

KONECRANES®

# LIFT TRUCKS QUARTERLY

MAY 2016



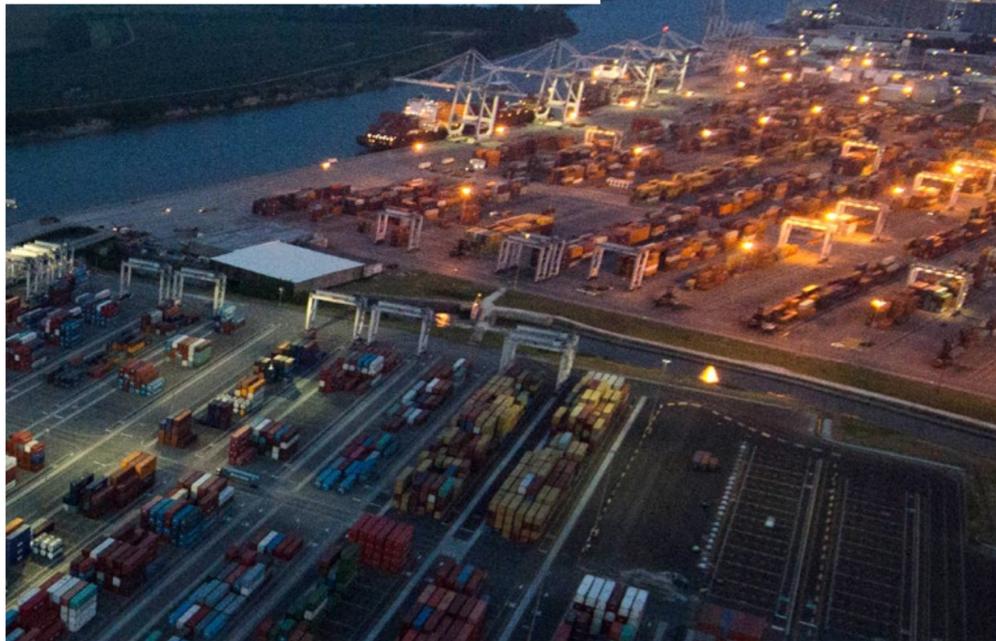
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- New Solutions for Lift Trucks Container Weighing

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# MACRO ECONOMIC TRENDS

**GLOBAL ECONOMY IS EXPECTED TO WITNESS SLUGGISH GROWTH IN Q1 WITH SOME DOWNTURN IN CHINA AND FRANCE**



## REAL GDP GROWTH

Q1 GDP performance in the UK, EU and US remained the same, but fell in France and China.



## INDUSTRIAL PRODUCTION

Industrial production levels have went up year-on-year in majority of the countries, but went down in UK, Japan, US, Brazil and Russia.



## INFLATION

Inflation fell month-on-month in Euro Area, India, Japan, Russia, US and Brazil, and remained the same in China.



## CURRENCIES

In January, Euro depreciated against JPY, BRL, SEK and RUB, but appreciated against USD, GBP, CNY and INR.



## CAPACITY UTILISATION

Capacity utilisation went down in both US and EU.



## POLICY INTEREST RATES

Policy interest rates remained steady in all major economies.

