



# FRANKLIN OFFSHORE SERVICES

2021.



# **CONTENT PAGE**



Introduction	3
Spooling	4
Socketing	5
Rope Inspection	6
E-Mag Rope Inspection	7
Anchor Chain Inspection	8
Inspection & Re-certification	9
Temporary Mooring	10
Permanent Mooring	11
Crane Rope Installation	12
Chain Installation	13
FAT, SIT and Offshore Execution	14
System Integration Testing	15
Sling Installation	16
Equipment Rental	17
Steel Wire Rope	18
CFE Fabrication	19

# INTRODUCTION



### Franklin Offshore Holdings Pte. Ltd.

Franklin Offshore Holdings Pte. Ltd. is the parent company of the Franklin Offshore group of companies.

### A World-Class Company

The Franklin Offshore Group is a leading integrated provider of quality rigging and mooring equipment and services to the offshore construction, oil and gas exploration and production industries.

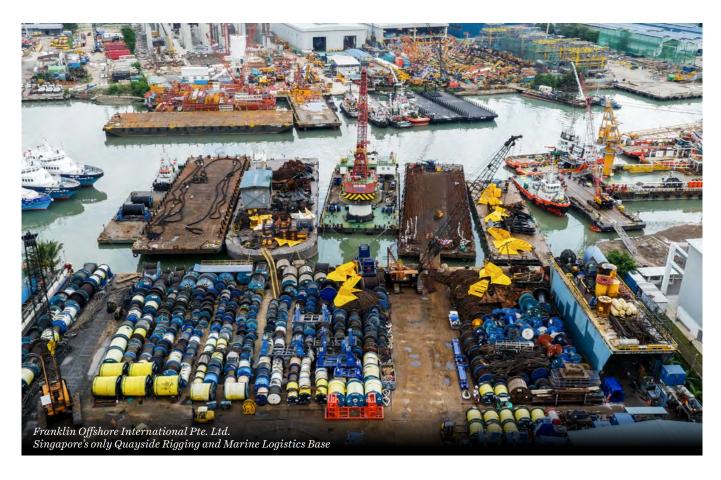
Headquartered in Singapore, the companies in the Group are strategically located worldwide to provide its customers with the fastest, most efficient and most economical service possible.

Franklin Offshore manufactures excellent products and provides a full spectrum of value-added services. Such products or services developed by the Group are branded with the "FRANKLIN" name.

The Group has an experienced and dedicated workforce and a corporate culture that is solidly based on the principles of professionalism, innovation and service.

#### **Global Reach**

Franklin Offshore has operations strategically located across the globe in Singapore, Australia, Indonesia, Malaysia, South Korea, Azerbaijan, Qatar, The Netherlands and Americas.



# **SPOOLING**



### **Spooling Services**

We own and operate a large fleet of hydraulic spooling winches used in the removal and installation of all types of steel wire ropes for different applications.

Our spooling units are tough, reliable and certified.

### 3,000 kg up to a massive 600 Tonne capacity

Our smallest units have capacity of 3,000 kg for installing small diameter ropes and we go all the way to our mighty Franklin 600 Tonne Spooling unit.

Our spooling units are multi-purpose designed and can easily accommodate a variety of reel sizes, dimensions and weights.

Experienced offshore spooling crews accompany our offshore spooling machines to ensure that the installation and removal of steel wire ropes are always conducted in a manner that enhances safety and reduces the potential for rope damage.



# **SOCKETING**

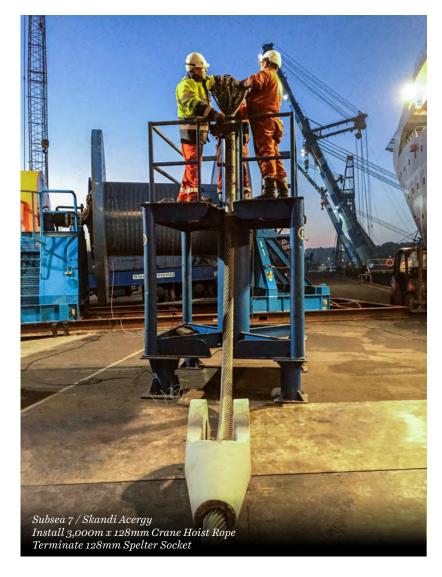


### **Socketing Services**

We provide around the clock and around the globe, our socket installation rigging crews. Our socketing procedure is approved by ABS Consulting and our socketing crew members are trained and certified for socket terminations to be carried out in strict compliance with our procedures.

