

# ON-SITE MACHINING OF 870MM RUDDERSTOCK IN BAHAMAS

# GOLTENS IN-SITU MACHINISTS RECTIFY DAMAGE TO CRUISE SHIP RUDDERSTOCK

During the drydocking of a cruise vessel in the Bahamas it was discovered that one of the vessel's rudderstocks was badly worn with significant ovality and scoring on the journal surface.

Knowing that Goltens has the capability for machining up to 1.1 meter diameter journals, the customer contacted Goltens Miami to make a proposal for an on-site machining repair.

Goltens Miami reviewed the requirements for the 1,115mm long x 870mm diameter shaft and immediately prepared its single point cutting tools and mobilized two teams of technicians to work around the clock to repair the shaft.

#### **ON-SITE MACHINING SCOPE:**

- Single point cutting/machining of damaged rudderstock removing 0.80mm from the diameter for a finished diameter of 869.20mm
- Machine polishing of journal surface to required roughness
- · Grinding of journal end surfaces

#### **ON-SITE MACHINING RESULTS**

Goltens' in-situ machinists completed the large diameter machining job working 2 shifts in 5 days and the shipyard machined an undersized bearing to suit the new diameter of the rudderstock.

The shaft was inspected and accepted by the customer and the vessel was able to complete its drydocking without further interruption.

#### **VIDEO**

To view a video of the repair please follow the link below: <a href="https://youtu.be/YrmG7c66ASw">https://youtu.be/YrmG7c66ASw</a>

## **PROJECT FACTS**:

Location: Vessel Type: Journal Diameter: Journal Length: Material Removed: Machining Time:

### **Rudderstock Machining**

Bahamas Cruise Ship 870mm 1,115mm 0.80mm 5 days





Preparing rudderstock for tool installation



Single point cutting tools mounted



Journal Machining in progress