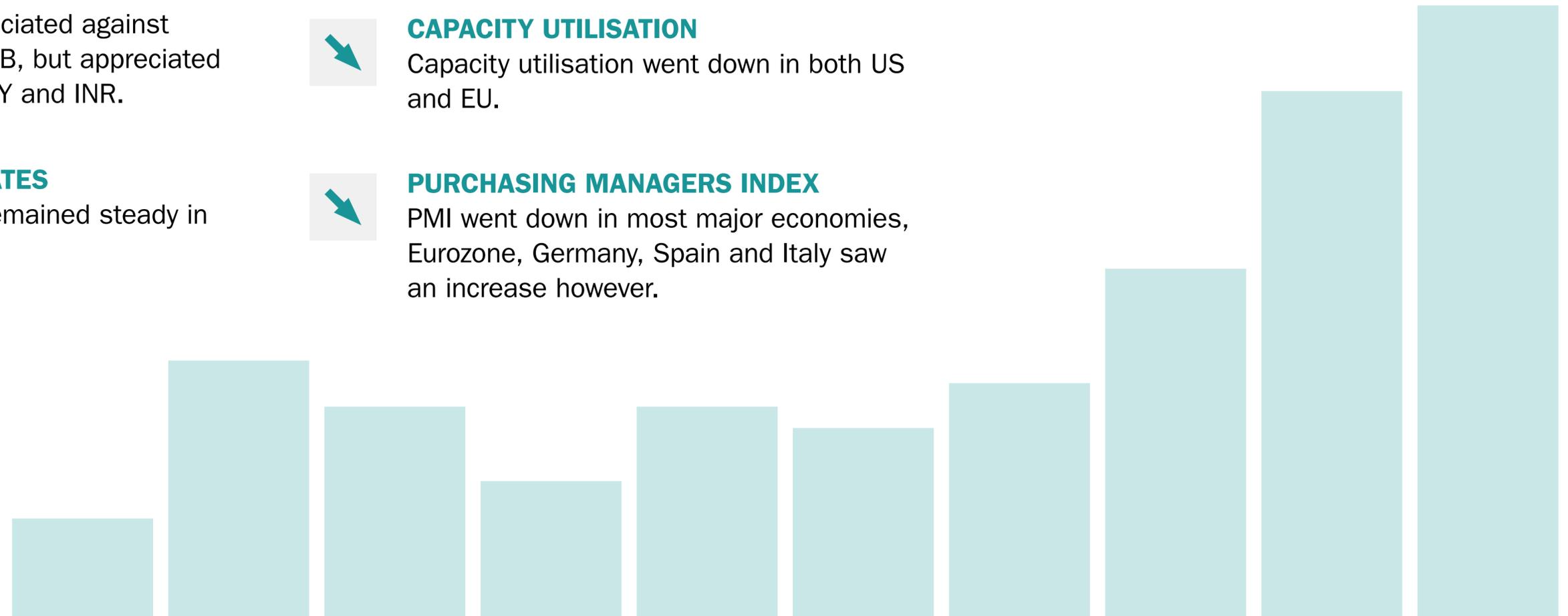


## PURCHASING MANAGERS INDEX

PMI went down in most major economies, Eurozone, Germany, Spain and Italy saw an increase however.