### We provide socketing for all types and constructions of steel wire rope

- · Elevator Ropes
- Crane Hoist Ropes
- Winch Ropes
- · Anchor Lines
- Mooring Inserts
- · Pennant Lines
- · Towing Bridles
- · Spiral Strand





### Socketing Procedure Approval

Standard: ISO 17558-2006-09-15 DNV-OS-E304

Procedure: FOS SSC-1



# **ROPE INSPECTION**



### **Rope Inspection Services**

Our rope inspectors are trained and qualified by both BRIDON and LEEA to carry out rope inspections in strict compliance with the inspection and rope rejection criteria.

### **Bridon Bekaert Ropes Group**

BRIDON · BEKAERT
THE ROPES GROUP

### Lifting Equipment Engineers Association (LEEA)



### **Rope Inspection Criteria include:**

- API Recommended Practice 9B:2015
   Application, Care, and Use of Wire Rope for Oil Field Services
- ISO 4309:2010
   Crane -- Wire ropes -- Care and Maintenance, Inspection and Discard
- API Recommended Practice 2D:2014
   Operation and Maintenance of Offshore Cranes



# **E-MAG ROPE INSPECTION**



### Non-Destructive Examination (NDE) by means of Magnetic Rope Testing

E-Mag is a NDE Non-Destructive Examination of Wire Rope by Electromagnetic methods giving detailed insight of the condition of the wire rope. Its ability to examine a specimen throughout its working length under in-situ conditions has made it a popular choice in the Oil & Gas and Mining Industry.

### **E-Mag Technicians**

Our e-mag technicians are trained and certified in the use of our e-mag Magnetic Flux Leakage (MFL) Method.

### **IMCA M 197 August 2009**





### **Guidance on Non-Destructive Examination**

We carry out our NDE rope inspections in compliance to the IMCA guidance note.

Our technicians are trained in the safe use and technical features of our e-mag NDE inspection units.

### **Rope Diameter**

We can carry our e-mag NDE rope examinations from 6mm all the way up to a massive 160mm diameter.

## Our Range of E-Mag NDE Units

DESCRIPTION	<b>BODY UNIT</b>	MAGNETIC HEAD	WIRE ROPE DIAMETER
Steel Wire Rope Flaw Detector Intros	505022	705018	6mm - 26 mm
Steel Wire Rope Flaw Detector Intros	405281	203523	24mm - 64 mm
Steel Wire Rope Flaw Detector Intros	405065	203546	24mm - 64 mm
Steel Wire Rope Flaw Detector Intros	405092	220504	60mm - 85 mm
LRM XXI Diagnostic System No. 2818	5118 / 5218	-	120mm - 160 mm

# **ANCHOR CHAIN INSPECTION**



### **Anchor Chain Inspection Services**

We have the experience and ability to provide cost-effective total solutions to all anchor chain inspection and compliance requirements whether conducted globally onshore or offshore.

Our anchor chain inspection procedures meet the requirements of both DNV and ABS. Upon completion, a comprehensive inspection report and chain map will be provided.

We also provide anchor chain refurbishment services that include hydraulic pressing of loose anchor chain studs.

### **Onshore or Offshore Chain Inspection Services**

Our equipment and stud press unit for anchor chain refurbishment can be set up for chain inspection both onshore and offshore. The stud press unit is certified for lifting and offshore use. When offshore, we can work from a AHV deck or a suitable flat top barge.





