Brigantine Xiamen Depot: Open for Business

Brigantine Group is pleased to announce the opening of a new depot facility in Haicang, Xiamen. The new depot facility is situated outside the Haicang Bonded Zone.

The opening of the Xiamen off-dock depot and repair facility, compliments the existing on-dock repair service operation in Xiamen Songyu Container Terminal (XSCT), making Brigantine the first full-serviced, on-dock and off-dock EMR service provider in Xiamen.

Brigantine aims to provide its clients with professional service wherever their containers end up. Brigantine reduces the risk of costly 'trial & error', associated with trying new vendors, and also promotes economies-of-scale savings, critically needed in these trying times.

With more than 8,000 TEU daily storage capacity, 60 repair slots and 2,000 units of monthly repair capacity for dry EMR, the facility also offers 36 reefer power plugs and a brand new full-service reefer foaming shop. The depot offers a broad variety of services, including container storage, dry and reefer container repair, cargo worthy quarantine inspection and Pre-trip Inspection (PTI). The facility is open 24 hours a day, 7 days a week.

For more information on Brigantine Xiamen services, please visit www.brigantinegroup.com or contact Mr. Max Ye at +86 138 5007 7685.

Welcome!

This month is our eighth news letter.

Each month offers a snap shot into different aspects of Brigantine's various business activities.

This edition continues with our third Health and Safety quiz, where you can find out your knowledge in this area and will receive a prize if you get all of the answers right. In "Industry Knowledge Corner", we offer insight into some common industry jargon, so you are better armed verses your competition. Knowledge is power!

We thank you, our valued customer and business partner, for your on going support.

Yours faithfully,

John Brennan
Managing Director

Inside this issue

External Recognition — Brigantine's Constant Care for People

Brigantine's Safety Management System was honorably awarded by Hong Kong Occupational Safety and Health Council in 2009

Constant Care for People has always been a key element throughout Brigantine's key management processes since the company was founded in 1956. With over half a century's effort, and especially since year 2000 when Brigantine introduced a systematic tool OHSAS18001, the concept of Constant Care for People in Brigantine continues to be realized.

Secretary for Labour and Welfare, Mr Matthew Cheung Kin Chung, GBS, JP, gave the opening speech

For many years, we focused on continuous internal improvement. As our efforts on safety progressed, we branched out our benchmark to external parties. In October 2009, we were afforded the chance to participate in vying for an award from the Hong Kong Occupational Safety and Health Council, and we jumped at the opportunity to compete with the big boys on the block.

The Hong Kong Occupational Safety and Health Award is a major and renowned occupational safety and health promotional activity jointly organized by the Occupational Safety and Health Council, the Labor Department and other concerned bodies. Their aim is to recognize organizations with outstanding achievements in occupational safety and health, and thereby promote greater HSSE standards across all industries, both private and public. The Award also provides a platform for cross sector exchanges between very different types of businesses and state agencies on best practices and strategies to raise QSH standards in Hong Kong.

There were over 200 companies from various industries competing in this Award, in eight different categories:

- Safety Management System Award
- Safety Promotion Award
- Safety Performance Award
- Safety Enhancement Program Award
- The Hong Kong Federation of Insurers Award for Excellence in OSH
- OSH Annual Report Award
- Catering SMEs Sponsorship Scheme OSH Award
- Work Safe Behavior Promotion Award

As a newcomer to participating in this competition, Brigantine chose to compete in the Safety Management System (SMS) Award. Our first step was to submit all our application supported with various documentation about our SMS for the panel judges' assessment. Then we were visited by the panel judges' for a rigorous on-site assessment. Finally, Brigantine was asked to make a best practice presentation to HSSE experts during the Awards ceremony.

President of the Chinese Manufacturers' Association of Hong Kong, Mr. Paul TS Yin, SBS, JP, presented the award to Brigantine's Managing Director, Mr. John Brennan

Brigantine was a finalist alongside reputable government, large public utility and giant organization, namely Hong Kong Housing Authority, Hong Kong Electric and Fedex. We proudly received the Meritorious Award. It was an outstanding result on our first entry to this competition.

This Award acknowledges our past performance, but true to the goal of the competition, we also came away with some best practices from other industries which we can implement and improve our processes. There is no room for complacency, and Brigantine will continue to do nurture an OSH culture with our employees, suppliers and business partners.

Grand Opening of Marine Services Shenzhen Office and Workshop

In order to deliver superb and high-quality service to our customers, our Marine Services Shenzhen office and workshop has relocated to Terminal Office Building and depot area at Yantian Port on 19 October 2009.

Our new office and workshop are within walking distance from Yantian Port and also from other Brigantine unit offices located at Harbour Building.

A “Bai Sun” ceremony led by David J Schaus, Head of Marine Service, was conducted on 21 October 2009 to bless the safety of colleagues and also smooth running of daily operations at this new office and workshop.

