



## RAISING THE BAR

A Quantum Leap towards Meeting Myanmar and Thailand's Energy Needs

The Zawtika Wellhead Platforms and Sealines Project marked a significant trend in the offshore EPC space. This breakthrough offshore project overrides many of the past records established by L&T in its journey. The project involved use of facilities from India, Thailand, Myanmar, and Oman. It also attracted talent and personnel from across the globe.

The gas supply from the M9 field of the Gulf of Mottama, located 300 km. south of Yangon, Myanmar will play a strategic role in Thailand's energy market while simultaneously providing for Myanmar's domestic energy needs. L&T was the first to mobilise into the virgin field of Zawtika.

### New Region, New Benchmarks

37,000 MT of fabrication in a record time of 16 months.

- 1 A water depth of 158 m. was achieved. (Deepest so far by L&T)  
24 Single-piece Piles of length 144 m. were constructed (Longest so far by L&T). These were launched using the Dynamic Upending Pile Method
- 2 The platforms were located in the vicinity of a seismic fault line and therefore required Non Linear Rare Intensity Earthquake Analysis with a return period of 2,500 years. This is the first-of-its-kind in India
- 3 Complex safety studies like CFD were carried out  
Wrap plates were introduced using FEA  
Special Fatigue Analysis was performed for long-duration transportation of structures
- 4 Special installation Techniques such as Dynamic Pile Upending, Chaser Piles, Chaser Rack etc. were used for the installation of piles
- 5 Self-propelled vessels were deployed for the transportation of top-sides. Most of the structures were transported over 3,000 nautical miles
- 6 Three back-to-back jacket launches were conducted in a span of two months. These jackets are of length 150–170 m., almost twice the length of a football field



## Breaking Barriers

Concept to commissioning, all under one roof:

**Detailed Engineering:** L&T, Valdel

**Procurement:** L&T, Mumbai

**Fabrication:** L&T, MFY, Oman and MFF, Hazira

**Installation:** LTS 3000

We successfully negotiated through the transition of withdrawal of international sanctions on supplies to Myanmar, among other various single-source situations

3 nations stood united to complete the job.

The sail away of structures was flagged off by the Minister of Energy (Myanmar), Minister of Energy (Thailand), Minister of Oil and Gas (Oman), the Ambassador of India to Oman and other distinguished dignitaries

Special Armed Guards were deployed for the safety of the structures due to close proximity with the Gulf of Aden

## Impact

### Social

Considering the high-pressure situations of offshore projects, we effectively managed to work through a multilingual and multicultural environment comprising Indian, Thai, Indonesian, Singaporean, Malaysian, Burmese, British and American nationalities.

**More than 4 Million LTI Free Man-hours were achieved.**

### Product

We finished 37,000 MT of fabrication in a record time of 16 months.

We also set new records in terms of water depth (158 m.), length of piles constructed (144 m.), and in the transportation of structures (over 3000 Nautical Miles).

We also effectively conducted specialised studies for the effective utilisation and safety of both our structural members and the site environment.