

Wilhelmsen Ships Service

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SHIPS SERVICE

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Ships Service

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A MESSAGE FROM THE PRESIDENT:

STRENGTHENING OUR GLOBAL OFFER

With the commitment of the people in our company and a solid product and service portfolio, we have achieved growth in a turbulent market still recovering from the recession. In fact, we strengthened our product and service offering throughout 2009 and 2010, and now face 2011 in a strong market position.

In order to be our customers preferred partner we continuously look at ways to further develop our global offer. We have acquired Nalfleet, a marine chemicals company, and Eurokor, an agency and logistics company, earlier this year to strengthen organisational expertise and the number of customer solutions. The competent people and the specialised capabilities of these two companies will without doubt be a valuable addition to our global network. I am confident that this will create further value for our customers worldwide.

Wilhelmsen Ships Service has been a number one in the marine chemical business with the production and distribution of Unitor chemicals. With Nalfleet onboard, we are geared for more innovation and continued growth. In this edition you will find background stories about this acquisition, interviews with key executives in the company, as well as features on ports, products and regulations.



Best wishes,

David Tandy
President

Marine Chemicals

Wilhelmsen Ships Service acquires Nalfleet

At the end of 2010, Wilhelmsen Ships Service signed an agreement with Nalco to take over their marine chemicals division, Nalfleet. Since then, it has been “Business as usual” for Unitor Chemicals and Nalfleet, so as not to disrupt the production and delivery of chemicals to the customers.

Text: Dave Stebbing, Editor

Wilhelmsen Ships Service has been working on integrating the two brands, and the next few months will see gradual changes in the way the new marine chemicals group operates.

WILHELMSEN CHEMICALS

An early decision in the integration process was to keep both brands. Unitor Chemicals and Nalfleet are well-known brands in the market, and highly respected for their quality, and the delivery and back-up service for the customer. The production unit for these two brands will in future be known as “Wilhelmsen Chemicals”, which in turn is wholly owned by Wilhelmsen Ships Service.

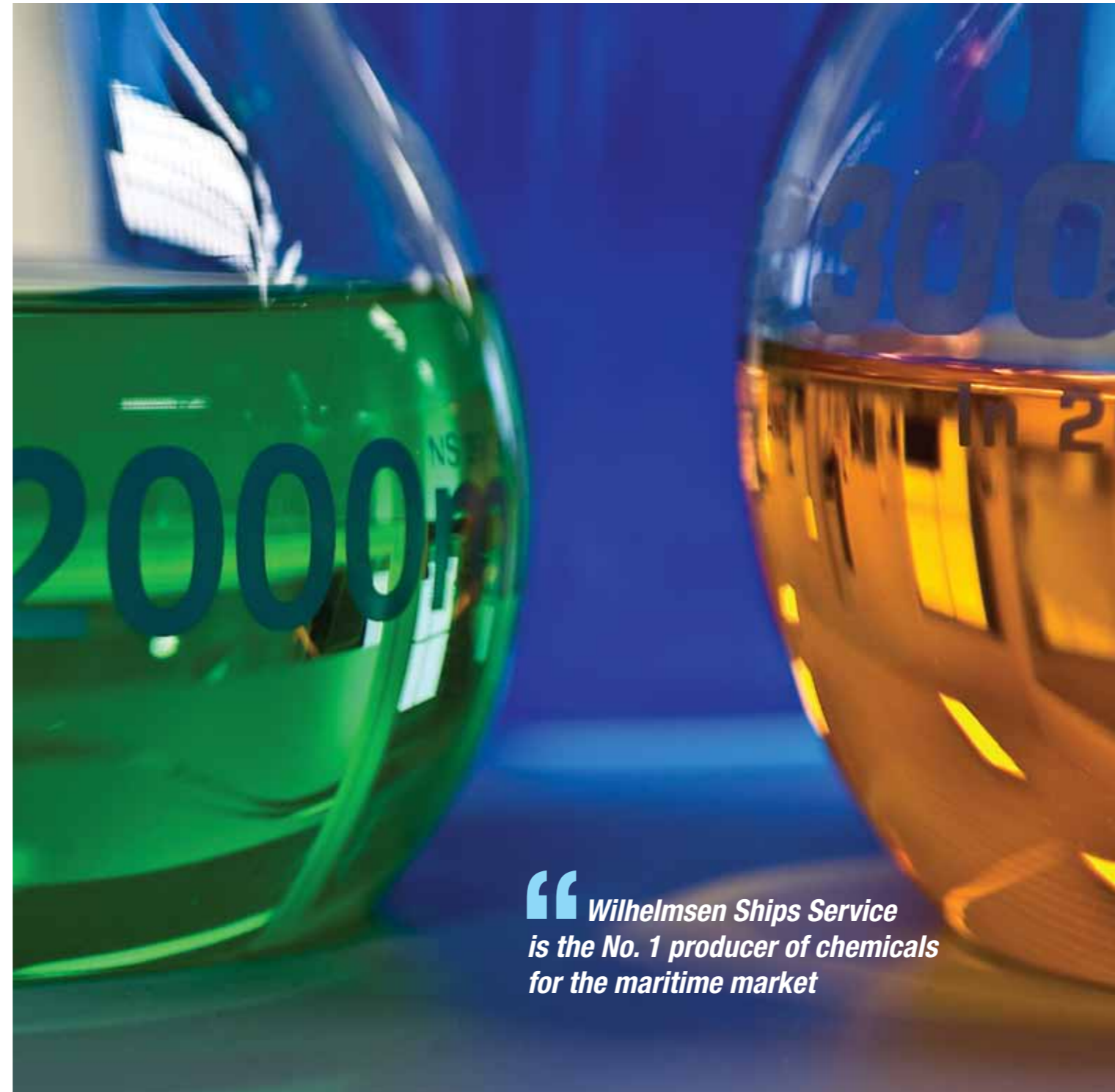
It has also been decided that production of the Nalfleet range of chemicals will move to Norway. This started on 1 April, and will gradually increase as our production lines become adapted to take over the Nalfleet formulations. Some of the Nalfleet chemicals are completely different from the Unitor products, whilst others are almost identical.

