

Newsletter

December 31st 2016

Link road, rail, sea!

Council Of Intermodal Shipping Consultants

**YEAR XXXIV
Issue of December 31st 2016**

MARITIME TRANSPORT

2016 – THE MOST TURBULENT YEAR IN CONTAINER SHIPPING'S 60-YEAR HISTORY Page 3

RAIL TRANSPORT

SNCF NETWORK SUBMITS €46BN 10-YEAR SPENDING PLAN " 6

FELB LANDS IN ITALY " 8

TRASPORT & ENVIRONMENT

INTERNATIONAL CHAMBER OF SHIPPING SLAMS EU EMISSIONS TRADING PLAN " 10

INDUSTRY

CONTAINERSHIP SCRAPPING RAMPS UP, AS PANAMAX VALUES CONTINUE IN THE DOLDRUMS " 14

LOGISTICS

NEW PUSH TOWARDS DIGITAL MANUFACTURING 'COULD REVOLUTIONISE
AUTOMOTIVE SUPPLY CHAINS' " 16

LAW & REGULATION

EUROPEAN PARLIAMENT APPROVES EU PORTS REGULATION " 19

PROGRESS & TECHNOLOGY

THE BENEFITS OF LITHIUM-ION TECHNOLOGY EXPLAINED " 21

STUDIES & RESEARCH

OUTLOOK IMPROVING FOR CONTAINER LINES " 24

REEFER

TRANSPARENCY AND E-COMMERCE THE KEY DRIVERS OF A SUCCESSFUL COOL CHAIN " 27

ON THE CALENDAR " 30

December 31st 2016

The content of the C.I.S.Co. Newsletter is also published in the newspaper "Informare" accessible on the Internet site <http://www.informare.it>

MARITIME TRANSPORT

2016 – THE MOST TURBULENT YEAR IN CONTAINER SHIPPING'S 60-YEAR HISTORY

Five mergers and acquisitions and one bankruptcy is the final toll of a truly tumultuous year for liner shipping.

They put in the shade other notable events, such as the opening of the enlarged Panama Canal in June, mandatory weighing of all loaded containers (VGM) from 1 July and the record scrapping of some 700,000 teu of redundant container tonnage.

It was a year of reckoning for an industry that had maxed out its collective credit card, spending billions of dollars in ordering bigger and bigger state-of-the-art containerships in what appeared to be an ego-driven race; and then proceeded to sell container slots from Shanghai to Rotterdam for little more than the price of a city taxi ride.

Ocean carriers have looked into the abyss before, but this time it was more serious – plunging spot rates at the back end of 2015 forced container lines to agree annual contract rates on the main Asia-North Europe and transpacific trades that were significantly lower than the year before.

And when these new contract rates kicked in, spot cargo rates, which represent at least 50% of containers carried, took another dive to reach all-time lows by March and April.

But carriers had been in big trouble before and lived to fight another day – state sponsorship and generous shareholders would bail them out, suggested analysts.

Shippers generally shared this view and were happy to play the carriers' fast and loose rates game.

After all they were too big to fail, weren't they?

Indeed, to quote Monty Python: "nobody expects the Spanish Inquisition."

In January, Hyundai Merchant Marine (HMM) approached the owners of containerships it had leased on long-term charters for a reduction in daily hire rates.

The success of the so-called 'charter cut', almost unprecedented in shipping circles, became part of the conditions for the South Korean carrier's restructuring within a voluntary agreement signed with creditors headed by state-owned Korean Development Bank (KDB), in March.

Another key condition of the carrier's restructure was HMM's entry into one of the vessel sharing alliances from April 2017.

Meanwhile, it transpired that Hanjin Shipping, which had previously rebuffed the prospect of a merger with HMM, was in bigger financial trouble than its smaller compatriot – not only burdened by a growing debt mountain, but significantly in arrears on its charter hire payments.

Hanjin eventually admitted its parlous state and applied for restructuring in April.

It made representations to shipowners, and also approached stevedores, for cost reductions in order to meet the conditions set by the KDB-led creditors.

While both carriers achieved some success with charter rate cuts, for example negotiating hard-fought 20% reductions on daily hire rates from Greek containership owner Danaos, politics and egos became a factor in their survival.



Anecdotal reports to The Loadstar in Pusan in October suggested that the relationship between Hanjin and KDB executives was fraught, and despite Hanjin gaining entry into THE Alliance, its fate was effectively sealed over one weekend at the end of August when intransigence prevailed over the KDB's request for increased support from parent Hanjin Group.

The last day of August will go down in history as the day Hanjin Shipping applied for court receivership, leaving 100 ships, 500,000 teu and \$12bn in goods stranded around the world.

HMM managed to survive by meeting the conditions of its creditors, including signing an MoU with Maersk Line and MSC on 14 July to join the 2M alliance – which was subsequently watered down, leaving HMM as a slot charterer only.