**KEEP READING**



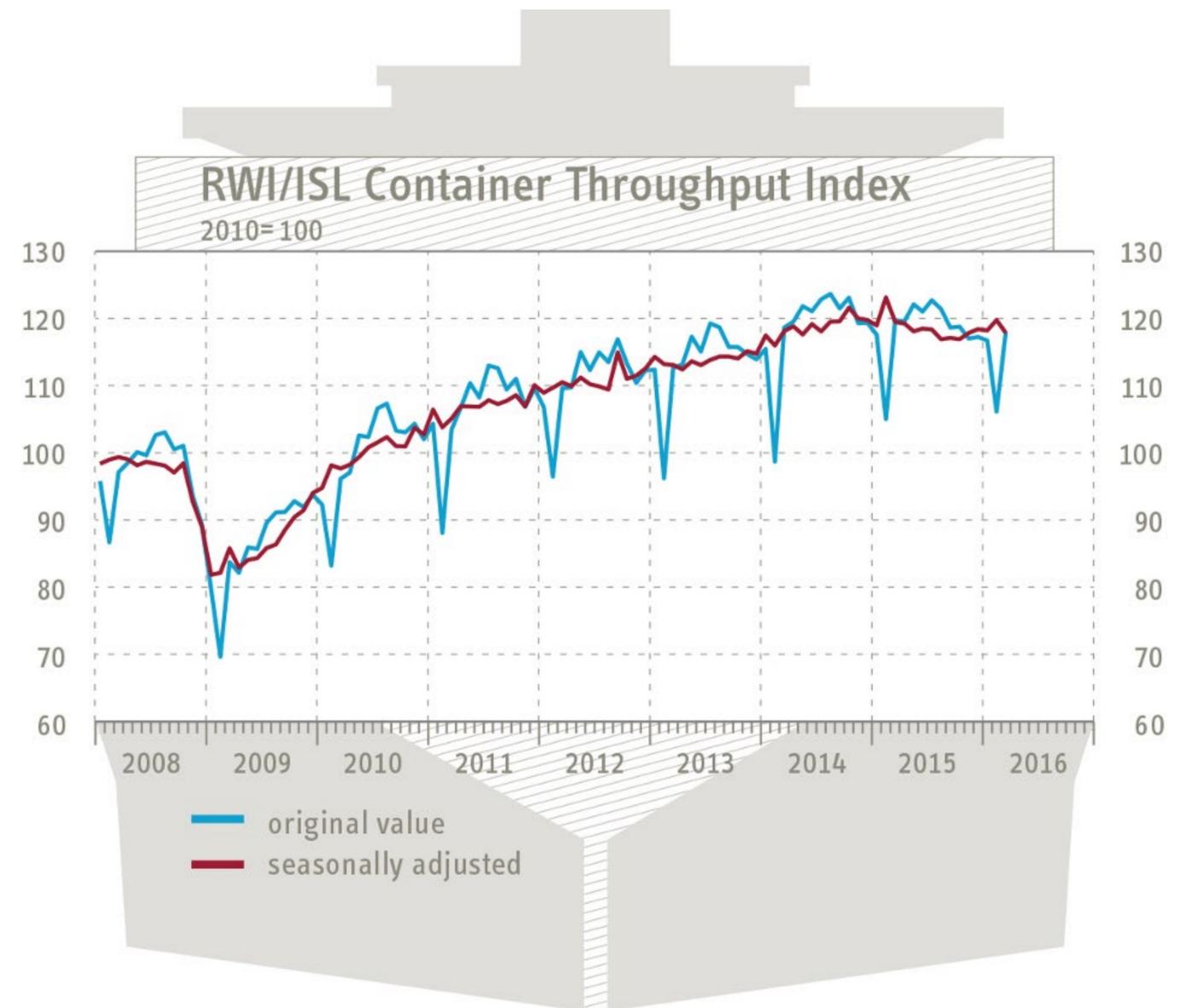
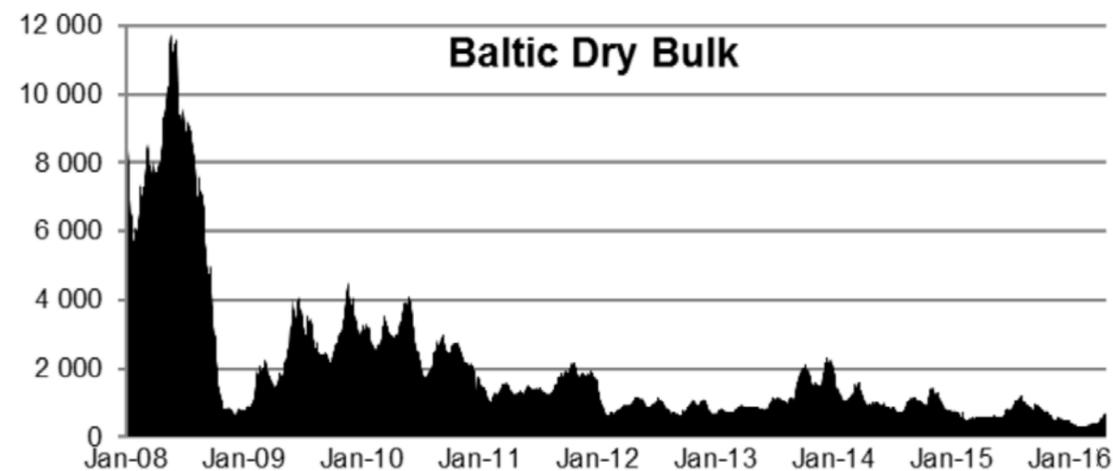


## RWI/ISL CONTAINER THROUGHPUT INDEX AND BALTIC DRY BULK

The demand for container shipping is stalling at the moment, with indicators for growth in the first months of 2016 pointing to limited overall demand and great variations from trade to trade. In addition, Chinese New Year lays its disrupting mark on global trade figures.

BIMCO's data for the United States imports on the east coast shows an increase of 6.5%, notable rise even compared to 2015's strong levels. The west coast imports of laded containers are not similarly strong, and these were impacted heavily by the conflict between the international Longshore and Warehouse Union and the Pacific Maritime Association, which closed up the main ports.

Volumes going into Europe from Asia dropped 6.8% in Jan–Feb 2016 from previous year, Container Trade Statistics' data shows. In 2015, volumes transported from Asia to Europe dropped by 3.6, out of which, volumes going specifically to Russia dropped by 24.2%. Mainland Europe demand also continues to be weak. ■





# INTELLIGENT LIFT TRUCKS IN THE AGE OF IOT

INTERNET OF THINGS IS INTRODUCING GREAT ADVANCEMENTS IN EVERY BRANCH OF TECHNOLOGY. TRUCONNECT REMOTE MONITORING TRACKS THE REAL USAGE OF YOUR LIFT TRUCK AND CONNECTS YOUR BUSINESS TO THE FUTURE OF LIFTING.



