium/Heavy Vehicles is already constrained, and we see some Tier 2 and Tier 3 suppliers slowing production at some OEMs. **PSR**

Europe Report

By Emiliano Marzoli, PSR Business Development Manager-Europe Christopher Bamforth, European Market Analyst, contributed to this report

Volvo Launches Rigid Haul Trucks

Volvo Construction Equipment (Volvo CE) has officially launched its new rigid haul trucks at the company's Motherwell facility in Scotland. The new machines consist of the 45-ton R45D, 60-ton R60D, 72-ton R70D and the flagship 95-ton R100E. Improvements include greater visibility and safety systems. The star of





Europe ReportContinued from page 8

The European
General Business
Climate Index of
the farm machinery
sector continues to
improve; the current
Index is at its highest
since 2012.

the show was the R100E, a completely new rigid hauler that combines a wealth of market and customer knowledge with new technologies.



Emiliano Marzoli

PSR Analysis: After several years of sluggish performances, the mining sector is coming back to positive performances. Off-Road trucks decreased -3% CAGR from 2013 to 2017, while Rigid Haul Trucks suffered even more, due to low commodities prices and consolidation in the mining industry. However, things started to turn around in 2017, and PSR forecast demand for Rigid Haul Trucks to continue growing in the medium term. Volvo's new products come at a strategic

moment for the industry. With mines re-opening and fleets very old, needed replacement units will help sales of the new products. **-Emiliano Marzoli**

European Business Climate Continues To Improve

The European General Business Climate Index of the farm machinery sector continues to improve; the current Index is at its highest since 2012. The Index is prepared by CEMA, the association representing the agricultural machinery industry in Europe. The Index is based on past and current order intakes, sales and orders from outside the EU which are "gaining additional momentum." **Read The Article**

PSR Analysis: The growth of outsourced products is very promising; a few years ago, the market was slow, and most OEMs were focusing outside of Europe to ensure they would survive. Now, we are seeing that these strategies have been effective on top of the European economic climate recovering and showing very strong positive trends. These trends are also highlighted in this report as most of the respondents are expecting sales increases in the next six months.

Currently, arable equipment appears to be healthiest product segment. This has been the case for the last few years, as it was one of the only products that was growing during the downturn. There is some cautious concern when it comes to this product because it has been one of the strongest products in the past and now there are some worsened harvesting expectations in some regions in Europe.

On the other hand, the livestock related machinery has not been performing very well; in fact, it has been considered "the worst current business situation." However, livestock equipment has the best future outlook, and we will probably be seeing a shift in the future from arable machinery to livestock machinery. *-Christopher Bamforth PSR*





Far East/Southeast Asia Report:

By Akihiro Komuro, PSR Research Analyst, Far East and Southeast Asia

Far East: Japan

Isuzu, Hino Develop Automatic Driving Technologies



Akihiro Komuro

Isuzu and Hino jointly have developed four technologies in the automatic driving field. The OEMs began work in May 2016 to jointly develop an ITS (Intelligent Transport Systems) and advanced driving support technology as a base technology for the early commercialization of an automatic driving system. Those technologies will be incorporated into products to be introduced in FY 2018.

Source: The Response Read The Article

PSR Analysis: Hino and Isuzu, known for years of rivalry, now are cooperating because they know that taking the initiative in this field could lead to success in both domestic and global markets. If automatic driving technology can be developed under the most complex Japanese road conditions, it could greatly contribute to improved safety in many situations and create a large market for

these products. PSR

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Far East: South Korea

GM Korea: Bankruptcy Or New Funding?

GM Korea is preparing to file for bankruptcy if its management fails to reach an agreement with the company's local labor union over a restructuring program that has to be approved this month.

The Korean unit of the U.S. automaker has been in the red and urgently needs funds to make two upcoming payments. By the end of April, GM Korea needs US\$600 million to pay subcontractors and to compensate 1,100 workers from a local factory who opted for an offer of voluntary redundancy. GM earlier said it would shut down the Gunsan factory by the end of May.