There is likely to be some overlap between the two ranges, and in order to avoid un-

necessary duplication, there will be some rationalisation of the two offers. We want to be able to offer the best of both brands to customers, and the best possible prices.



Unitor and Nalfleet chemicals will be manufactured at the same site



“Wilhelmsen Ships Service is the No. 1 producer of chemicals for the maritime market”

A WORLD OF DIFFERENCE

Why do shipping companies buy chemicals from maritime chemical companies instead of companies supplying land-based industries? What is the difference?

Although many marine chemicals are formulated specifically for a maritime environment, the biggest difference is not so much in the formulation of the chemicals themselves, but in the logistics and delivery. A vessel using a specific formulation of, for example, boiler water treatment chemicals, needs to know that it can pick up exactly the same formulation at any of the ports in the world where it operates, at very short notice. Most vessels cannot carry large quantities of a large selection of chemicals on board, so they need to know that whatever brand they carry will have standardised formulas of their products in ports around the world where they can top-up their existing supplies. As crew turnover becomes more frequent and consequently the knowledge base amongst experienced crew drops, they also need to be able to count on finding experienced chemicals experts who can advise on the best applications of products wherever they buy their chemicals.

This advanced supply and logistics exercise would obviously be difficult for a large company supplying land-based industries. Generally speaking, these companies are geared up to providing very large quantities of a limited number of chemicals. Their lead-time is usually several weeks, and they often have fixed delivery schedules, which cannot be easily adapted to meet the needs of the merchant fleet.

Furthermore, as a result of IMO regulations and the environmental demands of the industry, customers need to know that the chemicals they buy come from reputable firms with high levels of quality control and worldwide standardisation.



Wilhelmsen Chemicals

Introducing Wilhelmsen Chemicals

Unitor and Nalfleet chemicals will in future be manufactured by Wilhelmsen Chemicals, a wholly-owned subsidiary of Wilhelmsen Ships Service. The factory, which is located at a picturesque location near Tønsberg, Norway, has already taken over some of the production of Nalfleet chemicals, and it is anticipated that in time all chemicals for the two brands will be produced in the same site.

Text: Ole Wang, Managing Director of Wilhelmsen Chemicals



WHY PRODUCE CHEMICALS IN NORWAY?
People often question why we have not re-located our operations to one of the low-cost countries in the developing world. They find it difficult to believe that we can operate cost-effectively in Norway.

There are a number of factors why we are here, the first being historical. The site was bought in 1973 by Kjemiservice AS, who entered into a joint venture with Unitor in 1975. As Unitor expanded in the market, the factory gradually grew into the facility we have here today.

STABLE WORKFORCE
As we have grown, our workforce has grown with us. Some of the original employees have been with us for nearly 40 years, and the average length of employment is around 17 years.

This is the second reason why we are able to operate cost-effectively. Our employees are highly skilled and experienced, and while it is true that Norwegian wages are amongst the highest in the world, it is also a fact that the Norwegian workers as a consequence have had to become highly efficient and are today rated as the most efficient in Europe.

FACT BOX

Location:	Kjøpmannskjær, near Tønsberg, Norway
Number of production lines:	11
Number of litres produced:	250,000 litres per 8 hour shiftBulk Carriers
Number of employees in Kjøpmannskjær:	101
Throughput through the warehouse:	30 times / year

AUTOMATED PRODUCTION LINES

Another reason for our high productivity ratio is because of the sophisticated production lines the plant operates. Not only do these have the capacity to process thousands of litres per hour, 24 hours a day, but they are also highly flexible, able to switch types of products and volumes at short notice. Most of our production equipment has been tailor-made to meet our needs, and we have ready access to highly skilled engineers if we need advice on modifications or adjustments.

