



MANUFACTURING CASE STUDY

THE CHALLENGE.

A multi-national forklift manufacturer wanted to domesticate a reach/lift device attachment for the North American market. The challenges were cost and absolute leak free performance. The hydraulic cylinder design was difficult due to very small gland space to accommodate a premier sealing system.

Wyatt Seal presented a rod sealing package that incorporated a proprietary "Skinny buffer ring".

The buffer ring accomplished 95% of the sealing while only using a very small amount of gland axial and radial space. It was also a pressure relieving design that worked in harmony with the primary rod seal.

The skinny buffer was net molded which is very economical and the use of the buffer ring enabled more cost-effective materials to be used for the rod seal and wiper ring.



THE SOLUTION.

A test program was instituted on behalf of the customer. The goal was 60,000 cycles (defined lifetime) with zero leakage. All cylinders tested achieved the absolute zero leakage specification. Upon tear down, the installation grease was still present in the rod seal and wiper ring areas. The seals looked to be brand new and could have carried on for many thousands of additional cycles.



THE RESULTS.

The sealing package met all goals of cost and performance and is now performing exceptionally in numerous warehouses in North America. The forklift manufacturer is very pleased and will specify this sealing system again in the future.