CHOKE AND KILL LINE SYSTEMS FOR BLOWOUT PREVENTERS

ABSTRACT

The invention is directed to pressure lines for use with equipment associated with drilling and production risers, and in particular, pressure lines having breechblock connections with the equipment and with choke and kill lines for use in connection with different sized blowout preventer stacks ("BOP stacks"). The pressure line systems and choke and kill line systems of the invention include a breechblock connection for quick and easy removal and installation of the pressure lines to riser equipment and the choke and kill lines to BOP stacks. Additionally, the choke and kill lines of the invention may include a coupling system having a BOP connector, or plate assembly, for permitting one set of choke and kill lines to be used on various sized BOP stacks. The plate assembly is in fluid communication with a first choke or kill line connector. Each of the choke and kill lines, or hoses, include a second choke or kill line connector, preferably as part of a line assembly, which is capable of being releaseably secured to the first choke or kill line connector. Therefore, by installing a plate assembly on different sized BOP stacks, one set of choke and kill lines can be used in connection with multiple sized BOP stacks. Methods of replacing BOP stacks and installing and removing choke and kill lines and pressure lines are also disclosed.

Figure : 9