REGULATION CULTURE

Most people are aware that Norway has a high regard for the environment and a strong tradition of regulatory control. Our facilities are subject to regular checks by regulatory organisations such as the NSO (Norwegian Safety Organisation), DSB (Directorate for Civil Protection) and the Norwegian labour inspection authority. We don't see this as a disadvantage. On the contrary, we have gone even further, by ensuring that all our processes are governed by ISO 14001 certification, which states "... concern for the environment is integrated into daily operations at all levels.

GREEN SITE

"A visit to our site is quite a revelation for most. Although we have a large quay which can take deliveries from vessels from around the world, it is also possible to catch cod and even sea trout from the edge of the quayside.

We have residential properties and a boating marina adjoining our site, and one of the country's most popular holiday islands is just across the bridge next to the

factory. Through my window, I am lucky to be able to view some of the most picturesque scenery in Norway – a far remove from the traditional image of chemical plants that most people have in their minds."

WORLDWIDE NETWORK

From Norway, our chemicals are shipped to our own warehouses and to clients in locations around the world. As a maritime nation, Norway is a convenient base from which to distribute our products efficiently.

"As many of our customers are also extremely sensitive to the effect of chemicals on the marine environment, it is reassuring for them to know that our factory is sited in one of the most regulation-aware locations in the world."

Wilhelmsen Chemicals



Marianne Marthinsen (right) in the laboratory with Jan-Erik Jacobsen (left) and Tone Frydenlund

Researching the future of marine chemicals

To maintain the quality of our chemicals and constantly to improve our offer, Research and Development (R&D) remains a key function in Wilhelmsen Chemicals.

Text: Fred-Inge Ternes, Technical Manager

Steinar van der Meer heads up our R&D operations with a skilled team of scientists working from a laboratory in Kjøpmannskjær, Norway. He was recruited a year ago from a major oil refinery, where he had been head of inspection, focussing particularly on corrosion. "In broad terms, my job is to improve existing products, and develop new ones," says Steinar.

"As a corrosion specialist, my first task has been to examine our water treatment products. New products need to be more efficient and less toxic than previous chemicals, and we need to liaise closely with the engine manufacturers and our customers before we can bring them to the market. Furthermore, any changes that we make to our products

need to be communicated to our port sales engineers and our customers."

TRAINING AND SUPPORT

"This brings me to another major part of my job," continues Steinar. "Wilhelmsen Ships Service has a network of customer service centres around the world, each with a chemicals expert in place to advise clients with purchases and treatments. We bring these specialists to Norway every year to bring them up to date with the latest treatments, and we also run courses for customers and class societies, both here in Norway, and in other locations around the world. I am not directly responsible for running this, but I am always involved in the training, particularly with water treatment products."

WATER TESTING

"Through our "Waterproof" program, we regularly advise on thousands of boiler and cooling water analyses performed by customers to monitor chemical levels and dosage. However, increasingly we are being asked to do more detailed analysis of water samples. We are therefore in the process of introducing a water-testing service for customers who require more comprehensive tests. I am involved in the initial setting up of this service."

RESEARCH TEAM

Steinar works with a team of researchers, each with their own responsibility: Sølvi Bårnes is responsible for developing water analysis, Laboratory Manager Marianne Marthinsen is the expert product developer

of cleaning chemicals, Runar Tveiten on speciality chemicals. Others have important support functions as Kjersti Illebrekke on Health, Safety & Environment and Tone Frydenlund on laboratory testing.

"Our technical department has always been seen as one of the most innovative departments in the company, but it is also one of the most cautious. We cannot take risks with chemicals."

Steinar van der Meer

NALFLEET

"The acquisition of Nalfleet throws up some interesting challenges for us in the technical department. Our first task after the acquisition was to analyse the chemical formulas of the Nalfleet range of chemicals and compare them with our own. Norway has some of the strictest Health Safety and Environment (HSE) regulations in the world, so we had to ensure that we would be able to meet these requirements.

Eventually we would like to standardise our range of chemicals by selecting the best products from the two brands. We have now moved a good portion of the Nalfleet chemical production to Norway. This has enabled us to consolidate the supply of the raw materials that make up our products, which will lead to long term savings and better control of quality. However, none of this will happen overnight. Our technical department has always been seen as one of the most innovative departments in the company, but it is also one of the most cautious. We cannot take risks with chemicals."



Steinar van der Meer



Meet Graham Hunter, Business Director Marine Chemicals

Graham Hunter, formerly General Manager of Nalfleet and now Business Director Marine Chemicals in Wilhelmsen Ships Service, gives his perspectives on the way ahead.

Text: Don Pyle, WW Corporate communications

THE OPPORTUNITIES

When two well-established brands start working together, there are bound to be new opportunities opening up. There are many product and application areas where we can do a lot more, for example waste water, tank and cargo hold cleaning and fuel additives. These are driven by legislation, which makes them even more interesting. There is also the new technology aspect which includes next generation environmental products, application equipment and use of the internet to support and train customer staff.

ASPIRING TO LEAD

The way to take the lead in this market is to offer continuously improving products and services, combining the best of both worlds. Training is a key part of this: we want to make

sure that our people out there are the best. We aim to maintain our market leadership because customers want to work with companies that bring new technology to the market. This is especially pertinent when new legislation is looming; it gives the customers more peace of mind to know we have the capacity to understand and meet their needs.

