



SIEMENS

www.siemens.com/oil-gas

Karish FPSO E-House, Israel

Project:

- Location: Offshore Israel
- Customer: TechnipFMC
- End user: Energan Oil & Gas Ltd
- Delivery: 2020
- Blast rated: Yes
- Dimension: 21m x 15.5m x 15m
- Weight: 856.5 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

E-House, c/w:

- MV Switchgears & Bus Duct
- LV Switchgears and MCCs
- Lighting & Power DBs
- MV & LV Transformers
- HVAC
- Fire Detection System
- Battery & Battery chargers
- Earthing and cabling
- E&I bulk items



SIEMENS

www.siemens.com/oil-gas

Upper Zakum 750 Field Development Project, UAE

Project:

- Location: Abu Dhabi, UAE (Arabian Gulf)
- Customer: DSME Petrofac JV
- End user: Zakum Development Company (ZADCO)
- Delivery: 2016
- Blast rated: Yes
- Dimension: 23 m x 6.5 m x 5.75 m (max)
- Weight: 200 MT (max)

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

- 12 E-Houses, c/w:
- LV AIS switchgears
 - Motor control center (MCC)
 - Dry type transformers
 - Neutral earthing resistors (NER)
 - UPS and battery system
 - LV distribution board



SIEMENS

SIEMENS

www.siemens.com/oil-gas

Jangkrik FPSO E-House, Indonesia

Project:

- Location: Offshore Indonesia
- Customer: STC JO
(Saipem, Tripatra Chiyoda)
- End user: ENI Muara Bakau B.V.
- Delivery: 2016
- Blast rated: Yes
- Dimension: 25m x 16m x 14.3m
- Weight: 1,150 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

E-House, c/w:

- MV and LV Switchboards
- Transformers, NER
- Bus duct, Distribution Boards
- Electrical Management system (EMS)
- UPS and Battery system
- HVAC and Fire Suppression System
- Lighting and Small Power
- Earthing and cabling
- E&I bulk items

© Siemens AG 2020. All rights reserved.



SIEMENS

www.siemens.com/oil-gas

P76 FPSO E-House, Brazil

Project:

- Location: Brazil
- Customer: Technip Techint JV
- End user: Petrobras (PNBV)
- Delivered: 2015
- Blast rated: Yes
- Dimension: 28m x 22m x 21m
- Weight: 1,200 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

Three storey E-House, c/w:

- MV Switchgears
- MV Bus duct
- LV Switchgears and MCCs
- Lighting & Power DBs
- MV & LV Transformers
- HVAC
- Battery & Battery chargers
- Power Management Systems



SIEMENS

www.siemens.com/oil-gas

Bay of Campeche (BEC), Mexico

Project:

- Location: Mexico
- Customer: Schlumberger
- End user: Pemex
- Delivered: 2015
- Blast rated: No
- Dimension: 18.7m x 8.7m x 4.5m (max)
- Weight: 150 MT (max)

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

- 11 E-Houses, c/w:
- MV Switchgear
- LV Switchgear
- Transformers
- VFD
- UPS
- F&G System
- HVAC

PEMEX Litoral Gas Compression Modules, Mexico

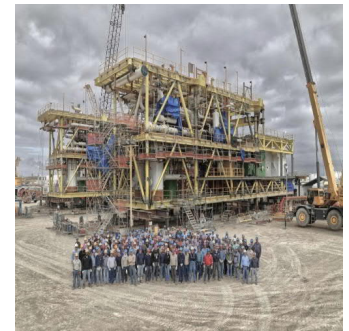
DRESSER-RAND
A Siemens Business

Project objectives	Increase the gas handling capacity in the middle process of the Abkatun-D 220 platform from 200 to 460 million standard cubic feet per day (MMSCFD), through the acquisition of two (2) gas compression modules (designed as a Single Lift Module) in order to achieve the project specified 98% gas utilization in the Integrated Gas Management Plan RMSO (2012-2016).
Project Scope	Engineering, procurement, fabrication, testing and transportation of Gas Compression Modules, and project management
Location	Gulf of Mexico, Abkatun-D 220 offshore platform
Size and weight	43m(L) x 8.6m(W) x 23m(H), 965 MT (each)
Module Fabrication	Corpus Christi, Texas
Project Schedule	Contract award: November 2012 Loadout: February 2014 Start-up: October 2014

Equipment installed in each Module



- (1) D-R Control Room
- (1) GE LM2500 Gas Generator
- (1) D-R VECTRA Power Turbine
- (1) D-R DATUM D12 Compressor
- (1) D-R DATUM D10 Compressor
- (1) Flender Gearbox
- (1) Samsung-Techwin Gas Turbine Package
- (3) Frames manufactured high efficiency Gas Scrubbers
- (1) Gaumer manufactured Gas Conditioning Skid
- (1) Fuel Gas Calorimeter
- (4) Bronswerk manufactured high efficiency Gas Coolers
- Fire and Gas detection system
- Paging system



