

Welcome!

2009 is coming to a close. It was a tough year for most players in the maritime field and 2010 looks just as challenging. Brigantine is by no means insulated from macro economic conditions, but we continue to have a strong balance sheet, a motivated and creative workforce, and a management team devoted to making sure our customers receive superior value for money.

In the "Industry Knowledge Corner", we offer insight into some common industry jargon, so you are better armed verses your competition. Knowledge is power!

It is with deep regret that I inform you that I will be stepping down as the head of the Brigantine Group this month, in order to pursue opportunities back in my home country. I will be shifting to another company on the east coast of the United States. Should you find yourself traveling in the US, please let me know at john_c_brennan@hotmail.com.

A suitable replacement is being sought by Brigantine's Board of Directors, and expected on board shortly. Brigantine's senior management team remains fully capable and empowered during this time of transition, and Brigantine's Chairman, Mr. Michael Lund Hansen, is keeping a sharp eye on things. We expect this transition should be nearly invisible from a service delivery point of view. What will not be so easy to replace are all of the good friends and business relationships that have been forged during my time in Brigantine, and my 14 years in Asia in various roles.

My warmest wishes of thanks go to all of our customers, business partners, and staff who have supported Brigantine during my tenure here. My wife and I wish you all the best fortunes in your future. 我们祝你好运. Vi ønsker dig held og lykke. हम आपकी अच्छी कस्मिंत की कामना करते हैं. Kami berharap anda berjaya.

Yours faithfully,

John Brennan
Managing Director

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Excellent Company for Accident Prevention 2008 – Awarded by Shenzhen Government

The award ceremony of “Excellent Company for Accident Prevention 2008”, organized by the Shenzhen Social Security Bureau and Shenzhen Labor and Work Safety Supervision Administration, was successfully held on 30 July 2009. Brigantine Shenzhen won the honor along with another 560 companies in Shenzhen area, after strict evaluation.

To join the campaign, four main criteria must be met: the full compliance in accident insurance, comprehensive safety management, good achievement in accident prevention and completed work instruction and procedure in safe production.

With high confidence in our safety management, Brigantine Shenzhen joined the campaign proactively and achieved the third prize. As the leading company in container repair industry, Brigantine always regards “work safely” or work safety as top priority. In last year, all effectual measures were taken to ensure safety at work, and various promotion activities were launched to improve our staff’s safety awareness. The measures include safety training, safety meeting, safety inspection system, JHA/RA for new jobs, site emergency plan, accident investigation and handling, etc. we also launched a successful propaganda campaign on “Anti-fall from container roof” throughout the Brigantine Group.



Accident prevention is beneficial to both company and staff as Brigantine always pays high attention on safety management. We insist on “people oriented, safety first” and are guided by “safety first, prevention as priority and integrated management”. We always work on improving the effectiveness of safety equipment for better work environment.

Top management also emphasized that Brigantine will continue its effort on safety management, based on the principle of “people oriented, safety first” and the guideline of “safety first, prevention as priority and integrated management”, in order to provide better service to our esteemed customers.

Quality Control System – Incoming – Material Quality Control (IQC)

To ensure our Operations delivers the best products/services that meet our customers’ strict requirements, our procurement team is committed to source qualified and price competitive materials for use in their production. Sourcing, however, is only the beginning; we also need to act as a gate keeper to ensure only defect free materials can enter our warehouse. Therefore “IQC” has been adopted.

Our Incoming-Material Quality Control (IQC) system aims at checking, measuring, testing the quality of incoming-material against our standard requirements in order to ensure all materials before entering production are qualified for use.

Key Functions of IQC

1. Inspection: Systematically check the quality of incoming materials according to the IQC standard.
2. Evaluation: Evaluate and confirm the inspection result.
3. Follow up Non-conforming (NC) materials: Confirm feedback and track the NC materials, assist suppliers on quality improvement.
4. Reporting: Analyze and report the IQC result to management. It will be used for strengthening quality control, quality improvement, quality evaluation, as well as reference for formulating future quality control strategies and policies.