GRAHAM HUNTER

Born: 25 January 1951.

Position: Business Director Chemicals, Wilhelmsen Ships Service from 1 Feb. 2011

Background: General Manager in Nalfleet from 1999

Education: Marine Engineer

Family: Twin boys and a daughter

Hobbies: Anything competitive: plays squash, hockey, golf

Ships Agency



SAVING TIME, SAVING BANK CHARGES

Text: Chris Raymond, Ships Agency Coordinator

seaspan have made use of our innovative float account offer to avoid having to make several payments for every port call

“ We have already noticed dramatic improvements in efficiency

When SeaSpan asked Wilhelmsen Ships Service to help them overcome the difficulties in handling port calls for their 68 container vessels, they were looking for a company that could simplify the process of dealing with a variety of ships agents around the world, with unpredictable service levels and costs. However, through our “Ships Agency Re-Defined” offer we were able to offer them many more ways of

improving efficiency and saving money.

Float account

All ships agents require an up-front payment in advance to cover the anticipated cost of a port call. Several cash transactions are made for every port call, if one includes payments for supplementary Disbursement Accounts and settling the final balance. This can become very

complicated, as shipping companies operating in several ports around the world have to operate multiple bank accounts, using several different currencies, accruing bank charges for all the transactions associated with every port call.

A float account does away with all these complications. SeaSpan have just one account with Wilhelmsen Ships Service, where they deposit

a fixed amount to cover a month’s anticipated port calls. Wilhelmsen Ships Service uses this amount to cover all the expenses for SeaSpan’s vessels, wherever they call in the world. The saving in time and bank charges is dramatic – their accounting has been reduced from several hundred transactions world wide per month to just one.

Seaspan Ship Management Ltd. is based in Vancouver, B.C., Canada. “We have signed a two-year contract, which will amount to up to 500 port calls per year worldwide,” said Raj Dewan Procurement and Technical Services Manager from SeaSpan. “We have already noticed dramatic improvements in efficiency, particularly through the use of one global agent who manages all our port call requirements worldwide from one office in Houston.”

WILHELMSEN SHIPS SERVICE ACQUIRES EUROKOR LOGISTICS

This acquisition, which was finalised on 1 April, will further strengthen our logistics and agency operations in Central Europe, specifically by adding freight forwarding and barging to the customer offer in this area.

Text: Bård Bjørlov, VP Europe

Acquiring Eurokor Logistics is another step towards fulfilling our growth ambitions. As a customer focused company, we are continuously adjusting our organisation to meet our customers’ needs. The Netherlands and Belgium are strategic key locations for our customers and Eurokor Logistics will be a valuable addition to our logistics expertise in this market.

The former Managing Directors of Eurokor Logistics, Piet Kok and Stan Claes comment, “We are pleased to now join forces with Wilhelmsen Ships Service. We believe this is a great opportunity for our organisation, and it will enable us to offer a wider range of services to our customers”.

Wilhelmsen Ships Service already offers ships agency services in The Netherlands and Belgium, but with the addition of Eurokor Logistics the company will now have the ability to offer customers a complete value chain from port to site.

Ships Spares Logistics

THE WAY AHEAD IN MARITIME LOGISTICS

The new head of Maritime Logistics reflects on future opportunities.

Text: Vidar Hole, Business Director Maritime Logistics



Running the Maritime Logistics business in Wilhelmsen Ships Service is one of the most fascinating jobs that anyone could wish for in the shipping world, especially during the present dramatic changes in the flow of world trade. The company's global network and competence is a fantastic platform for developing new maritime logistics solutions and new customer segments.

MORE THAN JUST LINER TRADE

A core part of my job is to ensure that our existing container and liner logistics continues to run smoothly. However, our customers are generally looking for more than this. They

want to see if we have innovative ways of doing things differently. Fortunately, I have

“Running the Maritime Logistics business in Wilhelmsen Ships Service is one of the most fascinating jobs that anyone could wish for in the shipping world.”

a creative team of lateral thinkers to work with who have a track record of developing innovative solutions.

FIRST MILE TO LAST MILE

We will take some of the existing programmes and develop these further. The most exciting to work with at present is the Ships Spares

Logistics offer, “First Mile to last Mile”. This is a great example of a concept making use of the Wilhelmsen Ships Service global network in conjunction with the infrastructure put in place to service our other business streams.

PROJECT LOGISTICS

We currently manage complex cargo movements as separate projects in different locations around the world. It makes sense to draw all this expertise together and draw on each other's expertise and experience. We will standardize, professionalise and globalise this process in order to provide a world class offering for selected market segments.

CUSTOMER SERVICES GEAR UP TO MEET SHIPS SPARES LOGISTICS DEMAND



As the Ships Spares Logistics concept is becoming more popular amongst our customers, the Wilhelmsen Ships Service Customer Services teams globally have responded by employing more logistics specialists, and extending training. The result has been an even better SSL service for our customers.

