The client, a leading chemical manufacturer operates a large number of storage tanks at its sites that provide hydrocarbon storage to service the manufacturing process plants.

A major refurbishment programme was required across the operating facilities to bring hydrocarbon storage tanks, containing fuel oil, butadiene and naptha, up to current design standards and industry good practice.

They engaged ABB to provide a comprehensive construction management service for the remediation of these vital pieces of equipment.

**Solution**

The ABB team operated as the client’s construction management team, which involved managing the contractors onsite, health and safety, the programme, costs and quality of work.

The comprehensive service involved isolation, inspection and repair of the tanks and supporting the commissioning team once work was completed.

**Work included**

Refurbishment work:
- Tank floor weld repairs
- Floating roof weld repairs
- Installation of a new secondary wind girder
- Removal and replacement of top strake and curb bar
- Removal and replacement of primary wind girder

Recommended good practice work:
- Articulated drain replacement.
- Upgraded the existing floating roof seal
- Installed new instrument platforms
- Rim seal fire detection installation
- Installation of remote operated solenoid valves
- Refurbishment or replacement fire protection systems
Inspection work:

- Visual and NDT checks of all areas of the existing tank including thickness checks of the shell, floor, roof legs and bosses
- Crack detection of nozzles and floor tees
- Magnetic flux leakage floor scans
- Eddy current flaw detection of attachments

Preparation work:

- Mechanical isolations and reinstatement
- E / I isolations and reinstatement
- Supporting SABIC UK Petrochemicals process and commissioning teams

ABB’s highly professional and knowledgeable team built close relationships with the operational personnel to ensure safe working in this dangerous environment.

Due to the vital need for the storage capacity of the tanks the work was carried out within an extremely tight programme.

Benefits

- Provided management of all site work including isolation, remediation and support to commissioning
- Secured the future availability of these vital assets
- Tanks improved to comply with current design codes
- Ensured compliance with CDM (Construction and Design Management) regulations
- Conformance with recommended engineering good practice
- Ensured no interruptions to production by planning a rolling programme of repairs