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June 2010

Welcome!

Dear Customers,

In this newsletter you will read about our newest innovation within container repairs. The Semi Refurbished Unit (SRU).

The industry and especially China is expecting a major shortage of containers to cater for the exports. The situation is a result of no container ordering in 2009 and the slow steaming of container vessel reducing the turn-time of the containers. From our visits to you, we understand that equipment availability including speedy repairs will be a key focus area.

The SRU is one way to provide an option that secure better equipment for export.

We are also taking waste out of the system to reduce the process time from gate-in of the damaged containers till available for export.

For an individual tailor made solution we are open to meet up and discuss further details with the aim of you, our Customers, have equipment available for export.

You will also find an article about our coverage in South China. We are pleased that many of our customers appreciate the geographical spread in repair facilities which also add capacity to ensure speedy repair. In addition to South China we can also offer locations in China, Taiwan, Vietnam, India and Thailand through our JVs and sister companies. We also welcome you to meet us for a detailed discussion about multi locations agreement which will add capacity and speed to your repair requirement.

As always we are here to serve the industry and be a valuable contractor of your repair requirement.

Wish you good wind in a growing market.

Yours faithfully,

Paul Erik Andersen
Chief Commercial Officer
Email: paul.erik.andersen@brigantinegroup.com

Using Sandwich Panel is Cost Effective

For the replacement of entire roof or side panels, it is more cost effective to use sandwich panels. Sandwich panels are separately fabricated for installation to the reefer box. Compared to repairing using conventional methods, the use of sandwich panels give a cost saving of 20% to 28%. Read more below on how and why sandwich panels should be used.

Severely damaged sides or roof wall of reefer box containers are to be replaced with entire side or roof sandwich panel. In the past, the only way to obtain the required sandwich panel was to place an order with the original manufacturer i.e. MCI, MCIQ or CIMC. However this is uneconomical and unproductive repair for a major reefer box repair shop due to the following reasons:

1. Very long production and delivery lead time. It takes about 4 months or longer from order initiation till receipt of part.
2. Very high freight as need to ship the sandwich panels by flat rack containers.
3. It is common to receive the sandwich panel with damages on its edges and there seem to be no way to avoid it.
4. There are many types of sandwich panel so you need to keep the inventories it requires placing big orders. After the sandwich panels are received their storage kills a very big area of the store room. They are also very difficult to handle both in storage and retrieval for repair.

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Being a major reefer box repair shop, we developed and designed the equipment to fabricate the sandwich panels by ourselves as we were not able to endure the above situations. The process of fabricating a sandwich panel can be described in the 5 stages below.

Stage 1

We assemble 5 pieces of panels into an about 20ft wide sandwich skin by using a rolling welding machine. This is to avoid over heat during welding as it will cause the panels to bend. We designed and worked with a vendor to build a rolling welding machine to meet our requirement.



Stage 2

The sandwich skin (stainless steel or aluminum) has to be cleaned and the surface grinded as preparation for the application of foam primer on its entire surface.



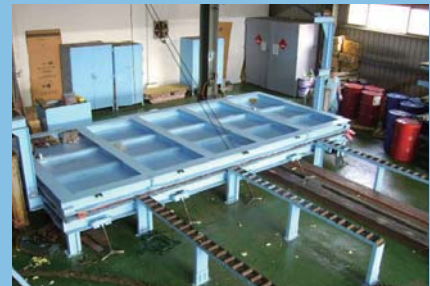
Stage 3

The primer coated panels are placed on the sandwich panel moulds.



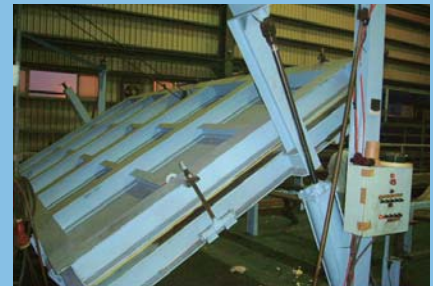
Stage 4

The sandwich panel is ready for foaming when both skins are placed in the mould.



Stage 5

The panels are foamed and the sandwich panel is created. A 20 ft sandwich is ready for use



We offer second-to-none maintenance & repair solutions for dry and reefer box repairs and we strongly believe that we can give our customers the reliability of high quality repairs.

If you are interested, please contact Mr Tung Hwa Chen at [+886 7 823 7763](tel:+88678237763) or email him at TungHwa.Chen@brigantinegroup.com.

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Brigantine's Container Service Network in Southern China



In Southern China area, Brigantine Group has already developed repair service network covering Hong Kong, Shenzhen, Huangpu, Nansha, Foshan and Xiamen cities. With such strong network, we provide second to none repair and inspection service to shipping lines, leasing company, bigger shippers, and bigger consignees. One stop quality service, standard procedure and customized products always bring fresh experience and satisfactory results to our valued customers.

We do not only simply repair boxes but also provide solutions to help you grow in business and customer satisfaction as well as cost saving. We warmly welcome to try and enjoy our service anywhere. If you need more information, please feel free to contact us via:

Person in charge : **Mr. Figo Gao**
Tel : **+86 755 2527 9041**
Fax : **+86 755 2527 9490**
Cell phone : **+86 159 8986 7401**
Email : **figo.gao@brigantinegroup.com**

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Semi-Refurbished Units – Prolong Container Life Span



Background

After 10 years of service, most containers have different degrees of corrosion and damage. If the corrosive area is not treated properly, Maintenance cost will increase exponentially with time.

As a cost saving initiative for the Line, Brigantine comes up with an innovative program in combating the rust and reinforcing the structure, in a bid to extend the container life span and thus reduce the EMR and redelivery costs.

What is SRU?

Eight service items to be selected according to actual box requirements:

- ✓ Door hinge lubrication
- ✓ Roof panel reinforcement
- ✓ PU coating on floorboards
- ✓ Side bottom rail reinforcement
- ✓ Cross-member reinforcement
- ✓ Protective paint on base structure
- ✓ Anti-rust protective treatment on panels
- ✓ Door frame reinforcement

We mainly introduce theme Anti-Rust Treatment on Panels in this newsletter.

Anti-Rust Treatment on Panels

- ✓ The unit to the right has been serviced for 13 years and should have been sold.
- ✓ SRU will extend the container life span for at least THREE more years.
- ✓ To stop corrosion on panels and add anti-rust primer to improve corrosion-resistance.

How did we do this?

Technology - Anti-Rust Primer

- ✓ Serve as priming paint treatment with anti-rusting and rust-inhibitor.
- ✓ Applicable to the corrosion resistance treatment of rusted steel parts.
- ✓ Widely used to steel structure, tunnel, bridge, railway, ship, and shipside.



BEFORE Anti-Rust Treatment



AFTER Anti-Rust Treatment



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Example: Anti-Rust Treatment – Top Coat



1. Treatment area



2. Clean and grind the heavy-rusted panel with grinder



3. After surface finish, anti-rust primer is applied on the panel



4. 12 hours later, put top coat on the treated panel

Please contact us if you are interested in SRU project.

Person in charge : [Leslie Leung](#) / [Mark Ma](#)

Tel : [+86 755 2527 9430](#) / [+86 755 2527 9055](#)

Email : Leslie.Leung@brigantinegroup.com / Mark.Ma@brigantinegroup.com