Text: Dave Stebbing, Editor

Trine Haug Hansen, International Customer Services manager commented on the expansion. “From the start of our Ships Spares Logistics promotion, we decided that nothing could be left to chance,” says Trine. “We have set ourselves the task of handling every delivery professionally, getting every delivery out on time to the right place, and to do that we need excellent customer service support. In every Customer Service office we now have a Ships Spares Logistics specialist. All of them have extensive logistics expertise, and some have specific experience in ships spares, but we have still spent time training them in the concept, ensuring that they fully understand the door-to-deck process, and particularly the benefits to customers of arranging the last mile delivery right on board the vessel.”

“The training continues,” says Trine. “We have held three training seminars in Germany, and still have two more planned for the rest of this year in other locations. As our specialists become more experienced, the training shifts away from direct instruction to the sharing of best practices. This also gives us the opportunity to pass competence on to other members of the Customer Services teams, such as our dedicated Ships Spares Logistics Coordinators. This effectively raises the competence of all the participants to the level of the most knowledgeable.”

So far, the results have been very positive. Of 3500 deliveries made since the concept began, practically all of them have been delivered on board, on time. On the few occasions where the delivery was delayed, we were able to notify the customer in time, and make delivery to the next port of call.

That is a track record to be proud of!

VIDAR HOLE

- Born:** 14 September 1963
- Position:** Business Director, maritime Logistics
- Background:** Naval logistics since 1992. Vice President Shipping and Logistics Department, Wilh. Wilhelmsen ASA since 2006
- Education:** Economics and Business Administration (PhD level)
- Family:** A girl and a boy
- Hobbies:** Restoring my vintage Willy's Jeep



Ships Agency

Wilhelmsen Ships Service assists customers with **EU ADVANCED CARGO DECLARATION**

The new European Advance Cargo Declaration took effect on 1 January 2011, requiring all carriers to declare cargo information to customs for goods being imported to or exported from the EU, Switzerland and Norway

Text: Carsten Torbergsen, Business Manager, Ships Agency



“ The EU ACD must be filed through the Import Control System (ICS) which is individually adopted by all EU member states.

Following the terrorist attack of 9/11, this new rule based on the “U.S. 24 hour rules”, is set to protect EU Member States with improved control of moving goods. The rules apply to all imported and exported cargo from the EU. While the American ACD is made through a single electronic portal when entering U.S.

waters, the EU ACD must be filed through the Import Control System (ICS) which is individually adopted by all EU member states. This requires all shipping companies to set up computer systems connecting them to the customs offices within the EU. Carriers failing to comply run the risk of being penalised by

individual member states in accordance with their national legislation.

“Wilhelmsen Ships Service has done a customer impact analysis of the European ACD ruling and all our customers can rest assured that we have the systems and dedicated

teams in place to make sure they are fully compliant with this regime,” explains Frederic Fontarosa, Business Director Ships Agency and Bunkers for Wilhelmsen Ships Service.

“With the new Ships Agency Re-Defined offer, our customers have learnt to expect pre-

mium agency services from us. We have the expertise and processes not only to ensure that our customers are compliant at all times, but we also help them improve their operational efficiency.”

For more information on the new regulation,

please visit: Official Journal of the European Union.

Please contact the Wilhelmsen Ships Service local port office in your first EU port call or your Wilhelmsen Ships Service Account Manager to get assistance with the ACD.

REGULATORY PRODUCTS AND SERVICES

Some foam concentrates DO NOT PUT OUT FIRES

In 2009 (MSC/Circ 1312) the IMO revised the testing requirements for protein-based alcohol-resistant (PB AR) foam concentrates, as it was discovered that some older types of PB AR foam concentrates are not compatible with a number of chemicals and could therefore fail to extinguish a fire in the case of an emergency. It is anticipated that many, if not all of the foam concentrates (mainly protein-based) currently in use onboard ships may fail to pass tests in accordance with the new test standard and may have to be replaced.

Text: Stavros Fountas, Product Marketing Manager Safety

It is important that fleet operators ensure that they undertake sample testing of their existing foam concentrates, to ensure that results are correctly analysed. In the event of a sample failing the tests, their foam concentrate stocks should be replaced. They can also perform a small-scale fire test, which is now required for Protein Based foams. An in-

spection will ensure that their foam products meet the MSC/Circ 1312 directive.

Wilhelmsen Ships Service stocks foam concentrate in twenty main depots around the globe so the company is swiftly able to respond to market demands. The routing of customer enquires is simplified by our single

point of contact for this service, ensuring that supplies are available globally.

“Our decision to stock globally and expand the small fire test capability to support our customers is proving to be a real benefit to customers.”