Although the South Korean carriers were arguably in a more precarious position than their peers, the rot had truly set in in liner shipping, causing carrier accounts to be swamped by a tsunami of red ink.

With hindsight, earlier estimates of an industry loss of \$5bn-\$10bn this year now appear somewhat undercooked.

Indeed, market leader Maersk Line saw its \$1.3bn profit in 2015 reverse into a negative this year, in what, according to chief commercial officer Vincent Clerc, was a “quite shocking” and “violent” rate war.

The merger of the two Chinese state-owned carriers, Cosco and CSCL; the sale of NOL/APL to CMA CGM; the announcement of the 2018 merger of the container business of the Japanese trio, K Line, MOL and NYK; the proposed merger of Hapag-Lloyd and UASC; and finally Maersk’s \$4bn recent agreement to acquire Hamburg Süd all happened in 2016 – any one of which would have been the top story in any other year.

The surviving carriers will thus hope for a better year in 2017, as they regroup into their smaller alliances (in terms of members) in April – it couldn’t get any worse could it?

(from: theloadstar.co.uk, December 23rd 2016)

RAIL TRANSPORT

SNCF NETWORK SUBMITS €46BN 10-YEAR SPENDING PLAN

The board of French infrastructure manager SNCF Network approved the draft of its first multi-year performance contract with the government, which includes a 10-year spending plan, during a meeting on December 20.

A requirement of the national railway reforms, which came into force in January 2015, the contract has been submitted to France's Rail and Road Regulatory Authority (Arafer) to gauge their opinion before it is signed off by the state and SNCF Network.

Described by the infrastructure manager as elevating its modernisation and



investment budget "to a level never seen before," the draft proposal envisages spending €46bn on modernising the network over the next 10 years, including €27.9bn for renewal of the main line network.

Nearly €2.6bn will be spent in 2017, with a target to provide €3bn per year set to be reached by 2020.

€1.8bn will also be spent over 10 years on industrial and technological investments to modernise and improve network management, with €300m set to be spent annually between 2017 and 2019.

€4.5bn is also set to be allocated by the state, regions and SNCF Network to improve accessibility at stations and enhance security, including removing level crossings.

In addition, the plan envisages spending of €12bn over the course of the contract on improvements to regional lines.

The French regions and SNCF Network expect to spend €900m on renovation in 2017, rising to over €1bn in 2018, which compares with €600m at present.

SNCF Network says the spending included in the plan is designed to help it overcome its two major challenges: guaranteeing a high-level of network security and improving the quality of service offered to transport operators, and has identified six major objectives to achieve this:

- place security and safety at the centre of concerns using the financial support of the state and local authorities
- define priorities for renewal and improvements to the network, with an emphasis on the core network and busiest lines
- deliver a programme of regional line renewal as outlined in the contract plan between the government and regional authorities
- transform network management by encouraging a policy of innovation across all areas of the company
- enhance the commercial offer, particularly for rail freight, by improving the network's quality of service by modernising path allocation and traffic management, and
- establish a "financial trajectory" for SNCF Network.

It is hoped that the investments, particularly in new technologies and an improved relationship with suppliers, will translate into €1.2bn of savings by 2026.

In addition, increases in commercial revenues relating to the improvements in quality of service should see some of SNCF Mobility's future profits transfer to SNCF Network.

However, while it will also benefit from revenues generated by real estate, the infrastructure manager's debt is expected to grow from €44bn to €60bn in the next 10 years.

(from: railjournal.com, December 23rd 2016)

FELB LANDS IN ITALY

The Eurasian railway operator Far East Land Bridge is pioneering new territory this fall by expanding their services to Italy.

A new connection route between Milan and China has recently been established by the company.

Also, a new office has been created in Milan for continued excellence in service.

The initial test shipments of containers from Milan to China began earlier this year and have been successfully transported with a transit time of less than 20 days.

This establishes a weekly service between China and Milan with options for transport to CIS and STAN countries as well.

FELB's aim is to develop the railway connection between Asia and Italy, offering a reliable connection to/from Asia (China, S. Korea and Japan).

Using their own private container fleet and reliable relationships with Russia and connecting CIS/STAN countries, they can ensure a consistent service for their clients.



Furthermore, a project transportation (oversized cargo) option will ensure a wide service portfolio primarily based on railway services.

The new office in Milan is operated by employees fluent in Italian and familiar with the local business and economy.

This allows FELB to offer a helpful and specialized service for current clients and build relationships with new ones.

"FELB's day-to-day ambition is consistently that of meeting Chinese and European companies' demand for land route transportations with minimal delivery times," states FELB CEO Mr. Thomas Kargl.

His business has made enormous strides in reducing the duration of travel, slashing the transit times on its terminal-to-terminal service between Asia and

Europe from an average 26 days in 2010, down to just 14 days since 2014 (with plans to drive that down to a remarkable 10 days in the not-too-distant future).

