

ABSTRACT

WEIGHT-SET MANDREL AND TUBING HANGER

An improved weight-set hanger system and method of securing the weight set hanger for use comprises three independent locking mechanisms that are built into an actuator/packoff assembly. These independent locking mechanisms comprise two locking rings, one of which fastens the actuator/packoff assembly to a spool body, and the other of which internally locks the hanger to the actuator/packoff assembly. A third locking mechanism comprises a plurality of screw down spring loaded lock pin assemblies, which, in an embodiment, are spaced out at 90 degree intervals. No rotation of the seals or other manual intervention is required, which results in significant improvements to lessen the required maintenance and replacement cost.

FIG. 1