

SOFT SKIN METAL SEAL AND TECHNIQUE OF MANUFACTURE

ABSTRACT

A seal assembly between a wellhead housing having a bore and a casing hanger, has an inner seal leg for sealing against hanger and an outer seal leg for sealing against housing. An extension extends downward from outer seal leg and is connected to a nose ring having a downward facing shoulder that rests on the hanger shoulder to provide a reaction point for setting operations. A sealing surface on the seal legs is heat treated to obtain a lower localized yield strength to provide improved sealing while maintaining mechanical load capability.

Figure 1