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## IOT IS CREATING NEW BUSINESS OPPORTUNITIES

Internet of Things (IoT), sometimes referred as Internet of Objects or Industry 4.0, is changing technology and enabling new devices, services and business – both at work and for leisure time.

IoT or Industry 4.0 represents the 4th industrial revolution. It allows us to take a huge leap in gathering, analyzing, and distributing data that we can turn into information and useful knowledge. IoT and cloud technology automate complex tasks resulting in increased productivity.

There are different projections how many billion devices will be connected to the Internet by 2020. Cisco estimates about 50 billion devices, but there are even forecasts that the number can be as high as 75 billion.

The fact is that connected products will give rise to the next era of IT-driven productivity growth. They create new business opportunities, vastly greater even than those the web has introduced with predictions exceeding 12 trillions euros in business value of the global IoT market by 2022.





## TRUCONNECT® – CONNECTING DATA, MACHINES AND PEOPLE TOGETHER

Konecranes originally developed the TRUCONNECT® Remote Monitoring and reporting system for its overhead industrial cranes. The IoT-based technology was an immediate success. Soon after, TRUCONNECT was also incorporated into lift truck line.

TRUCONNECT services for lift trucks allows you to track the real usage of your lift trucks fleet through a remote connection. It collects data – running time, usage, diagnostics, work cycles and fuel consumption – through a condition monitoring unit installed on each lift truck you want to monitor. The data is transmitted to the Remote Data Center, where it is compiled and made available on our customer portal around the clock.

Usage data is viewable 24/7 on cloud-based customer portal. From password-protected customer portal you get online views and reports of the lift truck. Alert notifications of events such as safety overrides or engine over-temperatures, can be send by SMS or email to the right person.

Intelligent lift trucks connect your business to the future of lifting. TRUCONNECT helps you to optimize your lift truck productivity, efficiency, safety and maintenance.

### TRUCONNECT PROVIDES YOU DATA FOR EXAMPLE ON:

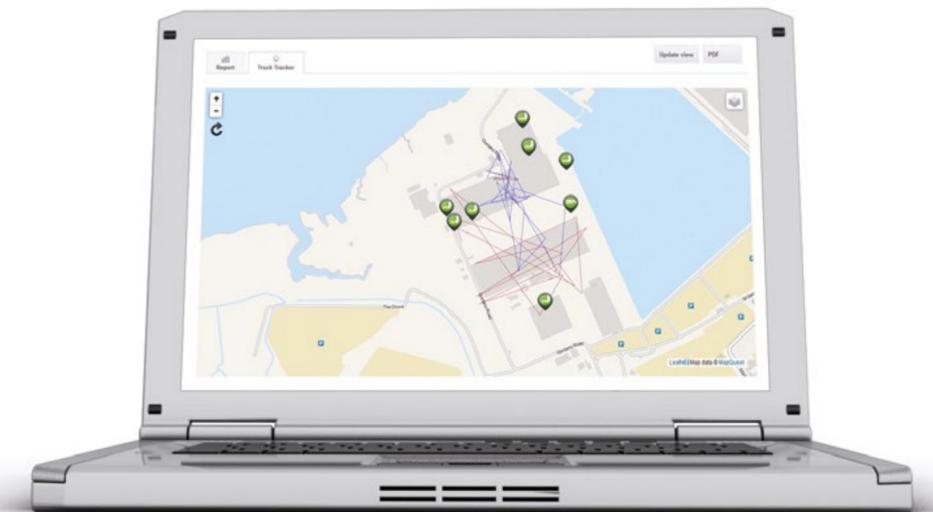
- **Actual usage data:** machine status, driving hours, traveling distance, traveling speed
- **Efficiency information:** fuel consumption, running modes and number of lifts
- **Safety related issues and truck specific faults:** override and overloads, drop in engine oil pressure and shocks
- **On-time maintenance data:** next maintenance counter, drivetrain and truck diagnostics ■



**The usage information helps the truck owner to improve maintenance operations by scheduling maintenance according to actual usage. The truck owner gets information that helps him to allocate maintenance resources with confidence.**

**Göran Pehrsson**

Service Manager, Konecranes Lift Trucks



[SEE MORE INFORMATION  
AND VIDEO ON TRUCONNECT®](#)



# GLOBAL SECTOR SUMMARY

WHAT ARE THE LATEST NEWS OF DIFFERENT, GLOBAL SECTORS? READ MORE ABOUT FORECASTS OF AUTOMOTIVE, PORTS, STEEL AND OTHER SECTORS.

