BI-METALLIC ANNULAR SEAL AND WELLHEAD SYSTEM INCORPORATING SAME

ABSTRACT

A wellhead seal assembly that forms a metal-to-metal seal between inner and outer wellhead members. A bi-metallic U-shaped seal with legs having a low yield metal on the outer portions. During installation of the seal assembly, the legs of the seal are forced outward against the surfaces of the wellhead members, by pressurization of a interim non-metallic seal which forces a wedge into the U-shaped seal, causing localized yielding of the low yield metal to fill defects on wellhead member surfaces.

Figure 1