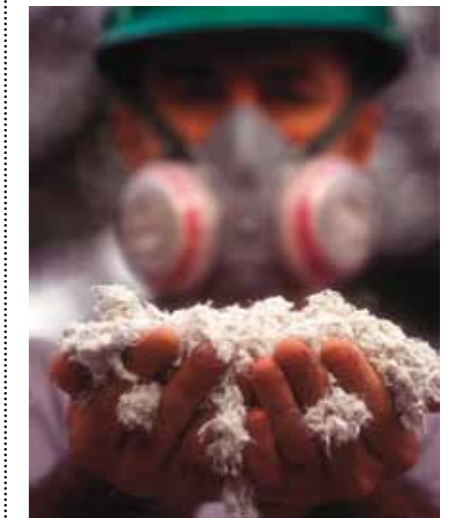
If a small scale fire test is required for a foam concentrate on board a vessel, we can perform the test, and send the test results to the customer within three weeks of the day of the sample's delivery to mutually agreed port.

A number of vessels' foam certificates will expire during 2011 and an increasing num-

ber of Flag States and Class Societies are adopting MSC 1312. Our decision to stock globally and expand the small fire test capability to support our customers is proving to be a real benefit to customers.

Asbestos banned ONBOARD SHIPS

Any use of asbestos onboard ships, is now prohibited by the International Maritime Organisation (IMO).



From 1 January 2011 it is totally prohibited to use asbestos in any form onboard new and existing vessels.

The ban applies to any new installation and any repair or maintenance. It is even prohibited to use spare parts that are already purchased and stored onboard, if asbestos is a component of the parts.

This new decision bans all use in order to make the working environment safer for crew-members, ship, shipyard and recycling workers, surveyors, inspectors etc. The previous IMO decision, from 1 July 2002, only limited the use of new asbestos.

Guide to gases

UNICOOL RANGE EXPANDED TO MEET CUSTOMER DEMANDS

Introducing Unicool R-422D and Unicool R-427A

Text: Sten Rath, Product Marketing Manager Refrigerants



As ozone-depleting refrigerants are in the process of being phased out around the world, vessels are changing their refrigeration systems to meet the new legal requirements. Through a series of activities like "Catch R-22", we have prepared our industry for this change.

Shipping companies need to ensure future availability for their preferred solution. The challenge for our business is to navigate through the jungle of replacement alternatives offered from the world-wide chemical industry. After performing in-house tests, we decided on Unicool R-417A as a cost-efficient option for replacing R-22 in direct expansion systems across a variety of applications.

However, although Unicool R-417A is suitable for customers that prefer to use a single alternative, there are several operating vessel types (such as passenger ships) that call for optimal performance in a variety of large cooling system applications. In order to stock the ideal replacement alternative for each system, some customers need to carry several different types of refrigerants onboard.

Acting on such requests we expanded our range to include Unicool R-422D (ICEON® 29 by DuPont) and Unicool R-427A (FORANE® by ARKEMA). For customers who now have different refrigerant types on board the same vessel, all Unicool cylinders are clearly colour-coded and labelled to prevent the crew from charging the wrong gas into a system.

Unicool R-417A Product number 593 905637
Unicool R-422D Product number 593 905710
Unicool R-427A Product number 593 905708

CARBON DIOXIDE

Nowadays CO₂ (carbon dioxide) has acquired a "bad" reputation because of its Global Warming Potential. However, CO₂ (usually used in gas form) has many very useful applications.

Text: Eddy Scheepers, Senior Technical Purchasing Manager

Carbon dioxide is an essential ingredient for life on earth. Despite the fact that there are only about 400 ppm CO₂ in the atmosphere around us, this is still enough for all green plants to live on. They convert CO₂, water and sunlight into carbohydrates and oxygen and grow to feed animals and humans.

BASIC INFORMATION

Under ambient temperature and atmospheric pressure, CO₂ is a gas and 1 litre weighs 2 grams. It is transported mainly in gas cylinders (liquid phase) or as a solid known as dry-ice.

PRODUCTION

Production of CO₂ on industrial scale is done mainly by combustion of fossil fuels, conversion of natural gas into hydrogen and CO₂, fermentation of sugar (breweries) and decomposition of limestone (CaCO₃) during the manufacturing of lime (CaO).

Carbon dioxide is widely used throughout industry. Because of its inert and non-flammable properties, and its relative low price, many of the applications are related to this.

APPLICATIONS ON VESSELS

Although many applications exist, not all of these are used onboard ships. The most common uses are listed below.

- **Fire fighting.** This is a well known application because the gas is inert. It extinguishes flames because it replaces oxygen needed for combustion. Because it forms liquid when compressed above 5 bars, much more gas can be contained in a cylinder compared with normal compressed air. Onboard most vessels we find numerous small extinguishers but also large fixed systems for protection of the cargo holds and the engine rooms. These large systems can contain several tons of CO₂.
- **Water treatment** (pH-control) onboard of modern cruise ships is a recent development. These ships have high demand for fresh (potable) water and cannot rely on taking on water in each port they visit: the consumption is too high. The production of water onboard is done onboard by two methods; reverse osmosis or using evaporators. The osmosis process depends on semi permeable membranes to separate the pure water from the salts and other minerals found in seawater. The evaporators basically boil the seawater after which the vapour is condensed. In both cases very pure water is produced. This pure water is however very corrosive. By running the water over limestone, the water absorbs calcium ions and thus increasing the hardness of the water, reducing its corrosiveness. Finally the acidity (pH) is adjusted using CO₂. The process is fully automatic and much easier to control than using aggressive liquid acids.