- [AUTOMOTIVE](#)
- [GENERAL MANUFACTURING](#)
- [INTERMODAL & RAIL](#)
- [MINING](#)
- [OIL AND GAS](#)
- [PULP & PAPER](#)
- [PORTS](#)
- [POWER](#)
- [STEEL](#)



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## AUTOMOTIVE

### MEXICAN AUTOMOTIVE GROWTH BRINGING IN MORE INVESTMENT

Roland Berger's new study reports that the growth in Mexico's automotive sector is bringing in investments. Mexico's automotive industry is predicted to grow at 9% annually from 2016–2020, to almost 5 million units of vehicles in 2020. The high growth expected will have a negative affect on suppliers since the supply base will not be able to keep up with the growth of car manufacturers. The supply gap is an opportunity for the global supplier community to expand into Mexico since local firm will not be able to close the supply gap themselves without support.



## GENERAL MANUFACTURING

### INNOVATION IN EUROPEAN MANUFACTURING SECTOR BECOMING MORE CRUCIAL

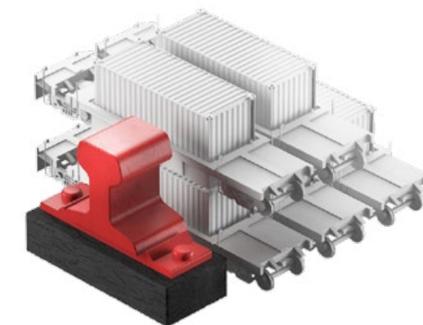
According to Damian Hennessey, the director of Proto Labs, a provider of rapid manufacturing of low-volume CNC-machines, continued innovations in manufacturing are becoming increasingly critical, as fluctuations in the price of commodities, especially oil, are having a deep-rooted impact on the sector. Economic markets both in Europe and in the United States have seen great fluctuation recently, and industries related to them are also experiencing swings in their forecasts. President Obama has called for the US and Europe to continue to establish a "special relationship" as both regions face a new era of manufacturing, in which digital disruption becomes a key market inhibitor.



## INTERMODAL AND RAIL

### US INDUSTRY CONVERTING TO RAIL, GROWTH STILL WEAK

Intermodal growth expectations have rebounded in Q1 to its highest in 1.5 years and is expected to account for 14% of total volumes in 5 years, according to recent Wolfe Research survey. International intermodal volume has been hit hard in the first quarter with high inventories, a decline in premium shipments, weaker peak seasons and sluggish retail sales all to blame. Analysts expect railways to gain market share over trucks in the long-term as result of cost savings despite reduced fuel prices, political pressure to divert freight from congested highways, and improving rail capacity and service levels.





## MINING

### NEW INDIAN MINING EXPLORATION POLICY TO BRING INCENTIVES FOR PRIVATE PLAYERS

In India, the Union government is set to introduce a mining exploration policy to make the market more attractive to private companies. The plan is to reimburse costs for mining companies that fail to find adequate mineral wealth. The companies will be offered a share of the revenue from blocks where valuable reserves are discovered. Under the new law, all mineral block allocations will occur through mandated auctions. The law is up for comment in May before it is approved. The Geological Survey of India has identified 108 blocks in 23 States that can be taken up for mineral exploration after this.



## OIL AND GAS

### GLOBAL OIL MAJORS REPORT LOWER SHRINKING PROFITS FROM REFINING UNITS

Global oil majors ExxonMobil and Chevron reported financial results for Q1/2016, with a notable decline in profits, especially from refining units, driven by oversupplied fuel market. Until now, refining units had continued to provide healthy margins and had offered oil majors some protection against the 60% fall in oil prices seen since the middle of 2014. Due to the difficult price environment, these companies had championed an integrated business model in which oil is both produced and refined. This had led to better profitability for refineries when prices of feedstock oil fall. Increasing fuel stocks and lower consumption is bringing an end to this advantage.