As part of the Italy connection, FELB is working on a direct rail option to link the Małaszewicze /Brest border and Milan in less than 2 days transit time.

Currently FELB uses a rail and truck combination to cover this distance. However, this future option will significantly reduce transit time and benefit FELB's Italian clients immensely.

An agreement with RZDL/RZD Logistics (a shareholder in the company) allows FELB's containers to transit over the wide gauge sector (Russia, Belarus and Ukraine) with minimal internal stoppages and custom checks, and no diversions – the complications that made the land bridge route impractical.

"In addition, our clients can track their containers along the entire route, as the container location is electronically monitored – that is, via RFID-Monitoring – at 37 points," informs Mr. Kargl.

Given the high level of traceability, it should come as no surprise that FELB's service is attracting companies in the automotive and electronics industry, where timeliness and reliability are paramount.

"Our clients experience the highest level of service and punctuality, both for regular transportation and for spot shipments," assures the CEO.

Known for their flexibility and ability to reinvent and expand their services for the past 9 years, FELB continues to build their business with customer needs being the highest priority.

This new route and office in Italy is just the beginning for FELB, as part of an exciting new future for the rail operator.

(from: ship2shore.com, December 14th 2016)

TRANSPORT & ENVIRONMENT

INTERNATIONAL CHAMBER OF SHIPPING SLAMS EU EMISSIONS TRADING PLAN

The International Chamber of Shipping (ICS), a global trade association for shipowners, said that a proposal by the European Parliament Environment Committee to incorporate international shipping into the European Union's carbon dioxide trading system will polarize and impede current discussions on additional CO2 reduction measures at the UN International Maritime Organization (IMO).

ICS Director of Policy and External Relations Simon Bennett said that nations outside of the EU will be disappointed and very concerned by a vote by the committee.

"In the absence of a comparable system operating under the International Maritime Organization (IMO), CO2 emissions in EU ports and during voyages to and from them should be accounted for," the Parliament said in a press release.

Members of Parliament said they "propose setting up a fund to compensate for maritime emissions, improve energy efficiency, facilitate investments in innovative technologies and reduce CO2 emissions from the sector.

Revenues from auctioning of allowances in the aviation sector would be used for climate action in the EU and third countries."

Bennett said the action follows the IMO's adoption of a comprehensive road map for action just a few weeks ago.

"We hope that EU governments and the European Commission will see sense and recognize that threats to their trading partners will not serve the development of the global solution, which both they and the shipping industry want and need," he said.

In addition, he said the ICS "is confident that IMO member states, most of which are developing nations, will adopt a CO2 reduction strategy in 2018 that will include ambitious CO2 reduction goals and the development of a mechanism for delivery.

But threats of EU unilateral action will do nothing to help this complex process."

The ICS said emissions trading is not appropriate for international shipping and is mostly comprised of small-and-medium-sized enterprises that typically operate with less than 10 ships.

Emissions trading was primarily developed for industries such as power generation, and cement and steel production, the ICS said.

Bennett said the EU emissions trading system (ETS) "has been an abject failure.

Its unilateral application to global shipping would create market distortion while generating trade disputes with China and other Asian nations, as happened when the EU tried unsuccessfully to impose its ETS on international aviation."



International Chamber of Shipping
Representing the Global Shipping Industry

The ICS said its position is "that if IMO member states should decide to apply a market based measure for CO2 reduction to international shipping, the preference of the industry would be for a global fuel levy."

In addition, the ICS said the shipping industry fully accepts responsibility for reducing its CO2 and building on the 10 percent reduction already achieved by the sector during the last five-year period for which IMO data is available (2007-2012).

However, the ICS asserted that if the IMO decides to develop a fuel levy, this would require the full support of developing nations, which are worried about the potential impact on trade and economic development.

"Even if market based measures are found necessary to achieve the objectives which IMO sets for the sector, threatening non-EU partners with unilateral action is not going to help them to overcome their legitimate concerns," Bennett said.

"The only forum in which to have this debate is at IMO."

ICS said it is "working closely with the European Community Shipowners' Associations (ECSA) to persuade the plenary of the European Parliament, as well as EU Member States and the European Commission, to reject the EP Environment Committee's report.

The plenary of the European Parliament is expected to vote on the committee's report in early 2017."

Bryan Wood-Thomas, vice president of environmental policy at the World Shipping Council (WSC), the primary trade organization for the liner shipping industry, said that details of the European plan would not be decided for some time.

"They may adopt something, but it is not going to be clear what it is exactly and its trigger is not until 2021," he said.

"The legislation will be put to a vote by the full House in February," the European Parliament said in a press release.

"Parliament, Council and the Commission will then start the so-called 'trilogue' three-way negotiations."

Wood-Thomas said if the IMO takes some global action that is acceptable to the European Parliament, yesterday's proposal may not move forward.