Our procedures are approved by DNV:GL

# **INSPECTION**



### **Inspection and Re-Certification Services**

We provide a full range of inspection and re-certification services on all types of lifting, rigging and mooring equipment. We also carry out all types of load testing and MPI / NDT inspection services.

All inspections and re-certification events are carried out in full compliance with international standards by our trained inspection technicians.

- Australian Standards
- American Petroleum Institute (API)
- American Society of Mechanical Engineers (ASME)
- BS EN Standards
- Det Norske Veritas (DNV)
- International Marine Contractors Association (IMCA)
- LOLER (Lifting Equipment Regulation)



### Lifting Equipment Engineers Association (LEEA)

We are a full member of Lifting Equipment Engineers Association (LEEA) and our staff members are trained to international standards. This ensures compliance and competence in carrying out inspections and lifting equipment certification.



# **TEMPORARY MOORING**



### **Temporary Mooring Services**

We are acknowledged as a global leader in the supply of integrated comprehensive solutions for temporary moorings. Regardless of water depth, mooring requirements and component requirements, Franklin Mooring Services provide a unique opportunity for customised and cost-effective solutions.

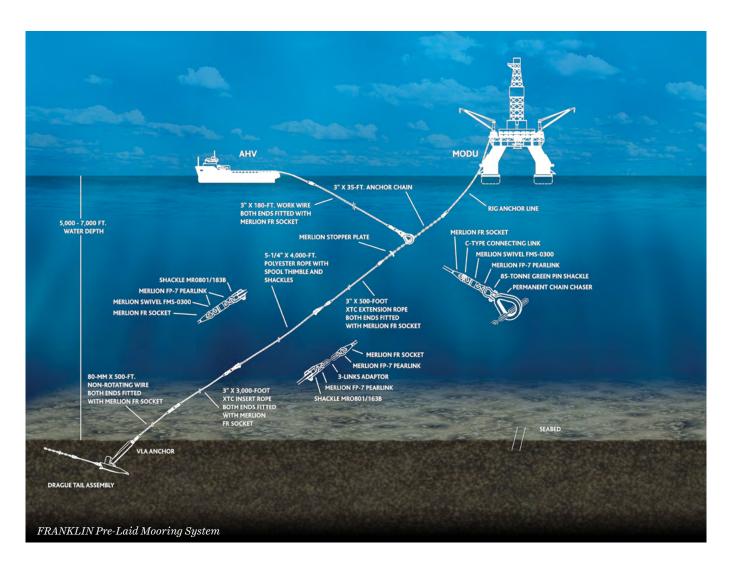
### **Deployment & Retrieval of Temporary Mooring Systems**

Our mooring supervisors are equipped to provide a full spectrum of support services such as rig moves. Turnkey support services include the establishment of mobilisation plans, mooring equipment deployment and retrieval procedures.

#### **Rental or Direct Purchase**

We can provide a total turnkey solution for a pre-laid mooring system.

From the anchor line to the anchor, we are the one-stop shop.



# PERMANENT MOORING



### **Permanent Mooring Services**

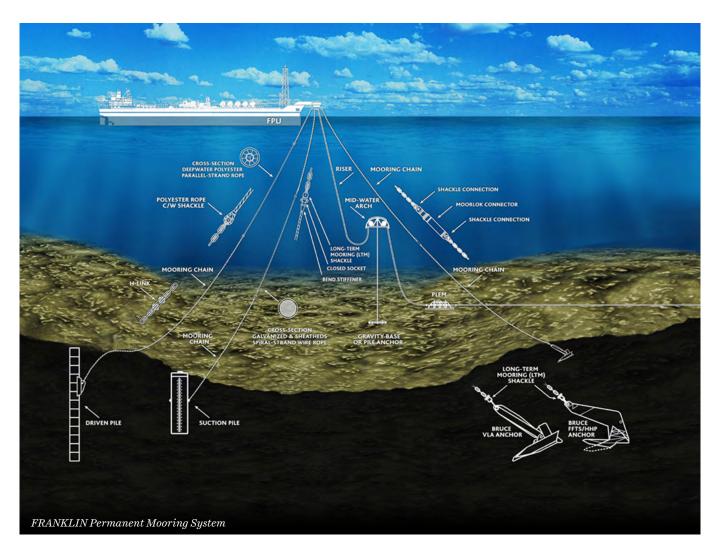
We have a wealth of experience and resources to provide our permanent mooring services on turnkey management, mobilisation and installation of complete mooring systems.

