



CASE STUDY - OFFSHORE INDUSTRY - CDE RISER CLAMP

Background

Drilling risers extend from the BOP (blow out protector) on the sea bed to the drilling vessel providing fluid communications between the well and the vessel. The riser supports the choke, kill and auxiliary lines while also being used to guide tools into the well.

Traditionally steel "burn-outs" were used to clamp the lines to the main riser. The weight of the risers can be enormous and this generates high levels of strain and tension on the host vessel.

Disadvantages

- Required a minimum of three people to fit each clamp
- Clamps were heavy and were a two man lift
- Clamps corroded , required anode protectors and ultimately replaced

Solution

After successfully trialing a clamp to the existing three part design, only manufactured in Devlon, at Devol's suggestion the clamp was redesigned to a two part main body with individual caps to clamp or support each line. This redesign streamlined the assembly procedure allowing individual lines to be offered up thus making assembly simple.



Advantages

- Assembly time more than halved and number of people required reduced to two
- Parts are non-corrosive
- Clamps are 1/7th the weight of original steel clamp
- Improved buoyancy due to weight saving