However, he said, "If the European Parliament and legislative bodies were to actually put this into place, we believe what they're likely to do is create a technical framework where you could participate in the emissions trading systems, but that they would make that so onerous that it would be designed that you would of course choose their second option and the second option is that you pay money into a fund."

One complication, he said, is there are indications that the system being proposed might include emissions that are not really limited to Europe.

In addition to including ships that just trade within Europe, he said there has been indications that the emissions on a ship's last voyage into the EU and first voyage out of the EU might be included.

That might be a very short leg indeed - a quick hop across the Mediterranean from Marseilles to Tangier, or following Brexit, across the North Sea from Rotterdam to London.

Or, it may be a very long leg, extending from Rotterdam all the way back to Singapore or Shanghai.

Wood-Thomas said creating an emissions trading system on a global scale would be very difficult.

While the ICS has suggested a tax on fuel, he said, "You need a suite of mechanisms or actions that actually result in reductions in emissions in the world fleet.

If you collect money, write a check and send it outside the industry, you're not accomplishing anything."

In addition, he said the industry already has a strong incentive to reduce fuel use, and hence carbon emissions, because of the huge losses most shipowners are incurring.

That incentive will become dramatically stronger in 2020 when the allowable amount of sulfur in fuel that ships use globally will be reduced from 3.5 percent to 0.5 percent, he said.

The limit on sulfur in fuel is already lower in some Emission Control Areas (ECAs), such as the one along the U.S. and Canadian coastline.

That is expected to result in a dramatic increase in fuel costs.

The WSC said, "This global limit is estimated by the Organization for Economic Cooperation and Development (OECD) to cost between \$5 billion and \$30 billion in additional fuel costs."

(from: americanshipper.com, December 16th 2016)

INDUSTRY

CONTAINERSHIP SCRAPPING RAMPES UP, AS PANAMAX VALUES CONTINUE IN THE DOLDRUMS

Two hundred and one containerships and just under 700,000 container slots have been scrapped this year.

According to Braemar ACM, by 20 December, 699,000 teu of capacity had been sent for demolition.

This compares with 187,500 teu in the whole of 2015.

The London shipbroker added that 32 vessels (102,000 teu) had been sold for scrap in just the past 30 days.

This rapid acceleration in containership demolition – particularly of panamax vessels, whose book values have plunged by over 60% this year to be on par with scrap value – has helped to put a welcome brake on the rise of the idle tonnage fleet.



According to Alphaliner, the number of containerships in hot or cold lay-up by 12 December had dropped to 336 from 357 vessels two weeks previously.

The slight fall was not just down to scrapping, but also to an increase in charter activity in the smaller, 1,000-3,000 teu sizes, where there has been a dearth of newbuild deliveries in the past few years.

Nevertheless, at 1.4m teu the number of redundant container slots still remains higher than in the wake of the 2008/2009 financial crash, and represents 7.1% of the world's cellular fleet.

Meanwhile, the sudden collapse of Hanjin Shipping on 31 August continues to impact the larger ship sizes, with 51 vessels of 7,500 teu and above in lay-up.

Alphaliner reported that 34 ships formerly operated by Hanjin, ranging from 7,000 teu to 13,000 teu, are idle, a figure which includes 28 vessels that have been redelivered to, or recovered by, their owners.

Until next April, when the Ocean and THE Alliance vessel-sharing groups formally begin operating, "prospects remain dim" for the bigger ship sizes, said the analyst.

But it does expect a "spur in chartering activity" as the new alliances bed in.

Charter rates for all sectors continue to scrape along the bottom, but in the beleaguered panamax sector new lows are seen daily on fixtures, with carriers easily able to pick up ships to meet temporary overflow or operational requirements.

Recent fixtures include the 2010-built 4,255 teu AS Morgana, chartered by Maersk Line for 2-12 months at \$4,150 per day, and the 4,239 teu Silvia, built in 2005 and fixed by Zim for 2-12 months at \$4,000.

Anecdotal reports from brokers suggest that the \$4,000 level has been breached, and one shipbroker told The Loadstar he had fixed a panamax 'on subjects' at \$3,900 in the past week for a two-month charter with options.

The plummeting asset value of panamax ships, linked to rock-bottom charter rates and bleak employment prospects, has nonetheless created some bargain buys.

Non-operating containership owner Seaspan, which is still smarting after the collapse of Hanjin with \$46m owing for unpaid charter hire, has surprisingly entered the S&P market to snap up four 4,275 teu ships at \$5.2m each.

Seaspan chief executive Gerry Wang said: "The purchase of these vessels represents a compelling opportunity.

We purchased modern assets at a price equivalent to their steel value."

(from: theloadstar.co.uk, December 21st 2016)

LOGISTICS

NEW PUSH TOWARDS DIGITAL MANUFACTURING 'COULD REVOLUTIONISE AUTOMOTIVE SUPPLY CHAINS'

A new push towards digital manufacturing presents the global automotive industry – and its supply chain and logistics suppliers – with a major opportunity over the next two decades, according to emergency logistics expert Evolution Time Critical.

