“Crane Repair”

Assignment

Kraatz was contracted by the chartering company, Basil Read, to do repairs to the jib arms of the crane on the NP Glory 4 vessel.

Risk and challenges

The following risks and challenges had to be considered:

- The damaged area is on the main girder and connecting transvers beam.
- Damaged occurred in a critical section of the jib.
- All repair procedures and welding procedures must be approved by the manufacturer (McGregor) and class (GL).
- Repairs must be done in position.
- Securing the jib section while cropping of the damaged area.
- Preventing distortion during the repairs.

Getting the job done

Kraatz, in conjunction with the client and the crane manufacturer developed a repair procedure and QCP to be followed to mitigate all risks. Welding procedures, repair procedure and QCP were submitted to the client for approval before any work started.

Support columns were custom designed, manufactured and fitted to the structure prior to cutting to prevent sagging and to prevent distortion while welding of new sections. All damaged sections were cropped out to approve repair procedure.

Backing strips and new insert sections were fitted as per procedure. All welding was done as per procedure while continuously monitoring jib section for any signs of heat distortion.

On completion of all welding MPI were carried out and crane was load tested and certified as safe for use.

Once the load test was completed all documents were submitted to the client, crane manufactures and class for approval and acceptance.

Key learning’s

Planning and involvement from all stakeholders prior to starting any difficult assignment will always make for a successful quality final project that is delivered safely, on time and within budget.