## PULP AND PAPER

### US FOOD PACKAGING MARKET TO EXHIBIT CAGR OF 2.9% TO 2022

According to the new report of The Association for Packaging and Processing Technologies, the US food market is forecast to grow at steady rate of 2.9% CAGR through 2022. The study forecasts that meat and related products and snack foods will outperform the market with over 3% growth. The US food industry trails the global market, the overall growth of the food industry is being driven by emerging markets like Argentina, Brazil, China and India. The new innovations of food industry are e.g. recycled and biodegradable materials for salty snacks, new films to keep meat fresher longer and active labels to sense when meat is past its expiration.





## PORTS

### INDIAN SHIPPING MINISTRY AIMS FOR USD BILLION OF INVESTMENT

The Indian government has prepared around 140 projects for public-private partnership maritime investment opportunity in the country. The Union Ministry of Shipping held a three-day investor conference in Mumbai from April 14 as contracts worth an expected USD 13 billion in investment were promoted. One of the key projects first to emerge is a new deepwater satellite port in Vadhawan, near Mumbai. The construction of the port will be around 1.35 billion. According to the government plans, it is envisaged that India's port handling capacity will increase to 3,000 million tonnes by 2015, up from 1,400 tonnes at present.

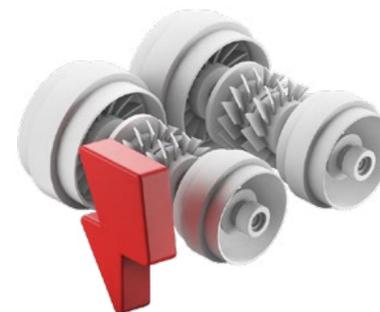


## POWER

**WASTE TO ENERGY:** Indonesia government set for waste to energy pilot project which aims to boost plans to create more energy from waste materials.

**FOSSIL FUELS:** Gas-fired power generation is overtaking coal generation in the US on an annual basis for the first time.

**WIND POWER:** Germany proposes cap of 2.5 GW on onshore wind subsidy, slower expansion expected.



## STEEL

### GLOBAL STEEL DEMAND TO FALL 0.8% Y/Y IN 2016 BEFORE RETURNING TO GROWTH IN 2017

The economic environment facing the steel industry continues to be challenging with China's slowdown impacting globally across a range of indicators, sluggish growth in global trade and low oil and other commodity prices. The global steel market in suffering from insufficient investment expenditure and continued weakness in the manufacturing sector. In 2016, while we are forecasting another year of contraction in steel demand in China, slow but steady growth in some other key regions including NAFTA and EU is expected. According to forecast of The World Steel Association in 2017 world steel demand will return to growth of 0.4%. ■





# NEW SOLUTIONS FOR LIFT TRUCKS CONTAINER WEIGHING

ACCORDING TO NEW REQUIREMENTS OF SAFETY OF LIFE AT SEA CONVENTION (SOLAS) THE GROSS MASS OF THE CONTAINERS NEEDS TO BE VERIFIED BEFORE IT CAN BE LOADED ONTO A SHIP. SEE NEW KONECRANES LIFT TRUCK SOLUTIONS FOR CONTAINER WEIGHING.



KEEP READING



## HOW DOES KONECRANES WEIGHING SOLUTIONS WORK?

We have developed at Konecranes Lift Trucks new solutions for container weighing. We offer two types of weighing system with two different solutions of data transfer depending on the need for accuracy, productivity, data interchange and integration in customer's ERP or TOS/TMS.

### 1. STATIC WEIGHING SYSTEM

The gross mass of the container handled by Konecranes reach stackers is measured hydraulically based on a static weighing system. The accuracy is 1–2% and time consumed for weighing is about 5 seconds.

### 2. DYNAMIC WEIGHING SYSTEM

The gross mass of the container handled by Konecranes reach stackers is calculated from integrated weighing devices in the spreader, providing a dynamic weighing system with 0.5–1% accuracy and on the fly weighing.

Container Verified Gross Mass (VGM) and associated VGM data set can be interchanged seamlessly with customers' ERP or TOS/TMS via YourKonecranes cloud services, which uses TRUCONNECT for the data connectivity with the truck and provide also the full set of TRUCONNECT features and services.

