

METAL-TO-METAL SEAL WITH TRAVEL SEAL BANDS

ABSTRACT

A wellhead seal assembly (21) that forms a metal-to-metal seal between inner and outer wellhead members (15, 10). A metal seal ring (23) has inner and outer walls (25, 29) separated by a slot (35). The exterior surfaces of the outer and inner walls (25, 29) contain a soft metal inlay (33). A wicker profile (12, 18) with a slick area (13, 19) is located on the outer surface (17) of the inner wellhead member (15) and on the inner surface (11) of the outer wellhead member (10). An energizing ring (41) is moved into the slot (35) to force the outer and inner walls (25, 29) of the seal (23) into sealing engagement with the inner and outer wellhead members (15, 10). The soft metal inlays (33) deform onto the slick area (13, 19) on the wellhead members (15, 10). The wickers (12, 18) on the wellhead members (15, 10) embed into the walls of the seal ring (23).

[Figure. 1]