IQC Process

1. Preparation: identify the requirements; select the IQC method; determine the IQC standard.
2. Testing or measuring: conduct test and measurement according to requirements in IQC manual.
3. Recording: record the inspection results in a standard form, keep record for future tracking.
4. Comparison: compare the IQC results with the standards to verify if the results are qualified or not, make sure each test item fulfills IQC standard.
5. Follow Up: confirm the IQC result and take follow up action if necessary.

IQC for various materials

1. Materials categories:
 - Corten steel
 - Floorboard
 - Paint
 - PPE
 - Welding wire
 - Mechanical parts (e.g. bearing)
 - Electronic parts (e.g. compressor, motor, controller)
 - Etc

2. IQC check on:
 - Surface visual examination
 - Quantity
 - Size
 - Weight
 - Loading capacity
 - Pressure
 - Materials descriptions
 - Specification
 - Packing condition
 - Product certificate

3. Mechanical test:
 - Rigidity
 - Yield point
 - Tensile strength
 - Pressure test
 - Torsion test
 - Impingement test
 - Moisture test

Distinguish IQC Results

IQC will classify inspected materials into three categories:

1. "Acceptable Materials" – will be received to warehouse.

2. "This Lot Only" – will be reviewed & co-signed by related Operations Manager and Purchasing Manager, who will decide on the following possible disposals based on production schedule:
 - Return to supplier for replacement
 - Concession with discount from supplier
 - Production to sort out and return substandard quantity to supplier

3. For any "Unacceptable Materials" found Material & Service Non-conforming and Material Shortage Handling Procedure will be followed. Procurement will investigate the case and recommend solution to Operations. Non-compliant cases will be analyzed during yearly supplier performance evaluation.

IQC Result Record

The original IQC record is a reference to verify materials quality, which is the basic data to analyze the quality problem, to track the quality history and also help continue improvement on IQC process. We have to reflect the truth with accurate, complete and clear record of IQC result.

Separation/Disposal of Non-conforming Materials

In case NC materials found in IQC process, it should be marked with "non-conforming material" clearly and be separated immediately to avoid being misused by the operations team.

When necessary, we need to take corrective actions and even the preventive actions as continual improvement. The corrective actions focus on correction against the root cause of non-compliant materials, while the preventive actions aim at avoiding the re-occurrence of same problem in the future.

High Velocity Oxy – Fuel (HVOF)

The High Velocity Oxy-Fuel (HVOF) process sprays molten droplets of coating material at extremely high velocities resulting in surfaces of high density, well bonded and free of the oxides and tensile stresses. HVOF surfaces typically provide better wear resistance properties than chrome plating and is more environmentally friendly.

HVOF coating with different material contents has different combinations of properties in the wear, corrosion and heat resistance to protect the parent material. Typical HVOF materials include Tungsten Carbide, Chrome Carbide, Nickel alloys such as Inconel, Cobalt alloys such as Stellite, and various carbon and stainless steels.

A Piston cooling pipe is a conduit to deliver cooling oil to the internal cavity of piston rod and the cooling space inside piston crown. Recent occurrences in Marine engines indicate that the cooling pipe exhibits damage at the outer wall near the upper edge of the seat of the cooling pipe and piston rod. In worst cases, holes are found at the cooling pipe wall. The damage is likely due to erosion caused by continuous spraying of cooling oil at the subject area.

A HVOF coating with superior wear, corrosion and heat resistant properties is the right solution to tackle this problem and Brigantine has modified our HVOF equipment to provide this service. The HVOF machine was designed to spray the exhaust valve spindle stems. The spraying booth is not tall enough to handle the cooling pipe which is four meters long. Considering spraying characteristics, safety and health issues in HVOF, Brigantine's technical team modifies the machine to change the spraying position from vertical to horizontal with a horizontal feed. The door of the spraying booth is replaced by steel plates with reinforcement. A successful trial was done in November with excellent results. The same hardness requirement of 900Hv, which is currently achieved on the spindle stem, is also achieved on the cooling pipe.