Its managing director Brad Brennan believes the integration of digitalisation could be a landmark moment for the automotive supply chain, which is already evolving rapidly to meet the rigours of a high-speed, time-contracted industry.

That presents opportunities and challenges for emergency logistics, required to support next-generation streamlined processes and reduced time to market, he notes.

According to a new report from The Society of Motor Manufacturers and Traders (SMMT), digital manufacturing presents a £74 billion opportunity for UK industry over the next 20 years, and a potentially step-change moment for the global automotive industry.

If calls for digitalisation are met, an already rapidly evolving supply chain could be revolutionised in the future, providing vehicle manufacturers globally with the ability to respond to time-contracted industry pressures by operating shortened, simplified networks that accelerate the time to market by up to 30%, he adds.

“Acknowledgement of the benefits that can be brought by a digitalised industry – embracing the emergence of artificial intelligence, automation and robotics, and human-machine interaction – could provide the automotive industry with the ability to solve the issues of conflicting lead-times and unresponsive supply chain rigidity, perfectly aligning tighter schedules and providing a robust, agile next-generation manufacturing tool,” said Brennan.

“Industry 4.0, as digitalisation has been referred to, has the potential to inspire Supply Chain 2.0.

The provision of premium freight and diverse emergency logistics expertise will play an increasing role in a dependable support network for a modernised

industry requiring faster deliveries, more frequently, with a minimised chance of supply chain failure.

“The time-sensitive pressures placed on the automotive supply chain in 2016 – where failure is not an option – is already inspiring an evolution of logistics and manufacturing trends ahead of any radical digitalisation roll-out,” continued the emergency logistics expert.

“Production idling and supply chain balancing, for example, have been devised as a solution for manufacturers wishing to operate more streamlined processes and helps prepare suppliers and logisticians for the more radical changes that could be ahead.”

Data analytics to help optimise plant efficiency and component flow, 3D manufacturing technology and instantaneously cloud-updatable designs could be able to align manufacturing requirements throughout a complex supply chain – reducing part flow, but heightening the requirement for dependable, agile supply.

“Some of our major vehicle manufacturer customers currently see digitalised



manufacturing as a way of data-analysing and sharing in an attempt to evaluate location, product flow, assembly, sequencing, tooling requirements and potential challenges of coordinating numerous suppliers; essentially drawing up a virtual strategy that avoids

potential bottlenecks and hypothetical threats to supply chain integrity,” explained Brennan.

“Time saved at manufacturing strategy conception can be augmented throughout the supply chain, ultimately leading to a reduced time to market and less wait for exciting new vehicle models.”

Brennan told Lloyd’s Loading List that the idea of Supply Chain 2.0 has not really materialised yet.

“The supply chain is rapidly developing to meet the demands of a complex and fast-moving industry, but we’re currently a long way from approaching ‘Supply Chain 2.0’, which was created as a reference to demonstrate the step-change moment that could be inspired by future widespread digital manufacturing,” he said.

“Understanding of the benefits of digital manufacturing to the industry and supply chain is emerging – and some of the software may already be available to encourage greater data analysis – but significant time and financial infrastructure investment is required before 2.0 is close to becoming a reality.”

Meanwhile, tooling requirement variance and the emergence of increased human-machine interaction could also lead to further supply chain challenges: for example, physically updating the manufacturing infrastructure.

“We have previously delivered enormous, first of their type, time-sensitive air shipments of updated tooling for vehicle manufacturers without impacting on production, and we would envisage that future digitalisation would increase the requirement of such movements,” noted Brennan.

“Widespread update of manufacturing tooling and supporting hardware would be required for the benefits of digitalisation to be felt fully, with the seamless integration of such technologies a vital aspect.”

Evolution Time Critical is a leading specialist in emergency logistics for the automotive industry.

(from: lloydsloadinglist.com, December 15th 2016)

LAW & REGULATION

EUROPEAN PARLIAMENT APPROVES EU PORTS REGULATION

Despite objection from the UK port industry, the European Parliament has approved a new regulation on EU ports, with an aim to make them more efficient and attractive to investors, and make the fees and funding that EU ports get from shipping lines and governments clearer.

A large majority voted to approve the regulation: 546 voted in favour, 140 against and 22 abstained.

This vote brings to an end the Port Package saga that started 15 years ago.

German rapporteur Knut Fleckenstein said: "After 15 years of discussion about European ports policy, we have finally found an agreement: existing port management models can be maintained and, for the first time, there is an emphasis on good working conditions, which are a major part of the competitiveness of ports and are non-negotiable for us".



He added that financial transparency is at the core of the agreement, which should facilitate the work of the commission on a "coherent state aid regime and trigger investments into ports".

The lack of clear rules on public funding of port infrastructure and charges for using it holds back investment in ports, said the EU Commission.

