

STITCHING

Process Cuts Repair Time from Months to Just Weeks

Out at sea, the crew of this Russian container ship noticed a sudden loss of power. Upon inspection below, they discovered the engine had thrown a conrod causing severe damage to the engine block.

THE FIX

Metal Surgery inspected the damage in Vladivostok. Back at the shop, two inserts were fabricated and machined. Metal Surgery then shipped men, equipment and the inserts to Seattle to meet the ship and engineer the repair.

Stitching - joins broken cast iron and dissimilar metal to like-new condition, on-site or in-house. Stitching restores casting strength to equal or better than original shock load capacity.

THE PROBLEM



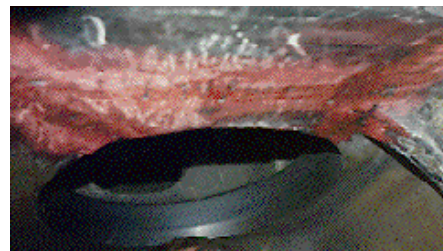
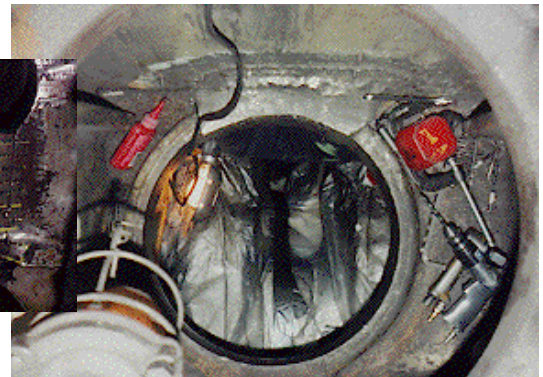
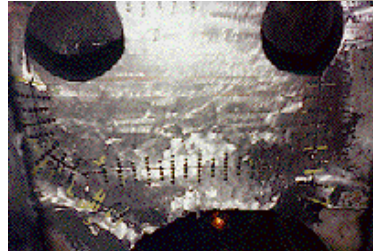
Cracked sleeve seat area.



Fractured iron is removed, template is made to fabricate and machine two new cast iron inserts.



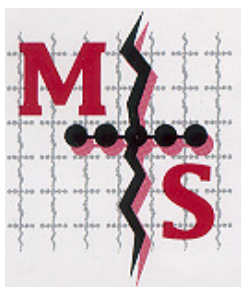
New inserts fitted and installed. Stitching is in progress.



THE RESULTS

Stitch repair and machining completed on the inserts. This repair took 16 days while the ship was under half speed, yet proceeding to its destination with a full cargo hold. Estimated engine block replacement would reach

approximately \$3,000,000 with three months of downtime. The repair was five per cent of replacement cost with no downtime.



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