

HIGH-CAPACITY SINGLE-TRIP LOCKDOWN BUSHING AND METHOD TO OPERATE THE SAME

Abstract of the Disclosure

A high capacity single trip lockdown bushing (25) and a method to operate the same is disclosed. The lockdown bushing (25) includes a tubular body (27) that carries a locking ring (41) and an energizing ring (43) about an upper portion (29) of the tubular body (27). The energizing ring (43) includes a cam portion (45) interposed between the locking ring (41) and the tubular body (27) so that the cam portion (45) and the locking ring (41) overlap along mating cam surfaces (53, 59) in an unset position. A running tool carries the lockdown bushing (25) to land on a casing hanger (21). The running tool is actuated to drive the energizing ring (43) downward so that the mating cam surfaces (53, 59) interact to move the locking ring (41) radially outward into engagement with wickers (63) formed in a wellhead (13).

Figure 1