The new rules aim to make EU ports more efficient and attractive to investors.

These rules apply to more than 300 EU seaports in the trans-European transport network.

They include a requirement for ports to show clearly in their accounting systems the public funds they have received and to improve transparency in the way port services and infrastructure charges are set.

EU Member States would also have to ensure that an effective procedure is in place to handle complaints.

To deliver high quality services, the rules include new requirements for port service providers to ensure that employees receive the necessary training, with particular emphasis on health and safety.

These training requirements should also be regularly updated to meet the challenges of technological innovation.

Further, while the new regulation does not impose a specific management model for ports, it does lay down conditions if they wish to set minimum requirements for services such as towage, mooring, bunkering and the collection of ship-generated waste, or to restrict the number of providers of these services.

Cargo handling and passenger services will also be subject to financial transparency rules, but are exempted from those on the organisation of port services.

Earlier this year, the UK ports industry called to reject the new regulation on EU ports, fearing it would take ports back to the days of restrictive practices and the old Dock Labour Scheme.

(from: portstrategy.com, December 15th 2016)

PROGRESS & TECHNOLOGY

THE BENEFITS OF LITHIUM-ION TECHNOLOGY EXPLAINED

All operators who use pallet trucks and double stackers in at least two-shift operation and keep replacement batteries in stock should be considering the benefits of lithium-ion batteries.

That's the view of according German giants Linde, at least – the Aschaffenburg-based company says the time is now right to do so, having expanded its product range with two new warehouse trucks equipped with this forward-looking battery technology: the Linde T16L ION pallet truck with ergonomic hub and the Linde D08 ION double stacker.

Both these warehouse trucks feature a mast.

In the coming months, Linde will also be adding pallet stackers to its lithium-ion product family.

“A major advantage of lithium-ion battery technology is that interim charging is possible at any time and is in fact even expressly desirable as it extends the vehicle uptime,” explains Christophe Chavigneau, Head of Product Marketing Warehouse Range at Linde.

“Whenever it is foreseeable that the truck will be idle for more than a few minutes, the user can drive up to the charger and connect it up.”

The optionally available, side-mounted battery connector makes interim charging for the T16L ION pallet truck even easier and more convenient.

All it takes for the operator is to plug the charging cable into the socket, without having to open a lid or a flap.

During recharging, the vehicle is immobilized for safety reasons and to prevent damage to the cable due to accidental drive switch actuation.

Chavigneau dismisses concerns that the use of lithium-ion technology could pose a certain amount of risk because of the battery's high energy density, pointing out that the same rigorous safety standards are applied as in all other industrial trucks from Linde.

Thanks to the electronic monitoring of all relevant battery parameters, the trucks are switched off under strict control before a safety-critical condition can arise in the first place.

This was verified and documented prior to the market launch with a series of extensive tests.

“The system is absolutely safe when used according to specification,” says Chavigneau.



Nevertheless, it is important for users to know how to react in certain cases – something which applies just as equally to lead-acid batteries.

Four 24-volt batteries of different sizes are available for the pallet trucks.

Capacities range from 1.8 kWh to 3.6 kWh and from 4.5 kWh to 9.0 kWh.

The double stacker can be equipped with the two smaller batteries.

Selection of the battery size should be based on how much power is required for the application in question and whether interim charging is possible.

A major field of application for both the pallet truck with ergonomic lift and the double stacker is in shipping where they provide valuable help in the loading and unloading of trucks via loading ramps.

However, due to their compact dimensions, they are also popular aids when it comes to order picking in confined spaces.

The pallet truck's ergonomic lift function raises the load arms up to 675 millimetres including the initial lift to make it easier for the operator to pick up and position crates, parcels and other types of load carriers.

This means that the operator can work with a back-friendly posture.

An optional solution, which has been available for standard trucks since the beginning of 2016, provides for even more comfort and additional time savings: the automatic lifting and lowering function.

Here, two light sensors attached to the mast detect whether there are still goods on the pallet at a specific height, or if the warehouse worker has just

removed the last package and would now have to bend further down to pick up the remaining goods.

If no goods can be detected, the lift mast automatically moves upwards by up to 550 millimetres, so that the next layer of packages can be picked up and stored in a back-friendly and ergonomic way.

Conversely, if the worker takes goods out of a rack and places them on the pallet truck's load carrier, the load arms are lowered step by step, so that he can always work in the most ergonomic position.

As an alternative, an optionally available switch on the chassis enables the operator to manually control the lifting and lowering function.

Even though this is not quite as comfortable as the automatic version, the user still saves time as he does not have to keep going backwards and forwards to the tiller.

"Particularly if the truck is frequently used for picking, these are highly recommendable new extras," says Chavigneau.

In addition, the trucks come with three comfort features that are now part of the standard equipment and thus benefit these lithium-ion versions as well.



These include, firstly, maintenance-free castor wheels with integrated spring and damper which ensure stability even on uneven ground.