Source: The Oilprice.com Read The Article

PSR Analysis: There is not much good news in the Korean economy. The Korean labor union is famous for taking radical actions often, but this time actions included destroying the president's office. Not only GM but also other Korean automobile OEMs, such as Hyundai, are facing declining sales. While Korea's car brand image and the Korean automobile market are getting worse





Far East/Southeast Asia Report

Continued from page 10

U.S. Trade
Representative
Robert Lighthizer
recently said the
U.S. is considering
additional measures
regarding China
for what it sees as
unfair acts related to
technology transfer,
intellectual property,
and innovation.

day by day, OEMs and workers have lost sight of how to solve the problem. It is not easy to stop this flow. **PSR**

Southeast Asia: Taiwan

KYMCO Unveils IONEX at Tokyo Motorcycle Show 2018

KYMCO launched the IONEX electric scooter at the 2018 Tokyo Motorcycle Show as the spearhead of a new battery-charging strategy. The Taiwanese manufacturer proposes a power outlet network that combines typical charging stations with battery-swapping vending machines, all while remaining open to other manufacturers. KYMCO says it plans to launch 10 electric models, establish charging networks in 20 countries, and sell over 500,00 electric vehicles worldwide, in the next three years.

Source: newatlas.com Read The Article

PSR Analysis: KYMCO's promotion was very conspicuous in the Tokyo Motorcycle Show 2018. According to a KYMCO spokesman, the company plans to release battery specifications. KYMCO is the largest OEM in Taiwan, and it achieved an astounding penetration rate of 1 in 1.8 people. This EV system IONEX has big potential to duplicate success example of Vietnam's Gogoro. **PSR**

China Report

By Qin Fen, PSR Business Development Manager-China.

US-China Trade Conflict Heats Up



U.S. Trade Representative Robert Lighthizer recently said the U.S. is considering additional measures regarding China for what it sees as unfair acts related to technology transfer, intellectual property, and innovation.

Source: Office of the United States Trade Representative **Read The Statement**

Qin Fen

PSR Analysis: Many in China's manufacturing industry think this statement is a sign the US is trying to do to China what it did to Japan in the 1980's. A number of articles and stories about this history have widely circulated





China Report Continued from page 11

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recently in China media. Here are some of the major points being discussed by Chinese government and business leaders:

- Every time the US is afraid to compete with an emerging economy, it tells
 the world the trade game is unfair and calls for changes to level the playing
 field;
- The US did this with Japan in the 1980s, first by waging war on Japanese manufacturers, then by attacking the country's financial stability by forcing Japan to sign the 1985 Plaza Accord;
- The US now is choosing a sensitive time when the Chinese real estate market is at a turning point. If US gets what it wants, China's real estate market could collapse, and China's economy could stumble;
- A US-China trade war is not about trade; the US seems to be trying to
 block China's plan to improve its manufacturing capabilities, as outlined in
 "Manufacture China 2025" plan. Nearly every objective listed in this document
 encourages Chinese manufacturing companies to move up the value chain and
 take business that now is held by US and European companies.

China can't afford to lose this battle as Chinese leaders see it, and China seems willing to raise the stakes in this conflict.

Heavy Truck Sales Plummet in China's Four Cities

Handan, Tangshan of Hebei Province, Tai'an, He'ze of Shandong Province have seen truck sales in these four cities fall sharply.

Source: Fangde 800 Read The Article

PSR Analysis: These four cities represent only part of the truck market in Northern China. The figure may be relatively insignificant compared to the total market number, but the news does sound an alarm to China's heavy truck market when nearly every major truck OEM is reporting strong sales for Q1 2018.

Rumors are that truck OEMs are dumping products to their dealers and reporting good sales for the first quarter. If that's true, the question then shifts to how long this practice can continue. Semi-annual reports in July will then be a critical point to decide whether the market is truly doing well beyond everyone's anticipation or that H1 2018 is only a time for truck OEMs to dump 2017 inventories.

Like what you see?





China Report Continued from page 12



China Rolls Out Welcome Mat for Tesla

BEIJING – China said it is opening up its manufacturing sector including scrapping ownership limits for foreign automakers, shipbuilders and aircraft firms

Source: Quartz Read The Story

PSR Analysis: If everything goes well for guys like Navistar, DAF, Daimler, Scania and Volvo, in 2020, they will have their own wholly owned truck factory in China. However, it will take lots of efforts to achieve that in two years. But policywise, these commercial vehicle guys, along with battery car maker Tesla, are pretty much good to go. And of course, passenger car makers like VW, Toyota, GM will enjoy the benefits by 2022.

