SIMULTANEOUS TUBULAR HANDLING SYSTEM

ABSTRACT

A system and method for building and handling oilfield tubular stands while drilling operations are simultaneously and independently occurring with one drilling deck, one derrick, and one rotary system. An offline guided path horizontal to vertical arm lifts and moves in the same plane tubulars stored horizontally on the catwalk and positions the tubulars vertically directly into a preparation hole for assembling and disassembling tubular stands while online drilling operations are simultaneously being conducted. A stand arm lifts and lowers the tubulars into and out of the adjustable preparation hole, and transports the tubulars for storage to an auxiliary tubular racking station in the upper part of the derrick. A bridge racker crane moves tubular stands from the auxiliary tubular racking station to the top drive or another tubular racking station.

Fig. 20