



BP OIL REFINERY

OCT 2023 - DEC 2023
ENERMECH
\$0.2 M

DEMEX was engaged by EnerMech to carry out the dismantling and removal of a hydrogen power station testing scale model, at BP's operational oil refinery in Pinkenba. The structure was a full-scale prototype of future hydrogen infrastructure, developed to support innovation in renewable energy.

The project took place within a live, refinery environment, demanding strict compliance with BP's site specific safety procedures and operational protocols. Throughout the project, DEMEX coordinated closely with key stakeholders, including EnerMech, BP & Chiyoda Corporation, to ensure all works were delivered to the highest safety and environmental standards.

DEMEX commenced works by removing all loose fixtures and plant equipment earmarked for salvage, followed by demolition. Due to a large section of the structure being manufactured of tilt-panel concrete walls, a third party structural engineer was engaged to oversee critical elements of the demolition sequence.

Prior to the removal of the roof and steel framework, engineered temporary propping was installed to stabilise the tilt panels. Once approved and signed off by the engineer, the roof was dismantled, followed by careful deconstruction of the steel framing, which was salvaged for recycling.

With the steelwork largely removed, the demolition excavator methodically pulverised the concrete tilt panels, followed by concrete slabs and hardstands. Final site clean-up ensured all materials were safely removed, with minimal impact to surrounding operations.

The project was delivered safely, efficiently, and in full compliance with BP's operational requirements and project environmental targets - with over 95% of waste being diverted from landfill. This demonstrated DEMEX's capability to manage complex works within highly regulated, live industrial sites.