Brigantine had successfully introduced the HVOF repair to the stern shaft mandrels of cross harbour ferries owned by Star Ferry Hong Kong. Brigantine technical team is experienced, flexible and efficient to tackle with customers' requirements.

For our customers that are experiencing similar damage on their cooling pipes, this innovative repair method is much more cost effective than buying a new pipe and offers superior wear characteristics than the original.



Damaged Cooling Pipe



Horizontal Set-up



Horizontal Set-up



HVOF Spraying



Cooling Pipe being ground



Finished Cooling Pipe

Prefabricated Container - House The Ideal Solution for Your Various Projects

This mobile prefabricated container house provides comfort and convenience for your employees, customers, visitors, participants, soldiers, partners or even students in your construction sites, work locations, exhibitions, open-air shows, school areas, medical centers, fiesta.....and many more different occasions!!

Convenient • Customized • Portable

A prefabricated container houses are tailor-made and assembled with desired designs and dimensions. It is mobile and easy to assemble to either single or multi-storey buildings. The components allow multi-installation which is flexible to those who frequently move to various locations or change the design due to some constraints.

With long lifespan and modern look, this type of product is suitable for different purposes for long-term usage. Besides, a wide range of colors/styles can be chosen to suit your specifications.

Prefabricated house assemblies can be delivered easily by truck or ship. Global delivery can also be arranged but farther locations might add a little extra time for the transport. For the 20ft prefabricated container houses, they can be packed into an ISO 20ft "transpack" size which is composed of 4 units and a more cost effective delivery.



High Quality • Special Features

All prefabricated houses are made of high quality materials and can be equipped with different facilities to suit your needs.



- A. Galvanized steel sheet metal wall with insulation is installed for easy cleaning and maintain constant temperature.
- B. Units can be made of water-proof & insect-resistant materials, so that the unit can be used in tropical areas.
- C. Windows and steel doors are installed to allow entry as well as improve air ventilation.
- D. Electricity system and plugs are pre-installed for easy handling & safety.
- E. The unit can be partitioned into rooms for multiple usages such as bedrooms, kitchen and washroom.

Reasonable Price

Brigantine has long been known for keeping the price of our high quality products reasonable and our latest offering is no exception.

For further enquiries, please feel free to call:

Contact : Miss Terrie Ng
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Email : gcabrgcet@brigantinegroup.com



Masava Offshore Cleaner Made in Denmark is Now Available Across Asia Pacific Through Brigantine

Brigantine as a loyal customer of Masava Offshore Cleaner for years has been formally appointed by MASAVA KEMI APS as its agent and distributor to promote and sell Masava products across Asia Pacific.

Masava Offshore Cleaner is effective water based alkaline all-round degreasing agent registered under the HOCNF, CHARM and the IMO. The product is used for cleaning of oil, grease and dirt on all surfaces that can tolerate water.

- is Danish developed and environmental safe
- contains no petrochemical solvents
- does not liberate poisonous gas, and can be used in closed rooms
- is certified and approved according to Cefas, Achilles, HOCNF, CHARM and the Norwegian Environment rules
- is fast separating according to IMO, and can be used in an oil separator

Two packages are available:

- 30L/Drum
- 200L/Drum



The Masava Offshore Cleaner holds all certificates needed to be used worldwide. It has a higher dilution rate with water which makes it cheaper in use, and also provides the possibility to clean very difficult dirt using the product without dilution.

Brigantine has already set up distribution hubs for Masava in SHENZHEN, HONGKONG and MELBOURNE. We can also ship Masava cleaner directly from Denmark to customers' designated ports, which will save logistics charges from our distribution hubs to customers' designated ports.

This strategic cooperation between MASAVA KEMI APS and Brigantine will facilitate our jointly serving our customers across Asia Pacific with more supply varieties at competitive prices.

