

# RUDDER REPAIRS

## WHEN THE GOING GETS TOUGH, THE TOUGH GET GOING

**B**illy Ocean sang it back in the 1980s and others have used the phrase since, and MarineShaft recently coined the phrase when talking about the repair of the 150-ton rudder arrangement from the *MSC Loretta*.

After an unfortunate grounding in September, the container vessel *MSC Loretta* suffered major damage to the rudder and the rudderstock, requiring the vessel to dock in Antwerp, where Engine Deck Repair handled the unscheduled drydocking and repair.

Dealing with a damage of this extent requires excellent coordination and planning, so Engine Deck Repair asked

MarineShaft to carry out the repair on the rudder which measured some 95m<sup>2</sup> and weighing in at 120 tons. The 720mm diameter x 6840mm and 23-ton rudderstock was twisted by some 16 degrees.

MarineShaft sent supervisors to Antwerp, to assist in the disassembling and removal of the rudderstock from the rudder. The specialists then carried out laser alignment of the bearing lines and rudder cones, after which the rudderstock was sent by truck to MarineShaft's workshop in Hirtshals, Denmark, where it was straightened with the company's unique cold-straightening technique.

The repairs carried out in

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Hirtshals also consisted of welding, heat treatment and machining of the rudderstock, which was afterwards fully approved by DNV-GL.

A considerable amount of work was also performed on-site with several of MarineShaft's skilled certified welders having to travel to Antwerp. Welding of the lower rudder cone was carried out, together with heat treatment, and subsequently, machining work – a process that took place with the company's custom-designed mobile equipment for machining of cones.

*MSC Loretta* was then ready to be loaded again with containers, ready for new adventures at sea. 🌐



# WORLDWIDE





MEDITERRANEAN SHIPPING COMPANY

MSC LORETTA  
PANAMA

Antwerpen, December 4<sup>th</sup>, 2015

TO: MARINESHAFT  
Hirtshals , DENMARK

Subject: MSC LORETTA Rudder Repairs

Dear Gentlemen,

It is my pleasure, to use this opportunity to express my full satisfaction with the job you have done on repairs of Rudder on our "MSC Loretta".

On the other hand, works have peromed in a skilfull an profesional manner.

Your personel being in workshop in Hirtshals, and in situ, in Antwerp , have shown great experience, and utmost of patience and have spared no effort to complete all works in time.

Lot of job was done in difficult winter conditions, on a 24 hrs working basis. Your personnel never expressed feeling to be tired or requesting any help from our side.

So to say in brief, I am expressing our full satisfaction, and will use the opportunity to recommed your service to any of our cooperating Companies and bussines partners.

Please receive my kindest regards

Fleet group A

Capt. Antonino De Maio