

# ENHANCEMENTS TO PROTECT AND EXTEND BEARING LIFE

We've Got It Covered

A Case Study



**BACKGROUND** A major equipment manufacturer placed an order for 18 (9 expansion + 9 non-expansion) SRE-FB4-300 4-bolt flange mounted units. The units were destined for a land roller used in the Farming Industry to flatten land and compact the soil.

**THE CHALLENGE** High levels of contaminants (dust, gravel, sand, etc.) are present in the application. And while the triple lip HNBR rubber seals that come standard are quite effective at keeping debris out, the customer wanted even more protection on both sides of the bearing to not only ensure longer bearing life, but also help to prevent the seals from failing. However, a standard open end cover wouldn't fit due to limited space at the back of the bearing closest to the roller.

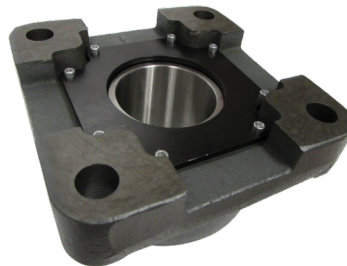
**THE SOLUTION** To protect the front of the bearing: PTI recommended a standard closed front cover. To protect the back of the bearing: PTI engineers designed a lower profile custom bolt-on back plate with a proprietary dust excluder seal. After sharing a 3D printed model of the back plate, which the customer promptly approved, PTI custom fabricated back plates for the application. PTI then drilled and tapped holes in the housings to accept both the front cover and back plate.



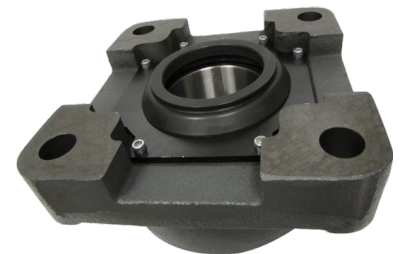
SRE-FB4-300  
4-bolt flange



With standard closed  
front cover



Custom back plate  
without seal



Custom back plate  
with seal

**THE RESULT** PTI shipped out the modified units. After installing and running the equipment for several weeks, the customer has since placed multiple orders for several hundred additional units.

**PTI'S ABILITY** PTI maintains a focus on ingenuity and a passion for enabling our customers to do more. It isn't just what we do – it's who we are.



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