

CURTIS ISLAND GLNG TRAIN 1 TAR 2019 CATALYST SERVICES



40%

Quicker unloading /
loading than manual
techniques

1,826

Drums loaded with
ZERO crane lifts



The Santos GLNG Project is one of Queensland's largest LNG processing facilities. Train 1 had reached its periodic MRU and Dehydrator reactor inspection and catalyst change out. EnerMech was engaged to conduct the catalyst change out on Train 1 utilising innovative technologies.

Client: Santos GLNG

Year: 2019

Product/Service: Catalyst change out services – Molecular sieves dehydrators and MRU's

Scope of work

To deliver catalyst change out without traditional reliance on confined space entry during inert conditions.

Implement process for catalyst change out without the need for manual handling of materials or extensive lifting operations utilising cranes.

Remove catalyst handling off the critical path.

Project Delivery

The EnerMech team utilised two industry leading technologies to successfully complete the change out.

These in-house designed technologies provide catalyst unloading and loading without confined space entry (CSE) or the need for crane lifting operations during loading activities:

- EnerVac® catalyst unloading tool (unloading speeds \approx 8 m³/hour)
- ENCAT® remote catalyst loading tool (1,826 drums loaded with zero crane lifts)

As an option to catalyst decontamination by water flooding EnerMech has pioneered the use of Zymeflow®. This patented chemical decontamination method allowed us to deactivate catalyst within 12 hours.

Key Benefits

Waste water reduction by avoiding water flooding when Zymeflow® option is selected

Elimination of inert entry and reduced Confined Space Entry

Demonstrated 40% quicker unloading and loading technology than manual techniques

Continued loading in high winds

Elimination of 1000+ crane lifts compared to traditional methods

Improved catalyst turnaround schedule through superior unloading and loading rates of the ENCAT® innovative technology