Our New Office Contact & Address:

Address : Room 315-316, YICT Terminal Office Building Shenzhen 518115, China
Office Tel : +86 755 2529 3495
Office Fax : +86 755 2529 2504
Email : GCABRGMARMRS@brigantinegroup.com

Industry Knowledge Corner

Large vessels tend to have both two and four stroke diesel engines. What is the difference?

Diesel Engines

A diesel engine is an internal combustion engine that uses the heat of compression to initiate ignition to burn the fuel, which is injected into the combustion chamber during the final stage of compression. This is in contrast to a petrol/gasoline engines which use the Otto cycle, in which a fuel/air mixture is ignited by a spark plug.

Invented in 1892 by German engineer Rudolf Diesel, it was based on the hot bulb engine design and patented on February 23, 1893. Diesel engines have the highest thermal efficiency of any internal or external combustion engine, because of their compression ratio. Low-speed engines diesel engines thermal efficiency exceeds 50%.

Diesel engines are manufactured in two stroke and four stroke versions. They were originally used as a more efficient replacement for stationary steam engines. Since the 1910s they have been used in submarines and ships. Use in locomotives, large trucks and electric generating plants followed later. In the 1930s, they slowly began to be used in a few automobiles. Since the 1970s, the use of diesel engines in larger on-road and off-road vehicles in the USA increased. As of 2007, about 50 percent of all new car sales in Europe are diesel.

Two Stroke Engines

A two-stroke engine is a combustion engine that completes the thermodynamic cycle in two movements of the piston compared to twice that number for a four-stroke engine. This increased efficiency is accomplished by using the beginning of the compression stroke and the end of the combustion stroke to perform simultaneously the intake and exhaust (or scavenging) functions. In this way two-stroke engines often provide strikingly high specific power.

Invention of the two-stroke cycle is attributed to Scottish engineer Dugald Clerk who in 1881 patented his design, his engine having a separate charging cylinder. The crankcase-scavenged engine, employing the area below the piston as a charging pump, is generally credited to Englishman Joseph Day (and Frederick Cock for the piston-controlled inlet port).

Main engines for large container vessels are often two-stroke diesels.

Four Stroke Engines

Internal combustion engines in cars, trucks, motorcycles, aircraft, construction machinery and many others, most commonly use a four-stroke cycle. The four strokes refer to intake, compression, combustion (power), and exhaust strokes that occur during two crankshaft rotations per working cycle of the gasoline engine and diesel engine.

The cycle begins at top dead center (TDC), when the piston is farthest away from the axis of the crankshaft. On the intake or induction stroke of the piston, the piston descends from the top of the cylinder, reducing the pressure inside the cylinder. A mixture of fuel and air is forced (by atmospheric or greater pressure) into the cylinder through the intake (inlet) port. The intake (inlet) valve (or valves) then close(s), and the compression stroke compresses the fuel–air mixture.

The air–fuel mixture is then ignited near the end of the compression stroke, usually by a spark plug (for a gasoline or Otto cycle engine) or by the heat and pressure of compression (for a Diesel cycle or compression ignition engine). The resulting pressure of burning gases pushes the piston through the power stroke. In the exhaust stroke, the piston pushes the products of combustion from the cylinder through an exhaust valve or valves. The largest and intermediate size diesel engines are usually two stroke diesel engines, requiring scavenging air pumps or blowers.

On large container vessels auxiliary engines are often four stroke diesels.

*source: Wikipedia

Brigantine Workshops Become Eco- Friendly by Adopting Energy Efficient LED Lights

As one of the major energy expenses, lighting constitutes about 20% of the total energy cost for normal commercial buildings. Extensive research on energy efficient lighting systems has been done over the past decade, showing that electronic ballast and LED lighting are perhaps the best places to take advantage of energy efficiency.

The General Maintenance team, an internal function of Brigantine's Yard Equipment Management team, has been looking into ways to reduce energy costs for the group, but also reducing Brigantine's carbon footprint. In recent years, the team has done some major changes including the retrofit of all fluorescent lighting with electronic ballast and the replacement of three air compressors. The resulting savings have been encouraging.

In June 2009, Brigantine YEM started a trial on using high power LED lamps to replace the metal halide high intensity discharge (HID) lamps in the company's Marine Repair Service and Container Repair workshops. With this initiative, Brigantine has projected savings of HK$0.5 million over a 3-year period in its electricity consumption in the two of its workshops in Hong Kong. However, cost savings is not the only benefit that Brigantine receives from this initiative, but it's the increasing environmental awareness among employees at all levels that has contributed Brigantine's success on the market.

HSSE Knowledge Quiz – 3rd Issue

Guideline for the use of ladder

- Use proper ladder to access the work site at height, such as to or from a working platform. Simple work that could be completed within a short time without moving the body or arms to a large extend, could be done with a ladder with balance and stability.

