

## Case Study 120Te Installation/Riser Winch FPSO Package

### The Challenge:

Ansell Jones were given a challenge by a major oilfield client to design, manufacture, test and commission a DNV type approved 120Te mooring winch package for a fast track FPSO project in the Malaysian Basin. The package comprised of a dual function winch, HPU, heavy duty snatch blocks and chain/wire diverter wheel.

### The Solution:

Ansell Jones utilised our established relationship with DNV and client to bring all the specifications and requirements together to produce a detailed design for the winch and HPU. By effective project management at early stages of the contract, Ansell Jones were able to expedite the project much earlier than anticipated.



### The Results:

Ansell Jones designed, manufactured, type approved and commissioned on-site in Singapore a 120Te hydraulic winch and HPU capable of pre-tensioning the mooring chains on the turret of an FPSO. The winch also had a riser mode to limit the line pull to 25Te for pulling in the risers. To get both functions from the same winch was of significant cost benefit to the client. The winch was supplied with a 110KW hydraulic power unit, large heavy duty snatch blocks and a diverter wheel capable of passing 114mm chain and the 62mm winch wire without damage to the chain or the rope.

### The package specifications were as follows:

- Zone 2 rated winch, 110KW HPU and all control panels
- SWL installation mode 120,000 Kgs all layers
- SWL riser mode 25,000kgs all layers
- Line speed 3m/min or 6m/min all layers in riser mode
- 180,000 Kgs brake holding capacity
- Full load and line in/out monitoring
- Spooling system for reeving the wire onto the winch drum
- Drum suitable for 330m of 62mm wire rope
- Dual motor pump arrangement in HPU for redundancy allowing full load retrieval with just one motor
- Remote control station to allow winch to be operated at a safe distance
- Winch base designed to spread the load and reduce amount of under deck stiffening required by the client
- Lifting eyes tested and certified for safe movement of the equipment
- Total winch weight (including wire) 27,000Kgs
- High load capacity snatch blocks suitable for 62mm wire rope
- Chain diverter wheel suitable for free passage of 114mm chain, 62mm wire and socket
- Fully guarded for safe operation
- Installation & commissioning support

To find out more contact our Sales Team at **Ansell Jones Ltd** on 0121 568 3420 or email [sales@anselljones.com](mailto:sales@anselljones.com)