Our services include the provision of expertise, equipment and personnel for:

- · Mooring & riser analysis
- Design & engineering of mooring system
- · Provision of all mooring equipment and installation aids
- Provision of all personnel for installation and retrieval of mooring and riser system for MODU / FPSO / FPU / DTB or similar vessels

### Mooring Analysis Software (Ariane 7, Moses, Orcaflex, Romeo)

- Efficient static / time-domain multi-body mooring software developed by BV
- Approved by MDN (Maritime Directory Norway) and certified by SHELL and ELF
- · Benefits of more than twenty years of development



# CRANE ROPE INSTALLATION



### **Hoist Rope Installation Services**

We have a wealth of international experience in the installation of new ropes for large cranes.

Our installation superintendents are responsible for the installation procedures - including pre-work JSA reviews.

Our spooling equipment is robust and has sufficient back tension to ensure that your ropes are installed in full accordance with manufacturers' requirements.

These dependable multi-purpose spooling units accommodate a variety of reel sizes, dimensions and weights.

The presence of our experienced offshore spooling crew with each of our offshore spooling machines ensures that the installation and removal of steel wire ropes is always conducted in a manner that enhances safety and reduces the potential for damage.



### **Aegir Installation**

We carried out without incident installation of all the following ropes:

4 x Tugger	180m x 40mm
5 x Tugger	195m x 30mm
1 x Whip Hoist	820m x 50mm
1 x Aux Hoist	1150m x 72mm
2 x Main Hoist	2680m x 72mm
1 x Boom Hoist	3696m x 72mm

# **CHAIN INSTALLATION**



### **Chain Installation Services**

Over our many years of installing anchor chains, we have designed and created proprietary equipment to enhance the safety and efficiency of this important operation.

In addition to saving time through use of our special equipment, every anchor chain installation is conducted by our highly skilled and knowledgeable rigging personnel. These individuals have acquired a wealth of experience working on all types of equipment on vessels of all sizes and categories.

### **Load Test of Chain Stopper System**

Offshore we cannot be in a position whereby the chain handling system is not 100% operational. When installing the chain, we can install the chain into the chain stopper and apply a load to ensure the chain stopper if fully operational as it is designed to operate.

Our chain installation services include the provision of detailed reports and multi-media supporting files.



# **FAT, SIT AND EXECUTION**



### Factory Acceptance Test (FAT) and System Integration Test (SIT)

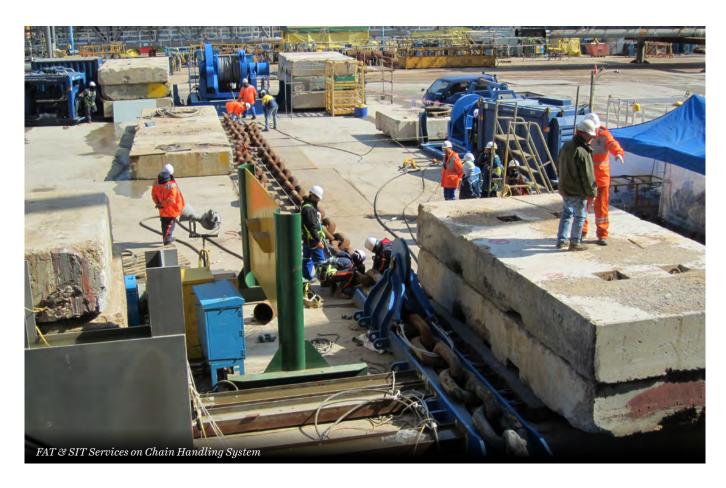
At Franklin Offshore, we have a well established track record and we provide our services to international industry's standards and accepted methods to ensure the integrity of chain, winch rope, deck and mooring equipment.