SIEMENS



www.siemens.com/oil-gas

Champion 7 Power Generation module, Brunei

Project:

- Location: Brunei
- Customer: Brunei Shell Petroleum
- End user: Brunei Shell Petroleum
- Delivered: 2013
- Blast rated: Yes
- Dimension: 32m x 26m x 14m
- Weight: 1,018 MT

Customer benefits :

- Zero black outs on the platform
- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

- 2x 12MW GTGs
- Fuel Gas Conditioning
- E-House
- MV Switchgears
- LV Switchgears and DBs
- Battery & Charger
- Transformers
- Emergency DG
- Power Management



SIEMENS

www.siemens.com/oil-gas

Cendor Phase-2 FPSO E-House, Malaysia

Project:

- Location: Malaysia
- Customer: MISC Berhad
- End user: PETRONAS
- Delivered: 2013
- Blast rated: No
- Dimension: 27.5m x 19.6m x 16.2m
- Weight: 760 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

- E-House, c/w:
- MV & LV Switchgears
 - Power Transformers
 - UPS System
 - Bus ducts
 - Neutral Earth Resistor (NER)
 - HVAC, F&G System

SIEMENS



MODEC SIEMENS ENAVAL
MV24 E-HOUSE MODULE
CIDADE DE MANGARATIBA FPSO
ENTREGA / DELIVERY
19/ OUT/ 2013

www.siemens.com/oil-gas

Cidade MV24 FPSO E-House, Brazil

Project:

- Location: Brazil
- Customer: Modec International LLC
- End user: Petrobras (Petroleo Brasileiro)
- Delivered: 2013
- Blast rated: No
- Dimension: 26m x 22.5m x 7.9m
- Weight: 700 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

- E-House, c/w:
- MV Switchgears
 - LV Switchgears
 - Distribution Panels
 - Neutral Ground Resistors



SIEMENS

www.siemens.com/oil-gas

Petrojarl Cidade De Itajai FPSO PowerGen Module, Brazil

Project:

- Location: Brazil
- Customer: Jurong Shipyard
- End user: ODEBRECHT - Teekay
- Delivered: 2012
- Blast rated: No
- Dimension: 14m x 16m x14m
- Weight: 500 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

Power Generation Module, c/w:

- 2 x 12MW SGT400 Gas Turbine Generators
- Fuel Gas Skid
- Heat exchanger
- F&G System
- Piping, Cabling, Lighting

SIEMENS



www.siemens.com/oil-gas

Petrojarl Cidade De Itajai FPSO E-House, Brazil

Project:

- Location: Brazil
- Customer: Jurong Shipyard
- End user: ODEBRECHT - Teekay
- Delivered: 2012
- Blast rated: No
- Dimension: 14m x 12m x14m
- Weight: 400 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

- E-House, c/w:
- MV Switchboards
- LV Switchboards and DBs
- Transformers
- AC&DC Power Supply
- Power Management System

SIEMENS



www.siemens.com/oil-gas

Petrojarl Cidade De Itajai FPSO Sulfate Removal Units, Brazil

Project:

- Location: Brazil
- Customer: Jurong Shipyard
- End user: ODEBRECHT - Teekay
- Delivered: 2012
- Blast rated: No
- Dimension: 14m x 12m x 14m
- Weight: 300 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

Sulphate Removal Module, c/w:

- 3 x Sulphate Removal Units (SRU)
- SRU feed pump skid
- SRU membrane skid
- RO membrane skid
- Common CIP (cleaning in place) skid
- Interconnecting pipes



SIEMENS

www.siemens.com/oil-gas

P55 FPSO E-House, Brazil

Project:

- Location: Brazil
- Customer: Quip
- End user: Petrobras (Petroleo Brasileiro)
- Delivered: 2011
- Blast rated: No
- Dimension: 20m x 14m x 5.5m
- Weight: 700 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

E-House, c/w:

- MV Switchboards
- LV Switchboards and DBs
- Transformers
- AC&DC Power Supply
- Power Management System



SIEMENS

www.siemens.com/oil-gas

TGT FPSO E-House, Vietnam

Project:

- Location: Vietnam
- Customer: Bumi Armada Berhad
- End user: Hoang Long JOC
- Delivered: 2010
- Blast rated: No
- Dimension: 25m x 15m x 5m
- Weight: 400 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

E-House, c/w:

- MV Switchgears
- LV Switchgears and DBs
- Transformers
- UPS System
- Power Management System
- ICSS



