

Africa Mercy - Case Story

Replacement of steering system gave new life to the world's largest civilian hospital ship



Mercy Ships

Mercy Ships is a relief organization that works directly in the poorest areas of the world, building on the Christian message of helping fellow human beings in need. Mercy Ships provides free health-care in the form of operations and rehabilitation of disabled people regardless of race, gender or religion. Training, education and sustainability are also part of the organization's activities.

Source: Mercyships.dk

When The Danish State Railways decided to build three IC train ferries to the Great Belt in 1978, they had hardly imagined that one of them would one day end up as the world's largest non-governmental hospital ship at shore on the African continent. Nevertheless, that was what happened to the ship, M/F Queen Ingrid.

M/F Queen Ingrid embarked on her maiden voyage in August 1980 on the Great Belt between Korsør and Nyborg. 17 years later it was all over, and she was put on stand-by in Nakskov, Denmark.

Two years later, new adventures were in store for The Queen Ingrid when she was purchased by Mercy Ships. It was the beginning of a long-term rebuild at the Cammel Laird and later A & P Tyne Shipyard, Newcastle, before she was ready to sail under the name "Africa Mercy" in 2007.

However, 39 years after she was launched, it was time for an upgrade and replacement of several key parts of the ship. As fate would have it Queen Ingrid once again fell into Danish hands.

Danish-German cooperation resulted in successful project

In the docks of Astican shipyard, Las Palmas, Danish Hans Buch Marine was responsible for replacing the ship's steering control system. It was a complex challenge that was crucial to the continued operation of the ship.

What started as a more or less "simple" replacement of vital components, later became a real turn-key project, in which Hans Buch Marine, in collaboration with German Loewe Marine and Danish SH Group, played a crucial role.



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From the left Christian Jordt, SH Group, Niels Jacob Wilquin, Hans Buch Marine & Hagen Dünzelmann, Loewe Marine

The right course was set from the start

The very good cooperation between the parties was, according to Niels Jacob Wilquin, the decisive reason why the project was running according to plan from the very beginning.

- It was a demanding project that required a great deal of planning and ensuring that the right actors were brought into play at the right times. We have a large network of competent partners and we succeeded in getting them all into play and letting them do what they do best.

How Hans Buch Marine, SH Group & Loewe Marine contributed to the Mercy Ships project

Hans Buch Marine & Loewe Marine had the joint overall responsibility for the management of the project, the approval of mechanical and electrical systems, the start-up of the systems and the test sailing from Gran Canaria to Tenerife.

In addition, each of the companies involved had their specialized tasks, which ensured the success of the project. The project was completed in August 2019.

“Throughout my 40 years in the industry, I have never previously worked with such professional and competent people who are constantly chasing the best solution. Thank you.”

**Alphonse Abraham, Technical Support Officer
Mercy Ships**

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www.hansbuch.dk/marine

Hans Buch Marine:

Overall responsible for the project including:

- Installation of new steering control system and new bridge steering system.
- Responsible for all interfaces of the electrical system (automation, alarms, VDR etc).
- Upgrading the ship's speed log and inclinometer while docking at Las Palmas.

Read more at: hansbuch.dk/marine

Loewe Marine:

- Project manager and responsible for the mechanical replacement and adjustment of the two steering units and rudder stocks.

Read more at loewe-marine.com

SH Group:

SH Group was contacted by Hans Buch Marine for assistance in planning cable installation and the actual execution of the work.

- In total, 7.5 km of cables were installed using more than 2.800 man hours.

- In addition, responsible for the cable laying and the installation of steering gear equipment from bridge and to breaker room to the two steering gears in the steering gear room.

Read more at shgroup.dk

HANS BUCH
Marine