We know by experience that for projects on a tight time schedule, the physical installation, FAT and the required SIT execution is very much a priority event.

### **FAT / SIT Project Execution**

Our multi-skilled project teams are highly experienced and we can provide total integrated solutions relating to:

- Development of procedures
- Fabrication of material handling and installation aids
- Engineers, technicians and rigging crew
   To support the work during equipment procurement and preparations, FATs, SITs and offshore execution



# **SYSTEM INTEGRITY TESTING**



### System Integration Testing (SIT)

We are highly experienced and have carried out high value SIT with a number of international clients who own and operate FPSO. All work is carried out in compliance with work specific procedures and all the tests are complete with reports and supporting photographs. We provide an experienced project team.

Our scope of work has included such SIT projects as follows:

- Installation of riser winch ropes
- Installation of all mooring pull-in wires
- Complete SIT of all riser pull-in systems
- · Complete SIT of all mooring pull-in systems
- Winch load tests up to 400 Tonne

Significant completed SIT projects include:

- Kizomba A
- Kizomba B
- BP Greater Plutonio
- USAN FPSO
- West Aquarius
- · Woodside Rankin B



# **SLING INSTALLATION**



### **Sling Installation Services**

We have a highly experienced cable laid sling installation team available for global sling handling and installation projects.

#### We can provide:

- Experienced onshore / offshore superintendents
- Experienced sling handling and installation rigging crew
- Sling installation procedures
- Sling installation reports

### Sling Installation Reports and Sling Visual Inspection Reports

The slings are installed with the expertise of our international cable laid sling installation riggers. After the installation, we issue our cable laid sling installation report and a visual examination report stating that the sling is free from visible defects.



# **EQUIPMENT RENTAL**



### **Equipment and Installation Aids**

We design and fabricate specialised installation aids for the handling and installation of steel wire rope, rigging and mooring equipment. Our equipment is available for direct purchase or project specific rental.

Our comprehensive list of equipment includes:

- Spreader Bars
- · Rigging Lofts
- · Rigging Blocks
- ROV Hooks
- Hydraulic Pin Release Shackles
- Spooling Machines
- Winches

- Franklin 400 Tonne Winch
- Chain Tensioner (500 Tonne)
- Linear Winch (400 Tonne)
- Hub (Under Roller Spooler)
- Track Tensioner
- Pile Guidance Frames



# STEEL WIRE ROPE



### One call Does it All

We, at Franklin Offshore, have built our global reputation as a leading supplier of high quality steel wire ropes to the onshore, offshore oil & gas, exploration and construction industries.

We have established high performance premium brands that include:

# Premium Brands for Premium Customers BRIDON HAGGIE KISWIRE PYTHON

We have established high performance premium brands that include:

- APOLLO XTC® Steel wire rope
- PACIFIC BLUE Steel wire rope

These ropes give enhanced benefits which include high breaking loads, high quality lubricants, and extended rope life.

- Drill Lines
- Anchor Lines
- A/R Winch Ropes
- Crane Ropes



# **CFE FABRICATION**



### **CFE Engineers Asia Pte. Ltd.**



CFE Engineers is a fully owned operating company in the Franklin Offshore group of companies. CFE has a wealth of experience and is acknowledged as a leading fabrication service provider of engineered platform and steel structural fabrications used throughout the offshore and drilling industry.

The company specialises in providing full-spectrum integrated solutions that encompass engineering design, blueprint consultation, fabrication, and comprehensive project management.

CFE has established a truly world-class infrastructure, complete with a sea-front manufacturing facility and in-house quality control unit to ensure that every aspect of our manufacturing process is efficiently and professionally managed.

CFE is an ISO-accredited company which complies with standards in corporate documentation and procedure.

- Certified to ISO 9001 Standard
- Certified OHSAS 18001 Standard
- Quality / HSE Management Systems





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