

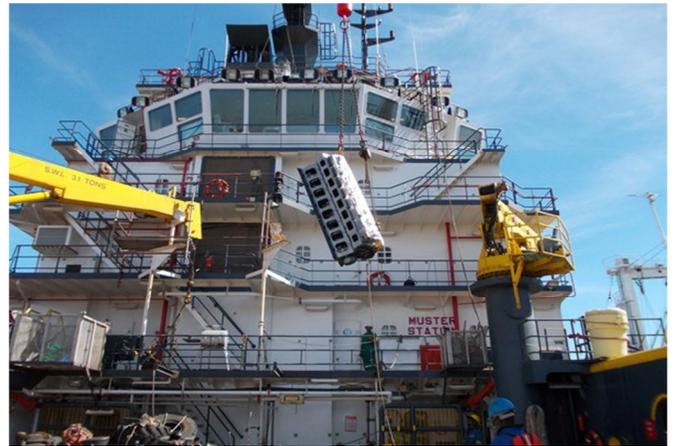
Assignment

Kraatz Marine & Offshore was contacted by Tide Water to do a main engine change out on the Ken C Tamlyn. The vessel is a DC propelled vessel equipped with 4 diesel driven generators supplying DC power to the propulsion units. The change out was a “like for like” change out, however with the alternator and all the pipes, electrical cabling and electrical panels in way of the engine made for a difficult rigging operation.

Risk and challenges

The following risks and challenges had to be considered:

- Using a shore based crane (Stationary) to rig out old engine and rig in new engine while the vessel is afloat (Moving)
- Removal of old engine
- In way of removals and reinstating items (Pipes, cabling etc.)
- Rigging in of new engine without damage
- Alignment of new engine to alternator



All openings on both engines were covered to protect from debris while cutting, grinding and rigging operations were done.

After the old engine were removed the engine bed were cleaned and prepared for the new engine.



Getting the job done

After taking all the risks and challenges into consideration, a comprehensive rigging plan was developed and it was decided to remove all components from the old and new engines to minimize the risk of damaging critical parts during the rigging process.

Access holes were mapped out and all items in way of the rigging was marked, mapped and remove.

Pad eyes were fitted and NDE inspections were done on all lifting points.

The new engine was rigged into place, aligned, chock fast and tested.

All access holes cut was fitted back in position, welded and NDE testing done.

All items removed were replaced tested and the vessel was handed back to the client.

Key learning's

Planning is the key to complete any assignment safety and on time.

The risk in rigging operation can be largely reduced through planning.