China Passes China 6 Regulation

BEIJING – China's environment authority, Ministry of Ecology and Environment, previously known as CEPA, has approved China 6 emission regulation on heavy duty vehicles run on diesel.

Source: Ministry of Ecology and Environment of People's Republic of China **Read The Article**

PSR Analysis: Great news for after-treatment suppliers and it's great news for local Chinese engine makers like Weichai, Xichai and Yuchai as well, since it paves the way for them to compete overseas with guys like Cummins, Volvo and Isuzu. **PSR**

India Report

By Jinal Shah, PSR Manager, South Asia Operations

Sonalika Tractors Sells 100,00 Units In FY 2018



Jinal Shah

Sonalika has recorded a robust growth of 56% in the Q4 FY 2018, surpassing the industry growth. **Read The Article**

PSR Analysis: International Tractors Limited (ITL), a flagship company of Sonalika Group, is one the top three tractor manufacturers in the country. Its success can be attributed to its ability to execute a sound business plan, despite strong competitors such as Mahindra and TAFE.

Its successful multi-pronged marketing strategy has driven its strong sales increases. ITL offers a wide range of products from 20HP-120HP; 1000+





India Report Continued from page 13

variants with most advanced technology; customized solutions for farmers, and competitive pricing. It's also expanding its reach into overseas markets, including the European Union, Africa, and the Far East, while improving its footprint in the domestic market from the northwestern states in India to the eastern and northeastern states.

Rolls-Royce Power Systems and Force Motors Sign JV

The joint venture is named 'Force MTU Power Systems Pvt. Ltd.' and is slated to produce MTU's renowned 10 and 12-cylinder Series 1600 units with power outputs from 545HP to 1050HP (400 to 800 KWm). Series 1600 engines are particularly suitable for power generation and rail underfloor applications.

Read The Article

PSR Analysis: The growing population and underserved power needs along areas of rapid infrastructure construction in India such as ports, airports, data centers, hospitals and education centres, will fuel demand for an engine of this type in the power generation segment, especially in distributed power generation.

The company has collaborated with a number of other German automakers such as Vidal & Sohn Tempo-Werke GmbH and MAN Truck & Bus AG in the past to enter new segments such as passenger commercial vehicles and heavy commercial vehicles.

This JV with MTU will allow Force Motors to diversify and manufacture high-quality and high-technology products. It will also gain direct entry into the global railways market, since MTU is a supplier to global clients. It also can expand into freight application where the 1600 series engine is well accepted. **PSR**

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Russia Report

By Maxim Sakov, Market Consultant, Russia

Russian Truck Market Grows 50%

The Russian market for on-highway trucks grew 50.3% in March 2018 over March 2017, according to Autostat. The market leader is KAMAZ, second is GAZ Group, and third is Volvo. Good results also were shown by Scania and MAN (+61% and +113% respectively. **Read The Article**

PSR Analysys: The on-highway commercial vehicles market in Russia continues its growth trend, which began in 2016.





Russia Report Continued from page 14

The Grunwald machinery plant in Kaliningrad has introduced an aluminum trailer for road tractors. The product range will include trailers of 27, 30 and 40 cubic meters.



Maxim Sakov

Tikhoretsk Starts Production of New Service Locomotive

The plant has started mass production of the newly-certified MPTG railway service locomotive. The locomotive uses a YAMZ engine of 400 kWt, modular design and is equipped with improved electric motors and a drilling machine. It can be used in the Arctic. **Read The Article**

PSR Analysis: In the early 2000s, the production of such machinery in Russia was suspended completely. However, with the development of the railway network and new railway projects, including Northern way, production of service locomotives has been resumed.

Kaliningrad Introduces Aluminum Trailers

The Grunwald machinery plant in Kaliningrad has introduced an aluminum trailer for road tractors. The product range will include trailers of 27, 30 and 40 cubic meters. One key advantage of the new trailer is its light weight, only 5.6 tons. Initially, the aluminum hull will be purchased from Belgian STAS. In the second stage, starting this year, local production of hulls is planned. **Read The Article**

PSR Analysis: The region of Kaliningrad is isolated from the rest of Russia, so, the logistic links are restricted. Nevertheless, the automotive production in the region is being developed. Besides the Autotor plant, making cars, trucks and engines, there are other automotive OEMs. **PSR**

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