SIEMENS

www.siemens.com/oil-gas

P-61 Tension Leg Wellhead Platform E-Houses, Brazil

Project:

- Location: Brazil
- Customer: FloaTEC
- End user: Petrobras (Petroleo Brasileiro)
- Delivered: 2010
- Blast rated: No
- Dimension: 25m x 15m x 5m
- Weight: 400 MT

Scope of supply:

- 3 x E-House Modules Fabrication including:
 - VFDs E-House Module 1
 - VFDs E-House Module 2
 - TLWP E-House
- 13,8 kV MV Switchgear
- 15 x MV VFDs for Electrical Submersible Pumps and Multiphase pumps
- 13 x MV VFDs for Multiphase pumps
- 480 V Switchboards
- MV and LV Transformers
- UPS and Batteries
- Complete Distribution System of TLWP
- HVAC System - Direct Expansion type
- Integrated Control and Safety System
- Power Management System
- Electrical and Automation Installation and Interconnection
- Fire and Gas Detection System
- CO2 Fire fighting System

SE O PR IS MOD

© Siemens AG 2020. All rights reserved.

SIEMENS

www.siemens.com/oil-gas

Tullow Jubilee FPSO E-House, Ghana

Project:

- Location: Ghana
- Customer: Modec International LLC
- End user: Tullow Ghana
- Delivered: 2009
- Blast rated: No
- Dimension: 30m x 20m x 15m
- Weight: 620 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

- E-House, c/w:
- MV Switchgears
- LV Switchgears and DBs
- HVAC, F&G System

SIEMENS



www.siemens.com/oil-gas

Oyo FPSO E-House, Nigeria

Project:

- Location: Nigeria
- Customer: Bumi Armada Berhad
- End user: ENI
- Delivered: 2009
- Blast rated: No
- Dimension: 25m x 15m x 5m
- Weight: 400 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

- E-House, c/w:
- MV Switchgears
- LV Switchgears and DBs
- Transformers
- UPS System
- ICSS



SIEMENS

www.siemens.com/oil-gas

Cidade MV20 FPSO E-House, Brazil

Project:

- Location: Brazil
- Customer: Modec International LLC
- End user: Petrobras (Petroleo Brasileiro)
- Delivered: 2009
- Blast rated: No
- Dimension: 22m x 16m x 10m
- Weight: 510 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

E-House, c/w:

- MV Switchgears
- LV Switchgears and DBs
- Transformers
- AC/ DC Power Supply
- Power Management Systems

SIEMENS



www.siemens.com/oil-gas

Cidade MV18 FPSO E-House, Brazil

Project:

- Location: Brazil
- Customer: Modec International LLC
- End user: Petrobras (Petroleo Brasileiro)
- Delivered: 2008
- Blast rated: No
- Dimension: 19m x 18m x 14m
- Weight: 650 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

- E-House, c/w:
- MV Switchgears
 - LV Switchgears and DBs
 - Transformers
 - AC/ DC Power Supply
 - Power Management Systems

Petrobras Compression Modules, Brazil



Petrobras P-50 Compression Module

- Two modules with three motor / VFD driven compressor trains, each with two compressor casings.
- Engineering and construction by UTC / Fels Setal consortium
- Project management by Dresser-Rand



Petrobras P-53 Compression Modules

- Two modules with three motor / VFD driven compressor trains, each with two compressor casings.
- Engineering and construction by Vetco Aibel, using Maclaren shipyard
- Project management by Dresser-Rand



Petrobras P-54 Compression Modules

- Two modules with three motor / VFD driven compressor trains, each with two compressor casings
- Engineering and construction by Maua Jurong
- Project management by Dresser-Rand



SIEMENS

www.siemens.com/oil-gas

Adriatic LNG Terminal E-House, Italy

Project:

- Location: Italy
- Customer: Aker Kvaerner Contracts
- End user: Terminale GNL Adriatico S.r.l.
- Delivered: 2007
- Blast rated: Yes
- Dimension: 50m x 25m x 6m
- Weight: 1,800 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

E-House, c/w:

- MV Switchgears
- LV Switchgears and DBs
- Transformers
- Bus ducts
- DC Power Supply + UPS System
- Electrical Control Systems



SIEMENS

www.siemens.com/oil-gas

P53 FPU Equipment Room, Brazil

Project:

- Location: Brazil
- Customer: Single Buoy Mooring
- End user: Petrobras (Petroleo Brasileiro)
- Delivered: 2007
- Blast rated: Yes
- Dimension: 18.5m x 2.2m x 3.8m
- Weight: 50 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

- Turret Equipment Room, c/w:
- LV Switchgears
 - MCC



SIEMENS

www.siemens.com/oil-gas

PDET PRA-1 FSO E-House, Brazil

Project:

