Offshore Handling Systems

UK Energy in Brazil 2013 Showcase
Deepwater and Subsea Technologies
12 March 2013

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Introduction

OSS is a new company formed in Brazil to target the offshore and subsea markets

Marine Handling Systems, Scotland, since 1968

Cable Installation Services, Brazil, since 1999
Background details

- Over 40 years experience building handling systems for Marine Offshore and Subsea markets

- Based in Glasgow, Scotland 40+ employees, with representatives and partners worldwide

- Privately owned since 2000. Previously a division Halliburton and Dresser Industries. Will turnover +$25m in 2013

- Comprehensive systems design capability and project management

- Dedicated assembly facilities compliant with HSE/QA (ISO14001:2004 and OHAS 18001:2007); Quayside access; Extensive overseas manufacturing experience

- Having a strong reputation for doing a good job for our clients has helped the company win a number of high profile offshore and subsea projects
Current Projects

Deepwater Lowering System
Client: <TBC>
Location: Glasgow
Class: Lloyds Register

The system will be used to lift a range of subsea structures some weighing in over 1,000Te in water depths greater than 1,300m later this year.

MARS Deployment System
Client: Cameron
Location: Glasgow
Class: Lloyds Register

The 10,000PSI MARS system (Multiple Application Re-injection System) will be used on 1,300m SW on Chevron’s Tahiti Project, GOM.

Workover reel with 150mm diameter riser and 35Te SWL

Caley is on the Cameron approved vendor list and has completed their rigorous HSE Audit.
Current Projects

7,000Te Carousel System
Client: Blue Offshore
Location: Newcastle; Glasgow
Class: Lloyds Register

The system is currently laying NSW power cable offshore Germany

5,000Te Carousel System
Client: Jan de Nul
Location: Glasgow
Class: Lloyds Register

First deployment of the system will be to install the 245kV export cable for the Northwind windfarm off the coast of Belgian later this year
Current Projects

Suite of electric winches and A-frame for new research vessel

Client: Indian Government
Location: Korea; Glasgow
Class: DNV

System includes a 10,000m fibre rope that is one of the first to be approved under the new code DNV-OS-E303 'Offshore Fibre Ropes'

Caley are participating in the DNVs DDRS JIP

For us there are some parallels with Korea in that there are good quality supply chain

Saturation Dive Handling Systems

Client: Spanish Navy
Location: Glasgow
Class: Lloyds Register/ ABS

Caley has built 20 dive handling systems for clients around the world in the part 5 years
Current Projects

Heavy Weather Boat Handling Systems for

USN,
Japanese Coastguard,
Chilian Navy,
Irish Navy

Caley has built over 200 davit systems over the past 20 years

In the aftermath of the Pipe Alpha accident the Caley Davit was one of the key safety technologies that was introduced.

Today most standby vessels in the North Sea are fitted with either Caley Davits or systems based on the technology

www.ossbrasil.com
Current Projects

2,500Te Carousel System Overhaul
Client: Saipem
Location: Netherlands; Glasgow

Overhaul of Alvin Submersible A-frame
Client: Woods Hole
Location: Jacksonville, FL, Glasgow
Class: Navsea/ABS

Designed for a single lift the system will be used to transport umbilical from Norway to China for the Husky Oil’s Liwan Project.

Alvin, which was used to find the Titanic has just completed a refit as part of a $50m upgrade programme after 39 years service.
Product Area Summary

A-frames, winches and reels

- Wellhead intervention systems
- Heave compensated ROV handling/ Dive handling
- Deepwater module installation/ Hose deployment

Carousels, tensioners, friction clamps and loading arms

- Cable and pipe storage, transport and installation
LIG is a local company, based in Santo André, SP, but operates throughout Brazil.

The company’s core business is the installation of Electrical Power Transmission Systems both for underground and underwater conditions.

LIG is qualified to work with a wide range of tension cables and many types of accessories (XLPE, EPR and OF cables), both for underground and underwater applications.
Current and Recent Projects

Construction of underwater transmission lines across the Rio Negro

- Cable: 3 x 4.4 km - 69 kV
- Client: SPIC / MESA
- Location: Manaus - AM

Construction of a submarine transmission line

- Cable: 3 x 4.3 km -230 kV
- Client: ELETROSUL
- Location: Florianópolis - SC
Current and Recent Projects

Construction of the transmission lines across a seaport access channel

- Cable: 4 x 1.5 km - 69 kV
- Client: CEEE-D
- Location: Rio Grande - RS

Construction of four transmission lines linking coastal islands

- Cable: 1 x 23.6 km (three core) - 20 / 35 kV
- Client: COPEL
- Location: Coast Islands - PR
Current and Recent Projects

Construction of two electrical feeds for the Bahia Liquefied Natural Gas (LNG) Regasification Terminal (TRBA)
  - Cable: 2 x 14 km (3 core) - 34,5 kV
  - Client: Prysmian / Petrobras
  - Location: Baía de Todos os Santos - BA

Construction of the optical link to TRBA.
  - Cable: 1 x 16 km (optical)
  - Client: GNL / Petrobras
  - Location: Baía de Todos os Santos - BA
Current and Recent Projects

Construction of two submarine transmission lines to feed Marajó island

Cable: 2 x 14 km (three core) - 20/35 kV
Client: CELPA
Location: Baía de Marajó- PA
Caley’s Business Model

Ultimate in *Lean Manufacturing*
- High value adding skills kept in house
- High quality products with minimum capital intensity

In house Design/PM  →  Outsource Components/Subassemblies  →  Assembly and Testing
Company Kick Start

Caley’s skills, knowledge and reputation
- Caley design book
- Manufacturing expertise
- Offshore contracting knowledge (e.g. FMECA, QA, Certification, HSE etc)

Lig’s installation experience and market knowledge
- Cable Installer
- Brazilian Contractor
- Petrobras specific experience

OSS
- New Company intent on being a self sufficient supplier of offshore and marine handling systems in the Brazilian and wider LA markets
  - Definitely not a JV
  - Definitely not time limited
  - Definitely not about technology transfer

First Project
- Develop supply chain
- Apply Caley’s business model

Caley carousel on NSW’s Aura
First OSS Project

Modular Carousel System

1,000Te Capacity
14.4m Outside diameter
Expandable to 23m and 2,500Te
Road transportable tower and loading arm

Ready 4Q13
>75% Brazilian content

*For future projects we expect the local content to be much higher as we develop the supply chain*
Going Forward

SUB-CONTRACTORS
- Steel Fabricators
- Machine Shops
- Electrical Contractors
- Hydraulic Equipment Suppliers

CLIENTS
- SURF Contractors
- Workover Contractors
- Deepwater Installation Contractors
- Diving and ROV Contractors

High local content

Clients can have confidence in the delivered product
Summary

OSS is a new company that combines the complimentary skills of two successful organisations.

Together, we are making a long term investment to build a new company of substance, capable of supplying high quality offshore handling systems to Brazilian companies and the wider LA.

Market focus

* Cable and pipe handling systems
* A-frames and winches
* Bespoke solutions

‘Hopefully in time, OSS will become a model for other UK companies wishing to enter the offshore market in Brazil’