- **Food protection.** Certain types of food are packed and transported under a CO₂ blanket keeping the food fresh for longer.
- **Beverages.** The most well know application in our daily life for fizzy drinks like beer and soft drinks. Already invented in 1772, it was noted that when CO₂ was added to water, a light acidic water was formed we still know under the name "soda water".

Every year, Wilhelmsen Ships Service provides enough CO₂ to the cruise industry to carbonate 59,000,000 litres of beer and fizzy drinks!

- **Welding.** For the welding of mild steel, wire welding using CO₂ as a shielding gas is often practiced. Although CO₂ at the arc temperatures is not inert, the effect on the quality and properties for mild steel is limited. The effect of controlling the welding process is more important.

OTHER APPLICATIONS IN INDUSTRY

CO₂ is widely used in industry in other applications.

- Dry cleaning of clothing can be done with liquid CO₂. Its strange chemical properties enable oil and fat to dissolve easily, and it is much more environmental friendly and less toxic than the traditionally used organochlorides.
- A strange application is its use as an Asphyxiant. In some countries, cattle are killed by exposing them to high concentrations of CO₂.
- By enriching the atmosphere in green houses with CO₂, the growth of plants can be stimulated and higher yields can thus be achieved.
- The solid form of CO₂ (dry-ice) can be produced in the form of blocks or pellets. Dry-ice maintains a temperature of -78 °C (-108 °F). Typically this is used in insulated boxes for small shipments when other cooling methods are not practical.

THE DANGERS

Good ventilation is vital when working with CO₂. Just 0.5% of CO₂ in the air is considered unhealthy, at which levels humans will show signs of drowsiness. By the time it reaches 10% it can be lethal. As it is heavier than air, the odourless gas will collect along the floor, and in low-lying sections of vessels, such as tank tops and engine rooms. Good safety training for crew, and the provision of adequate and up to date EEBD-sets (Emergency Escape Breathing Devices) is essential for onboard safety.

CO₂



Port Mobile, Alabama USA

A day in
the life...



ALEC MAY

MANAGER SHIPS AGENCY MOBILE,
ALABAMA, USA

“ We are a 24/7 business, so good communication is the key to keeping our customers happy.”

Text: Dave Stebbing, Editor

I had the honour of joining the Wilhelmsen Ships Service Mobile office in July 2001 as a Marine Agent. I took over as Marine Manager in 2006.

How do you spend your day?

My typical day starts by answering emails from the night before, and updating terminals and principals of the vessels' prospects. I ensure that all crew changes, spares, bunkers, cash to master, and all other items for a vessel's port call are arranged and executed in a timely manner. I continually update VOSS (our vessel operating software system) with any expenses that might have occurred during the night and ensure that the funds are accounted for for each vessel. Most importantly, I make sure that the customers and principals are happy

by keeping them up to date on the progress of their vessels with continuous communication and follow-up service.

How do you divide up the work?

I alternate the vessels between the agents by dividing up the work as the vessels call on the many ports that we handle. I appoint an agent to the vessel and that agent handles that vessel from start to finish. This ensures that the principal/vessel will have the same point of contact during their port call and will always know who they are dealing with. This also helps to ensure that mistakes don't occur during the port call, by making sure that nothing falls through the cracks when information is given to the wrong agent or by missing information when dealing with more than one agent.

“ I believe that giving a principal or vessel operator the personal touch, and making that extra effort, is the most important reason for our company's success in this region.

Wilhelmsen Ships Service in Mobile

We have quite a small office in Mobile, with just three employees. The office was opened in 1998 specifically to handle the WWL Vessels, amounting to twenty four (24) ships a year. Since then, the business has grown to around 160 vessels a year, and covers all the ports in the vicinity, including Panama City (Florida), Pensacola, (Florida), Mobile (Alabama), Pascagoula (Mississippi) and Gulfport (Mississippi).

Our office is so diversified that we have handled almost every type of vessel that floats. We have also handled

heavy lifts, as well as several dry dockings of cruise ships, which is the hardest port call that an agent can undertake.

“Being a bit smaller than the other two main ports in the region, New Orleans and Houston, it is easier to do business in Mobile.”

I believe that giving a principal or vessel operator the personal touch, and making that extra effort, is the most important reason for our company's success in this region.

Is Mobile a popular destination for crews?

Mobile is not the hottest entertainment port in the Gulf, but it is a well organised port which is easy to get in and out of. There are good communications with the rest of the USA and good

shopping in close vicinity to the port. It can be difficult for anyone without a TWIC (Transportation Worker Identification Card) to get into restricted areas, but as our agents have all done the escort training, we are authorised to accompany visitors to TWIC restricted areas without any difficulty.

How does Mobile compare with other ports?