The driver can use the interface tablet in the cabin to associate the verified gross mass of the containers with the container ID which will then be published in the cloud to interchange with customers' ERP or TOS/TMS.

Alternatively with the in-cab connectivity option, the container Verified Gross Mass (VGM) can be sent directly to the customer's VMT/TOS terminal in the cabin.



[READ MORE FOR CONTAINER WEIGHT VERIFICATION REQUIREMENT](#)

## 60 SECONDS WITH

# MIKE DEJONG

GENERAL MANAGER OF  
UNITED EQUIPMENT FROM AUSTRALIA

### WHAT OPPORTUNITIES DO YOU SEE IN THE FUTURE OF THE LIFT TRUCK BUSINESS?

The opportunities we see are not all centered on the equipment that we offer as heavy-duty Lift Truck distributor. It's more about the peripheral technology like TRUCONNECT and the service support. Our customer's needs are changing precipitously and this has provided a number of opportunities for UE to provide the one stop shop advantage.

### WHY IS UNITED EQUIPMENT SUCCESSFUL?

United Equipment success is based on a simple formula. We provide world's best products, listen to our customers and understand their needs, invest in our people and always look forward and don't rely on the past. Most of the above is encapsulated in our company philosophy and our culture. To be a United, National, Innovative business, Today and Every day, Delivering what we promise!

### HOW DOES YOUR CUSTOMERS UTILIZE TRUCONNECT?

The introduction of TRUCONNECT to our customer's has provided them with a unique opportunity to not only monitor the well-being of their equipment but also review safety and productivity related events. Our customers are seeing the many advantages TRUCONNECT can offer their business which varies based on their specific applications.

### WHAT'S YOUR FAVORITE SAYING, AND WHY?

Any one that knows me well would know I have a number of favorite sayings. My favorite is "If you cannot add value you cannot be valued by your customers". It puts everything back in prospective for our people.



Mike Dejong



## SUPERVISORS DAY

# MONITORING SMART CONNECTED LIFT TRUCKS

**Hans Jakobsson** is an imaginary supervisor at a paper mill in Sweden. His responsibilities include supervising the production storage – taking care of internal logistics, lift truck fleet, personnel and productive work cycles. Let's take a look at his average day.

### 7:00 MORNING CHECK-UP

Hans wakes up in his home in Norrköping, Sweden. He wants to check the situation of his lift trucks fleet by his phone while he is drinking his morning coffee. So he can be sure that there hasn't happened anything unusual during the night shift. Luckily everything has gone without problems.

### 8:30 CHECKING LIFT TRUCK FUEL CONSUMPTION

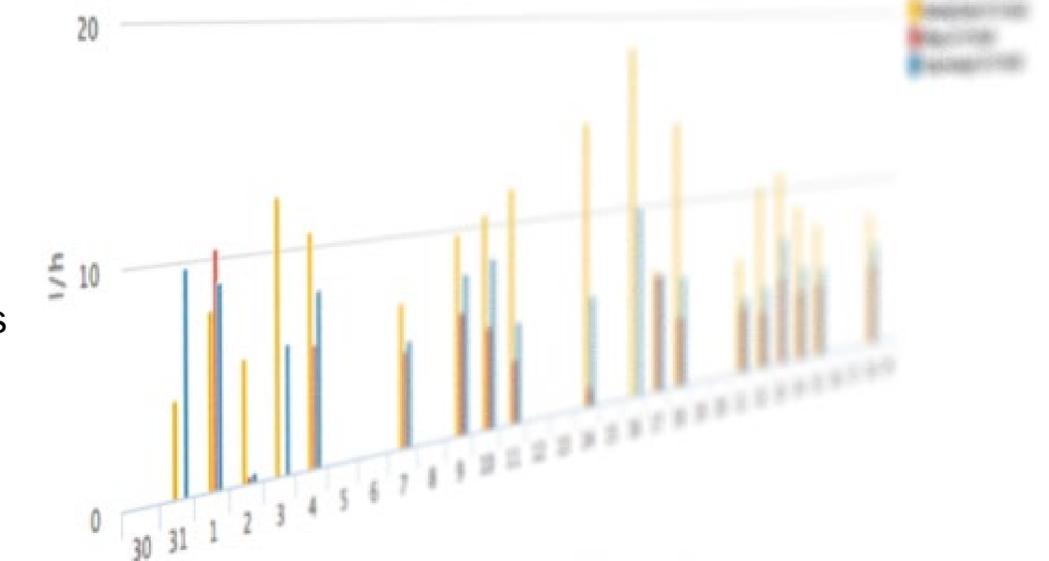
Hans arrives to his workplace and takes a quick look to the fuel consumption of the lift trucks in use. The data once again reveals that there are quite big differences in the fuel consumption between his lift truck drivers. He has been monitoring the average fuel consumption for the past few months and now it is time to take actions.

