COMPOSITES
Specialist flexipipe supplier and installer Coflexip chose PARAFL® Type A cables as permanent anchors for the Ivanhoe/Rob Roy floating production system operated by Amerada Hess in the UK North Sea. The cables anchor mid-water buoyed arches over which the platform’s flexible risers hang in lazy-S configuration.

The PARAFL® Type A cables, constructed from parallel fibres of high strength polyester encased in an extruded polyethylene sheath offer the following advantages in marine applications:

- High strength to weight ratio. In water PARAFL® Type A has only slightly negative buoyancy.
- High modulus, low creep and good energy absorption and damping.
- Excellent fatigue performance.
- Highly resistant to attack by seawater.
- Smooth surface reduces drag forces and avoids fouling.
- Sheath material is tough giving good resistance to abrasion and fish bite attack.
- Termination technology is fully established and well proven.
- Long continuous lengths can be produced. Up to 10,000 metre runs have been produced for smaller size cables.

PARAFL® Type A cables used for the Ivanhoe project had a Nominal Breaking Load, in standard terminations, of 100 tonne. Supplied in pre-made ‘strops’ of 50 metres in length the cables were terminated using standard design terminations and pre-loaded to 70 tonne. Pre-loading ensures full bedding down of the termination. Terminations were manufactured from a corrosion resistant steel alloy and were given additional surface corrosion protection.

The cable has an external diameter of 64mm, a weight in air of 310kg per 100 metres and a weight in seawater of 77kg per 100 metres.

The PARAFL® cables and termination systems have been tested to loads a of 1500 tonne.