For any inquires, please contact Spare Parts Sales Department at:

Tel : +86 755 2527 9171

Email : gcabrgprosp@brigantinegroup.com

Industry Knowledge Corner

Some might say Malcolm MacLean's development of the standard shipping container was one of the most profound inventions of the 20th century, changing the world as we know it. What exactly is a container?

An intermodal container or freight container (commonly shipping container) is a reusable transport and storage unit for moving products and raw materials between locations or countries; the terms container or box may be used on their own within the context of shipping. Containers manufactured to ISO specifications may be referred to as ISO containers and the term high-cube container is used for units that are taller than normal. There are approximately seventeen million intermodal containers in the world and a large proportion of the world's long distance freight generated by international trade is transported inside shipping containers.

Container variants are available for many different cargo types. Non-container methods of transport include bulk cargo, break bulk cargo and tankers/oil tankers used for liquids. For air freight the alternative and lighter IATA defined Unit Load Device is used.

There are five common standard lengths, 20-ft (6.1 m), 40-ft (12.2 m), 45-ft (13.7 m), 48-ft (14.6 m), and 53-ft (16.2 m). United States domestic standard containers are generally 48 ft (15 m) and 53-ft (rail and truck). Container capacity is often expressed in twenty-foot equivalent units (TEU, or sometimes teu). An equivalent unit is a measure of containerized cargo capacity equal to one standard 20 ft (length) × 8 ft (width) container. As this is an approximate measure, the height of the box is not considered, for instance the 9 ft 6 in (2.9 m) High cube and the 4-ft 3-in (1.3 m) half height 20 ft (6.1 m) containers are also called one TEU.

The maximum gross mass for a 20 ft (6.1 m) dry cargo container is 30,480 kg, and for a 40-ft (including the 2.87 m (9 ft 6 in) high cube container), it is 34,000 kg. Allowing for the tare mass of the container, the maximum payload mass is therefore reduced to approximately 28,380 kg for 20 ft (6.1 m), and 30,100 kg for 40 ft (12 m) containers.

The original choice of 8 foot height for ISO containers was made in part to suit a large proportion of railway tunnels, though some had to be deepened. With the arrival of even taller containers, further enlargement is proving necessary.

Similarly, the 45 ft (13.72 m) containers are also commonly designated as two TEU, although they are 45 and not 40 feet (12.19 m) long. Two TEU are equivalent to one forty-foot equivalent unit (FEU).

Source: Wikipedia

Container Donation to Crossroads for Charity Shipment

In line with our values and our efforts to be Good Corporate Citizens, Maersk Line and Brigantine worked together to assist Crossroads, a Hong Kong based charity organization, with several charity shipments from Hong Kong to poor countries in 2008. Brigantine donated eight used containers to Crossroads for Shipper Owned Container (SOC) shipment while Maersk provided the shipment at charity rate.

The project is very successful and we are glad to receive positive feedback from Crossroads and the beneficiaries.



The first shipment was to Kalulushi, Zambia. The containers were full of desks, chairs which were used in the new computer school opened in September 2008. Besides, there were a large quantity of clothes and blankets which were distributed to the local community. The blankets were even used as hospital bedding.



Another shipment to the Volta Region of Ghana, the poorest area of Ghana, was sent in May 2008. The consignee, Free Education & Reading Group (FERG) is working hard in offering study opportunities to youths. Full containers of educational books, videos, computers, air conditioners, fans, office and school furniture, spectacles, office equipment, school uniforms, toys and bicycles were donated to local youth centres and vocational training centre in order to support several on-going projects. Notebook, writing tools, chairs, textbooks, library books & laboratory equipments were distributed to primary schools whilst chairs and toys were sent to kindergarten kids.



In October 2008, a shipment of medical supplies and equipment, hospital furniture, computers and surgical gowns was sent to Aeta Tribe in Philippine. These gifts supported the set up of a new medical clinic which provides Aeta's people with basic medical needs. The consignee distributed medical aids such wheelchairs, canes for the blind, and walking sticks amongst those in need within the community.