Clean Jacksonville 2,200CBM LNG Bunkering Barge

Client:
Conrad Orange Shipyard, Texas, USA

Services:
- Basic and detail design for the cargo, machinery and electric parts
- Basic and detail design of CAMS, ESDS, F&G detection, SSCS, and instrumentation
- Pre-commissioning, LNG testing and commissioning

Location:
Jacksonville, Florida, USA

GAS Entec was contracted by Conrad Shipyard to provide basic and detail design engineering services for the cargo, machinery and electric components of Conrad's 2,200CBM LNG bunkering barge, the first and only LNG bunkering barge in USA. The LNG bunkering barge provides LNG fuel to TOTE's 3,100 TEU container ships and other LNG-fueled vessels in the Port of Jacksonville, Florida.

GAS Entec's contract included design of the Control, Alarm and Monitoring System (CAMS), Fire & Gas Detection (F&G), Emergency Shutdown System (ESDS), Ship-Shore Communication System (SSCS), as well as instrumentation, pre-commissioning, LNG testing and commissioning.

DIMENSIONS			
LOA: 64.6m	Breadth: 14.8m	Depth: 4.8m	Draft: 2.6m
LNG storage tank type and capacity: GTT Membrane Mark III Flex 2,200CBM			

Bali 26,000CBM FSRU

Client:
PaxOcean Zhoushan Shipyard, China

Services:
Engineering and procurement of cargo handling system and regasification system

Location:
Bali, Indonesia

GAS Entec was contracted by PaxOcean Zhoushan to undertake the engineering and procurement works for the cargo handling system and regasification system of a 26,000CBM floating storage and regasification unit (FSRU). This FSRU will supply LNG to the 200-MW gas-fired power plant in Pesanggaran, Bali, Indonesia.

DIMENSIONS OF VESSEL/BARGE		
LOA: 149.9m	Breadth: 31.0m	Depth:12.5m
FUEL GAS SUPPLY SYSTEM		
Purpose: Natural gas supply to dual fuel genset/boiler		
Components: BOG compressor and vaporizer		
Fuel consumption: 151kg/h x 2 sets (for DF genset) + 520.9kg/h x 3 sets (for DF boiler)		

125,000 LNG Carrier Conversion to FSRU

Client:
KALMOL (Karpowership and MOL joint venture)

Services:
EPC services and commissioning works

GAS Entec was contracted by KALMOL to supply power, regasification modules and a 1,000CBM buffer tank for its power ships (floating power plants).

To meet the client's requirements, GAS Entec designed and installed RegasTainer™, a proprietary compact, plug-and-play modular solution that uses standardized technology and can be built and installed quickly. RegasTainer™ offers greater flexibility to clients operating in remote coastal environments where site restrictions are common.

GAS Entec implemented rigorous design verification and well-defined quality control procedures throughout the project, ensuring seamless execution and successful completion.

REGASIFICATION SPECIFICATIONS	BUFFER TANK SPECIFICATIONS
Capacity: 84MMSCFD (42MMSCFD x 2) Type: Glycol water and steam indirect regas system Send-out pressure/temperature: About 8barg and 25-35 °C	Type: IMO Type-C tank Capacity: 1,000CBM

Bali 50,000MMSCFD LNG FRU

Client:
JSK Shipping, Indonesia

Services:
Engineering, procurement and construction

Location:
Bali, Indonesia

In 2016, GAS Entec was engaged by JSK Shipping (Indonesia) to do the engineering, procurement and construction of the world's first small-scale floating regasification unit to be based in Indonesia.

Installed at Benoa Port, the FRU powers the province of Bali and highlights the benefits of small-scale LNG infrastructure in remote markets. The 50MMSCFD unit is part of a mini-LNG import project in Indonesia that will serve a 200-MW power plant at Benoa Port to be operated by Indonesia's PT Pelindo Energi Logistik.

DIMENSIONS OF VESSEL/BARGE	FUEL GAS SUPPLY SYSTEM
LOA: 46.0m Breadth: 12.0m Depth: 4.7/5.2m LNG buffer tank: • QTY x capacity: 1 x 400m^3 • LNG feed pump: 2 x 100m^3/hr x 260MLC, electric motor-driven, barrel type	Purpose: Natural gas supply to dual fuel boiler Components: • BOG compressor • Regasification vaporizer Fuel consumption: 490kg/h x 2 sets