Compared with the other ports in the Gulf, we are certainly the most diversified. Being a bit smaller than the other two main ports in the region, New Orleans and Houston, it is easier to do business in Mobile, and the terminals are more flexible to deal with. There is a lot of competition for agency business, which is good for the customers of course, but there is plenty of work to keep us all busy, particularly husbandry work.

Although ships agency work might appear to an outsider to be fairly straightforward, repetitive work, in reality there is never a dull moment, and you never know what challenges are going to pop up next.

PORT IN SHORT

- 9th largest United States seaport in total trade – 67.6 million tons per annum
- Harbour; 40 ft. Theodore Ship Channel
- 33 Nautical Miles to Sea Buoy and the U.S. Intracoastal Waterway
- 5 Class-one Railroads (On Port)
- Access to 15,000 miles of barge lanes, via the Tennessee Tombigbee Waterway, to the Great Lakes, Upper Mississippi, Ohio and Missouri river systems and the Intrac-oastal Waterway
- 41 berths
- 2 major ship yards
- 1,295 Vessel Calls p.a. (Portwide)
- 22.4 Million Tons of tonnage handled
- 121,803 TEUs of containers transhipped
- 107,181 Rail Cars handled

IMPORTS:

Containers Coal, Aluminium, Iron, Steel, Copper, Lumber, Woodpulp, Plywood, Fence Posts, Veneers, Roll and Cut Paper, Cement, and Chemicals.

EXPORTS:

Containers Coal, Lumber, Plywood, Woodpulp, OSB, Laminate, Flooring, Roll and Cut Paper, Iron, Steel, Frozen Poultry, Soybeans, and Chemicals.

WILHELMSEN SHIPS SERVICE IN MOBILE

ADDRESS:

Visiting address: Regions Tower851 East I-65 Service RoadSuite 1050 Mobile, Alabama 36606
TELEPHONE 24 HRS
(+1) 251 471 2661

OFFICE OPENING HOURS

Monday - Friday 08:00- 17:00



News clips

Network update

CELEBRATING THE FIRST 150 YEARS



The Wilhelmsen story began in 1861 in the small coastal town of Tønsberg, Norway.

During the next 150 years the company developed into a global maritime industrial group with three main segments - shipping, logistics and maritime services.

But 150 years is more than time. It is an unbroken story of ships criss-crossing the world's oceans. It is thousands of men and women providing the best customer service. Not least, it is a century and a half of memories.

These memories form the backbone of the Wilhelmsen culture, a culture which extends to every branch of the business, in every part of the world.

We in Wilhelmsen Ships Service are proud to be a part of this history, and treasure the cultural values that we have inherited.



See you at Nor-shipping

We will celebrate our 150 years of experience in the maritime industry and bring you the latest news in ballast water treatment, lifesaving, ships agency services and maritime logistics. Come and experience the "Next Generation Shipping" at our stand E03-06.

Do you want to book a meeting or receive a free visitor ticket? Please contact wss.marketing@wilhelmsen.com, or your local Customer Services.



FUTURE EXHIBITIONS

Please visit us at the following exhibitions:

Coaltrans Asia
Bali, Indonesia, 29 May - 1 June

Navalshore
Rio de Janeiro 3 - 5 August

CHANGES IN CONTACT DETAILS OF SOME OF THE OFFICES IN OUR WORLDWIDE NETWORK:

BULGARIA
Varna
New Address
54 Osmi Primorski Polk Blvd,
Level 4, Office 17-18, 9000, Varna

ITALY
Genoa
New office number
0039 010 6142100

POLAND
Szczecin
New Address
ul. Kotwiczna 13
70- 673 Szczecin
ph.: +48 91 88 13 220

TUNISIA
Sousse
New partner for product deliveries
Contact Port de Bouc, France

TURKEY
Izmir-aliaga
New office
Kültür Mahallesi 246 Sokak,
No:15 Kat: 3, Izmir-aliaga
Tel: (232) 655 05 04 - 05
Fax: (232) 655 05 03

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HOW CAN WE HELP YOU?

Did you know that you can contact us 24 hours a day at any of the centres listed below? You can use the map on the home page of www.wilhelmsen.com/shipsservice to find all the contact details of your closest Customer Services, or check in your Network Directory booklet.

THE E-MAIL ADDRESSES OF CUSTOMER SERVICES ARE AS FOLLOWS:

CENTRAL EUROPE
wss.belgium.cs@wilhelmsen.com
wss.germany.cs@wilhelmsen.com
wss.netherlands.cs@wilhelmsen.com
wss.uk.cs@wilhelmsen.com
wss.switzerland.cs@wilhelmsen.com

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Wilhelmsen Ships Service has the world's largest maritime services network, with 4,600 marine professionals servicing 2 200 ports in 125 countries. We supply safety and environmental services, Unitor marine products, Nalfleet marine chemicals, maritime logistics and ships agency to the maritime industry.



If you have any questions, comments or suggestions regarding the contents or presentation of this publication, please send them to The Editor, wss.marketing@wilhelmsen.com. This is a customer magazine, and we want to include the sort of information that you most want to read, in the way you want to read it.



**Wilhelmsen
Ships Service**