### 9:00 PLANNING TRAINING FOR THE LIFT TRUCK DRIVERS

With the help of fuel consumption data, Hans starts to plan the 'Drive more economically' training day for his lift truck drivers. He plans actions how to decrease fuel consumption and sets goals how much the drivers should cut down from their fuel consumption during the upcoming months.

Average Fuel Consumption

08/30/2015 00:00 - 09/29/2015 00:59





### 10:17 RECEIVING ALERT NOTIFICATION OF TYRE PRESSURE

Hans' work gets interrupted. He gets a SMS to his phone; an alert notification tells that tyre pressure in one of the lift truck currently in use is too low. Hans knows that the driver of the lift truck gets the same alert message. Hans makes a phone call to the driver, to confirm that he drives his lift truck to the workshop to fix the tyre pressure.

### 11:25 CHECKING REAL-TIME USAGE DATA

Before lunch, Hans opens TRUCONNECT customer portal on his computer to check real-time usage data of the lift trucks currently on the run. Charts and views of the customer portal show machine status. Hans sees which lift trucks are in use, idling or off-duty. At a glance he sees also driving hours, traveling distance and travelling speed of each lift truck.

### 12:10 ANALYZING MAINTENANCE DATA

In the afternoon Hans is taking time to analyze on-time maintenance data of the lift trucks. The truck specific data shows that the next service is soon due on one of the lift trucks. Hans orders the right filters kit from Konecranes Spare Parts immediately. He is happy to see this data early enough. Preventive actions really save time and money when lift trucks can perform their very best without any extra pauses.

### 14:15 SENDING MONTHLY USAGE REPORT

Hans remembers that he has to send monthly usage report of the lift trucks to the technical director of the paper mill. All the necessary analyzed data of the month are easy to select in the online customer portal. Both pdf and excel reports are ready to send via e-mail.

### 15:00 HEADING OFF TO A BUSINESS TRIP

Hans is leaving the office earlier than usually because he is heading off to a business trip.

### 17:30 RECEIVING SMS ALERT NOTIFICATION FOR SAFETY OVERRIDE

After a quick look at the alerts log, he noticed that one of the drivers at the paper mill uses frequently the safety override. Right away, he calls the driver to make him aware of the risks involved and to request him to contact the maintenance workshop in any such situation would occur again. Fortunately, it did not cause any accident. ■

#### General Info

ACTIVE ALERTS		
ALERT ID	ALERT NAME	DATE
3	SAFETY OVERRIDE	9/29/2015 08:58:49



## TECH TODAY

# FUN, SELF-FLYING CAMERA LILY

Lily acts as a robot videographer, automatically following you anywhere. It starts recording videos as soon as you toss it into the air and is even waterproof.

The 10.29-inch-wide by 3.22-inch-tall device can fly 50 feet (15 m) up and comes equipped with a 1080p HD camera and small tracking device.

Lily has had quite a success in sales with tens of thousands units already sold and it's not even on the market yet. The commercial price will be \$999 when it officially launches sometime in summer 2016.

## EVENT CALENDAR



**TOC**  
EUROPE

Welcome to meet us at

## TOC EUROPE EXHIBITION

**14–16 June**

Hamburg Germany

Meet us at stand C54!

[READ MORE](#)

## 14<sup>TH</sup> ASEAN Ports and Shipping

**14–15 July**

Bangkok Thailand

[READ MORE](#)

# LIFT TRUCKS AT WORK



Hybrid Reach Stacker loading trucks in Port of Helsingborg.  
↓



SMV 4531 TB5 stacking containers in Australia.



↑ Empty container handler operating in Romania.



15-1200 C working on sawmill Södra in Sweden.  
↓

# THANK YOU FOR READING!

If you have questions about Lift Trucks or about this newsletter please contact us:  
[communication.lifttrucks@konecranes.com](mailto:communication.lifttrucks@konecranes.com)

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