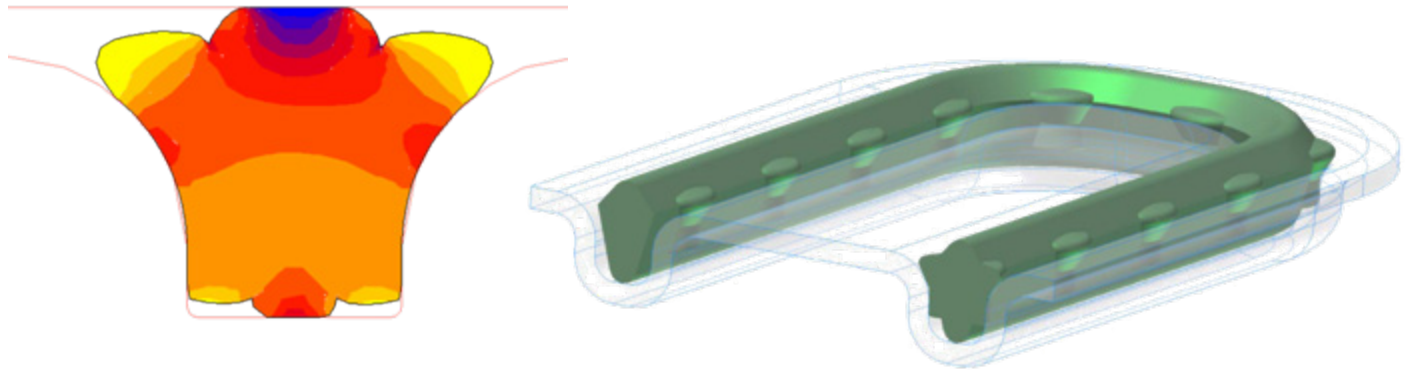


Application:

Potable Water Tank Seal

Problem:

The customer needed a self-retaining seal in a stamped steel groove with large corner radii formed in the stamping process. The groove, with depth equal to width, was not ideal and could not be changed. The large radii at the corners of the groove and shallow depth created a big challenge for seal retention and stability.



Solution:

A variation of the Parker Diamond Seal™ with a tapered rib was developed which conformed to the stamped radius on the corners of the groove. To make this rib shape possible, the seal configuration was changed to bias the parting line towards the top of the seal. Finite Element Analysis (FEA) was utilized, and the first prototypes met the customer's design expectations, minimizing development cost and lead time.

The Engineered Seal Division's seal provided adequate retention and robust sealing performance with no stability problems. Our engineering expertise and program management allowed us to launch the program quickly and at a competitive price.

Similar Applications:

Any stamped metal cover or component with a seal groove