Secondly, a buzzer is available instead of a horn for use in noise-sensitive environments and thirdly, the emergency stop switch is placed centrally above the display, which facilitates quick access from all sides of the vehicle.

(from: logisticsbusiness.com, December 21st 2016)

STUDIES & RESEARCH

OUTLOOK IMPROVING FOR CONTAINER LINES

Things are looking up for ocean carriers that remain active after the merger and acquisition (M&A) frenzy of the past year or two, according to container shipping analyst Drewry, although new players and state support may still upset the improving supply-demand balance outlook.

With fewer global carriers and a break from ordering big new ships, the industry has been busy preparing the ground that could see the industry return to profitability, it said, adding: "It might seem counter-intuitive to hold a more bullish view so soon after one of the industry's most high-profile casualties in Hanjin Shipping and a third-quarter when financials were splattered in red ink leading to a collective operating loss of over \$1 billion.

But such has been the intensity of consolidation that there does seem to be a very high probability that better times are just around the corner, and potentially really good times when the current orderbook is delivered."

But Drewry cited two main reasons it is reluctant to get carried away with the idea that recovery is on its way.

"Firstly, we remain cautious on a general principal because carriers have a self-sabotaging streak that in the past has shortened booms and lengthened busts.

And secondly, just because it now looks like a few big carriers will have the run of the place to themselves, it does not mean that new competition won't rise out of nowhere."

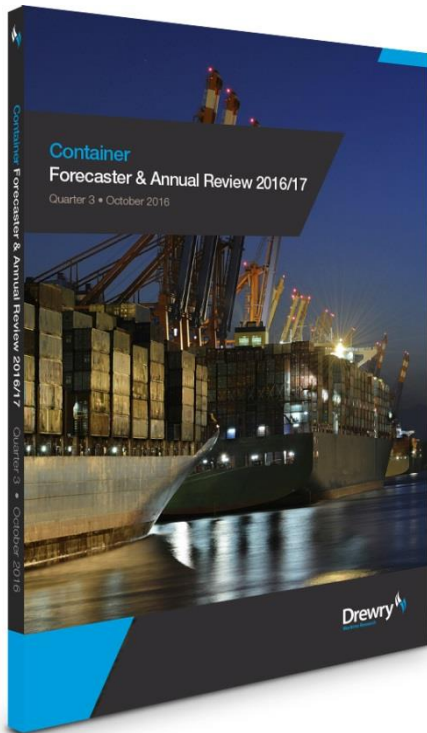
Whether carriers can be entirely pushed off the path to profitability will depend on the scale and longevity of any newcomer, or indeed an existing player with expansionist dreams, Drewry noted

"Already, from the ashes of Hanjin's bankruptcy a new entrant has emerged in Korea Line, a bulk operator that has bought some of Hanjin's Transpacific assets (excluding any vessels) for about \$30 million," it observed.

"According to reports, Korea Line will start two Asia-US West Coast services in April using 4,500 teu units, which are currently available on the charter and second-hand markets at rock-bottom prices."

Inevitably, to get a footing in the trade new entrants to some extent have to buy their way in with cheap rates, “which can have a destabilising effect on the incumbent carriers even if the newcomer only has a small share of the market”, Drewry pointed out.

“Korea Line’s entry at the same time that the new alliances are commencing operations will add yet another level of competition that will further suppress spot rates.”



It said the transpacific market had seen a number of short-lived carriers come and go in recent years.

“But even if Korea Line is just another flash in the pan, the point is that there is nothing the so-called legacy carriers can do to prevent new competition from eroding profits, even if it’s only for a short period.

So long as there is a surplus of vessels that keeps charter rates down, and fuel prices are manageable, there are almost no barriers to entry.

“Of course, the buy-in price varies from trade to trade and the ULCV-dominated Asia-Europe trade would be prohibitively high for most to even consider trying to break into.”

Aside from potential new competition, another factor that could prevent the big carriers from “reaching nirvana” is the political will that exists to grow certain companies.

“Despite the container industry’s history of losing money, some governments around the world remain keen to expand their shipping footprints, something that could push back the date when supply and demand finally align,” Drewry noted.

“State-owned Islamic Republic of Iran Shipping Lines (IRISL) has recently given the dormant orderbook a kiss of life by ordering four 14,500 teu units from South Korean shipbuilder Hyundai Heavy Industries (HHI) and has previously expressed a desire to buy much more new capacity to become a global player.”

That order was financed by the South Korean government, “who are desperate to resuscitate their ailing shipping industry, which in the last year has lost Hanjin and seen Hyundai Merchant Marine (HMM) shrink in stature as it fights to repair its balance sheet,” Drewry added.

“Unperturbed by its recent difficulties HMM has apparently set an ambitious target for 5% of global capacity by 2021, which would necessitate a serious ordering spree or takeover, the latter being most likely.”