- Location: Brazil
- Customer: Modec International LLC
- End user: Petrobras (Petroleo Brasileiro)
- Delivered: 2006
- Blast rated: No
- Dimension: 19m x 17m x 13m
- Weight: 700 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

E-House, c/w:

- MV Switchboards
- LV Switchboards and DBs
- Transformers
- AC&DC Power Supply
- Power Management System



SIEMENS

www.siemens.com/oil-gas

RJS-409 Espadarte FPSO E-House, Brazil

Project:

- Location: Brazil
- Customer: Modec International LLC
- End user: Petrobras (Petroleo Brasileiro)
- Delivered: 2006
- Blast rated: No
- Dimension: 21m x 19.5m x 11m
- Weight: 500 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

- E-House, c/w:
- MV Switchgear
 - LV Switchgear
 - NGT/NGR
 - VFD



SIEMENS

www.siemens.com/oil-gas

Arthit Central Processing Platform E-House, Thailand

Project:

- Location: Gulf of Thailand
- Customer: Haliburton, KBR Singapore
- End user: PTT Exploration & Production
- Delivered: 2006
- Blast rated: Yes
- Dimension: 26m x 11m x 9.5m
- Weight: 400 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

- E-House, c/w:
- MV/LV Switchgears
- Distribution Boards 400/230 V
- Electrical Control Systems
- Power Transformers
- Bus ducts



SIEMENS

www.siemens.com/oil-gas

Belanak FPSO E-Houses, Indonesia

Project:

- Location: South China Sea
- Customer: Halliburton B&R, Singapore
- End user: CONOCO Indonesia
- Delivered: 2004
- Blast rated: Yes
- PCB Dimension: 24m x 18.2m x 8m
- PCB Weight: 750 MT
- LER Dimension: 14m x 5m x 8m
- LER Weight: 110 to 125 MT

Customer benefits :

- Single source provider
- Improved life time costs
- Reduced operational costs

Scope of supply:

- 5 E-Houses (1xPCB and 4xLERS), c/w:
 - Switchboards, 13.8 kV
 - Switchboards, 4.16 kV
 - Switchboards, 480V
 - MCC/Emergency/Heat tracing
 - Small power Transformers
 - ANSI/NEMA standard, ABS approval
 - Power Management System
 - Switchgears for Well head platforms, (WHP)



SIEMENS

www.siemens.com/oil-gas

FPSO Barracuda & Carratingaroningen Compression Module

Project:

- Location: Brazil
- Customer: Petrobras

Customer benefits :

- Single source provider
- Reliable and localized service

Scope of supply:

- Complete compression set with compressors and process equipment, VSDS Motor drivers, c/w:
- 1* (08MV6A+06MV7A)

SIEMENS



www.siemens.com/oil-gas

FPSO Shiehallion Compression Module

Project:

- Location: Scotland, UK
- Customer: IV Oil & Gas
- End user: BP

Customer benefits :

- Single source provider
- Reliable and localized service

Scope of supply:

Complete compression set with compressors and process equipment Fixed speed Motor drives

4*08MV5A, 2*06MV6A, 1*05MV3A



SIEMENS

www.siemens.com/oil-gas

FPSO Jotun Compression Module

Project:

- Location: North Sea, Norway
- Customer: IV Oil & Gas
- End user: Exxon

Customer benefits :

- Single source provider
- Reliable and localized service

Scope of supply:

Complete compression set with compressors and process equipment Fixed speed Motor drives

1*12MV7B, 1*06MV5A, 1*08MV7B

1*06MV7a



SIEMENS

KASHAGAN BARGE 3

Turbo Compressor with Control Room

KASHAGAN BARGE 3

Air-cooler

www.siemens.com/oil-gas

FPSO KCO Compression Module

Project:

- Location: Kazakhstan
- Customer: Consortium with SBM
- End user: AGIP

Customer benefits :

- Single source provider
- Reliable and localized service

Scope of supply:

3 of Gas Turbine (SGT 600) driven Compressor Packages, main process equipment and control building



SIEMENS

www.siemens.com/oil-gas

Vasai East Compression Module

Project:

- Location: Arabian Sea, India
- Customer: Larsen and Toubro ONGC
- End user: ONGC

Customer benefits :

- Single source provider
- Reliable and localized service

Scope of supply:

5 of Gas Turbine (SGT400) driven Compressor
Packages, Module Engineering



SIEMENS

www.siemens.com/oil-gas

BCP-B2 Compression Module

Project:

- Location: India
- Customer: Larsen and Toubro ONGC
- End user: ONGC

Customer benefits :

- Single source provider
- Reliable and localized service

Scope of supply:

4 of Gas Turbine (SGT400) driven Compressor
Packages, Module Engineering