



**NON-DESTRUCTIVE EXAMINATIONS  
SPECIFIC FOR THE YACHTING INDUSTRY**

**DAMAGE TO A GRP HULL**

**Problem:**

A cradle with a GRP production motor yacht atop collapsed, causing extensive structural damage to the vessel. The owner of the vessel requested a full assessment of the extent of the damage, which was inspected employing Laser Shearography.

A large hole in the forward part of the hull and a number of connected cracks, did not allow the inspection of the area with a vacuum hood system.

**NDE Solution:**

The area visibly affected by the impact, was inspected using the inspection rig, attached to the hull by its suction cups, excitation of the area was achieved by a single Piezoshaker.

The rest of the hull was inspected using the vacuum system.



The vacuum hood attached to the side of the GRP production motor yacht

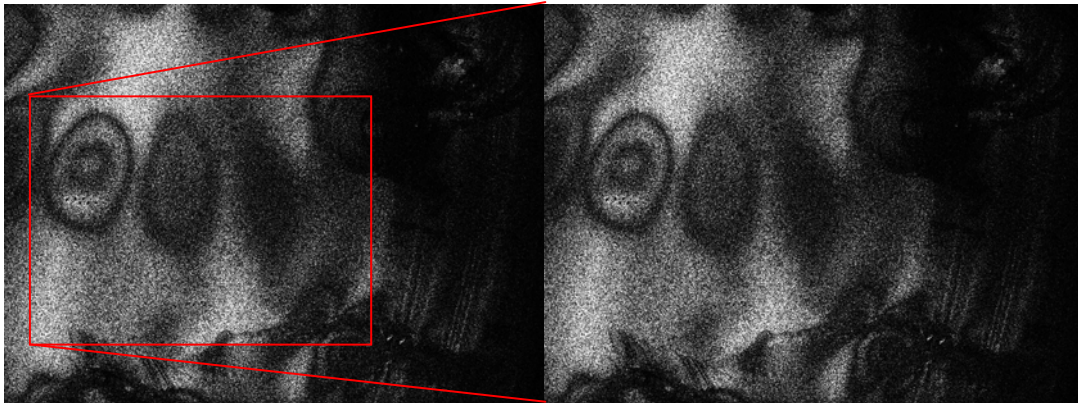
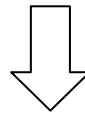
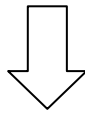
CASE STUDY 5

The inspection rig placed in way of severe damage to the hull.



Far sensor-surface distance

Short sensor-surface distance



Suction cup rig with sensor in combination with piezoshaker