Additionally, the Japanese and Taiwanese governments have also recently set up schemes to financially assist their shipping companies, which make their domiciled companies extremely unpredictable as they might not be subject to the same market forces, Drewry noted, “all of which suggest we should not assume that the big carriers at the top will have it all their own way”.

It concluded: “Consolidation will assist carriers on their path to becoming profitable, but conditions will still not be ideal for making huge sums until the overcapacity situation is dealt with and the barriers to entry rise to deter competition.”

(from: lloydsloadinglist.com, December 19th 2016)

REEFER

TRANSPARENCY AND E-COMMERCE THE KEY DRIVERS OF A SUCCESSFUL COOL CHAIN

Supply chain transparency and e-commerce are the key consumer-driven trends shaping the future of food logistics, according to a new study by Berlin Technical University (BTU).

A survey of 100 manufacturers, retailers and logistics companies also notes the growing importance of seasonal and regional produce, and that customers are placing greater importance on lean supply chains.

“The customer’s desire for more transparency across the supply chain has the strongest influence on logistics, as all value-added stages are affected,” said BTU research associate Benjamin Nitsche.

He added: “The development of e-commerce is influencing and changing the



entire food industry, thereby also changing the on-site food retailing sector.

Once the logistical challenges are overcome, more and more people will order food items from the

comfort of their home.”

Germany-based food logistics player Nagel-Group, which contributed to the study, told The Coolstar that e-commerce was being incorporated into its chilled and frozen food distribution network.

“Digitisation changes all areas of life, including logistics.

Therefore it has already been integrated into food logistics at Nagel-Group and forms an ongoing process of continuous development,” said Arran Osman, managing director of UK subsidiary Nagel Langdons.

Mr Osman says Nagel-Group regards e-commerce as an interesting opportunity and has begun pilot-testing delivery solutions with online retailers.

“Whoever supplies the goods to consumers needs well-reachable storage facilities and logistics specialists which provide regular replenishments, can handle the cooling of perishable food and pick the online orders if necessary,” he added.

Recently reporting a €1.7bn turnover, Nagel-Group employs 11,000 people across 100 locations and 16 countries.

And with over 6,000 trucks in daily use, the company claims to operate the largest food logistics network in Europe, with more than 100,000 daily shipments.

Other than a shift towards e-commerce, Mr Osman said the demand for frozen products was rising, while other food logistics trends differed from country to country.

“In one country we recognise a trend towards out-of-home; in another, healthy nutrition plays an important role.

If consumer behaviour and buying habits change accordingly, this can have a direct effect on supply chains,” he said.

In the UK, Nagel Langdons offers chilled, deep chill and frozen food storage and distribution from eight locations around the country.

According to food and grocery analyst IGD, UK shoppers are gearing up to spend £20.6bn on Christmas food and groceries, and IDG predicts online shopping will generate the fastest growth via a 9.3% uplift in sales.

Mr Osman said peak seasons such as Christmas required a high level of agility to meet customer requirements.

“Reaction times become shorter and the volume fluctuations become larger.

The tonnage can go up or down 40% from day to day.

Industrialised processes quickly reach their limits with this volatility.

We have been in this business for more than 80 years, so this of course gives us a planning routine to deal with seasonal peaks such as Christmas.

Having control of a large fleet and highly motivated and experienced staff at all levels helps us react to short-term changes as well as to new trends in the market,” he explained.

However, due to demographic developments, a lack of young drivers is pushing up the cost of recruitment and training, Mr Osman said, noting that employee recruitment in general was an important industry challenge.

“In order to attract new employees, Nagel-Group has already initiated measures such as a takeover guarantee for trainees, a minimum of temporary contracts and the own-training of drivers.

Moreover, in general the food logistics industry is characterised by steadily increasing volatility, which demands higher response speeds and capabilities,” he added.

(from: theloadstar.co.uk, December 16th 2016)

ON THE CALENDAR

- 24/01/2017 – 25/01/2017 Tehran 14th Trans Middle East 2017
- 23/02/2017 – 24/02/2017 Manila 9th Philippine Ports and Shipping 2017
- 22/03/2017 – 23/03/2017 Antananarivo 11th Indian Ocean Ports and Shipping 2017
- 19/04/2017 – 20/04/2017 Cape Town 17th Intermodal Africa 2017
- 18/05/2017 – 19/0520/17 Georgia 6th Black Sea Ports & Shipping 2017
- 06/0720/17 – 07/07/2017 Yangon 15th ASEAN Ports and Shipping 2017
- 28/09/2017 – 29/09/2017 Tallinn Baltic Sea Ports & Shipping 2017
- 26/10/2017 – 27/10/2017 Barcelona 5th MED Ports 2017
- 29/11/2017 – 30/11/2017 Abidjan 18th Intermodal Africa 2017

The Secretariat of C.I.S.Co. is able to communicate detailed information on the programs of all the events and how to participate.