- Hold the side with at least one hand when standing on a ladder, otherwise the user should wear full-body safety belt and secure the belt to proper place so as to reduce injury when one falls from 2m high above.

- In addition to regular inspection, check if rungs are cracked or broken and if skid-proof steps are loose before use.

- Check if there are oil, water and dirt on the rungs before use.

- A ladder must be placed on a flat and strong place and fixed on an anchor point above. If it is impractical, the ladder must be securely fixed at the lower end or assign a worker to hold the ladder to prevent falling.

- Use a ladder with sufficient length. Never climb to the top of the ladder. Leave at least 1m for holding at the top rung.

- Never use metal ladder for electrical work to eliminate the danger of electric shock. Insulating anti-sliding floor plate must be equipped if you need to use metal ladder.

- Ladders should incline onto support at proper angle. Angles excessively large or small may all lead to accidents (reference angle should be no more than 75 degree or the ratio between height and bottom should be kept at 4:1).

- Face the ladder and hold the rungs with both hands when climbing up and down a ladder. Use tool bags to carry tools so as to reserve both hands to hold the rungs if necessary.

- The footwear of the user shall be in good condition and free from moisture, dirt and grease.

- Securely lock the spreaders of a stepladder in position. Do not use a stepladder as a straight ladder.

- Always spare one hand to hold the ladder firmly. Never lean over or stretch out to reach the work.

- Wear safety harness with lanyard anchored properly when working on the ladder at height of 2 m or more if the provision of working platform is not reasonably practicable.

- Inspect the ladder for any defects before use. Do not use wooden ladder that has been painted as painting may cover up the defects. Display warning label to the defective ladder.

- Avoid stepping on the top two rungs of an A-shaped ladder.

- Never use substitute, e.g. chair, drum or box, as replacement of ladder.

- Never lengthen ladder by tightening together shorter ones.

- Never try to straighten or use ladders which have been bent or distorted.

- Never overload ladder. Under general situation, only one person is allowed to work on a ladder.

- Always remember the rule of 3 contact points when climbing up and down.

Please peruse above guidelines and answer below multiple-choice questions, each question only has one right answer.

1. Ladders should incline onto support at proper angle, the angle should be no more than _____ degree.
   A.45 B.60 C.75 D. 80

2. Climbing up and down a ladder should obey _____.
   A. three contact points B. opposite the ladder
   C. hold the rungs with single hand D. one hand hold tool

3. For electrical work, _____ ladder may be used.
   A. iron B. aluminium C. steel D. wood

4. Dismantling hangers inside container shall stand on _____?
   A. A-shaped ladder B. straight ladder C. drum D. box

5. Never climb to the top of the ladder, leave at least _____ meters for holding at the top rung.
   A. 1.2 B. 1 C. 0.8 D. 0.5

6. Below statement, which one is wrong?
   A. May stepping on the top two rungs of an A-shaped ladder.
   B. Only one person is allowed to work on a ladder.
   C. Face the ladder and hold the rungs with both hands when climbing up and down a ladder.
   D. The bent or distorted ladders may be straighten to re-use.

7. Below choice, which kind of activity is allowed to perform on a ladder?
   A. Use big hammer B. Electric welding
   C. Use small hammer to inspect container D. Install hanger-beam

(Please fill your answer into below reply slip, then cut if off along the broken line.

✂----------

Reply Slip

Company : _____

Name : _____ **Contact No. :** _____

1. ( ) 2. ( ) 3. ( ) 4. ( ) 5. ( ) 6. ( ) 7. ( )

Important Notice:

1. Please send your answers to Brigantine QHSSE department by email: gcabrgqhsse@brigantinegroup.com before 31 December 2009.
2. Please state clearly your company name, your personal valid contact no. and postal address on your mail.
3. Brigantine QHSSE department will award one mysterious gift to twenty winners by lucky draw from the participators with all correct answers in January 2010.
4. Brigantine QHSSE staff will contact you and mail the gift to you if you are the final winner.
5. Should you have any queries, please don't hesitate to contact Mr Edmond Leung of Brigantine QHSSE department at +852 3765 7760 or email to gcabrgqhsse@brigantinegroup.com.
6. Brigantine QHSSE department reserves the final potency of the quiz if any dispute.

2nd HSSE Knowledge Quiz Answers

1. Staff A didn't stop electric operation in rainy days.
2. Didn't adopt compressed air tool to replace electric one.
3. Staff A still operated electric tools with wet gloves and uniform.
4. The distribution box's leakage protective device isn't sensitive.
5. Staff A used general plaster instead of electric plaster to wrap the damaged wire.
6. Staff A used his hand to draw the wet wire lying on the ground without cutting off power firstly.
7. Didn't let authorized electrician to repair damaged wire.
8. The maintenance staff didn't detect the defective leakage protective device.
9. Staff A was lack of basic electric knowledge.
10. Team leader didn't carefully inspect tools before work commencement each day.