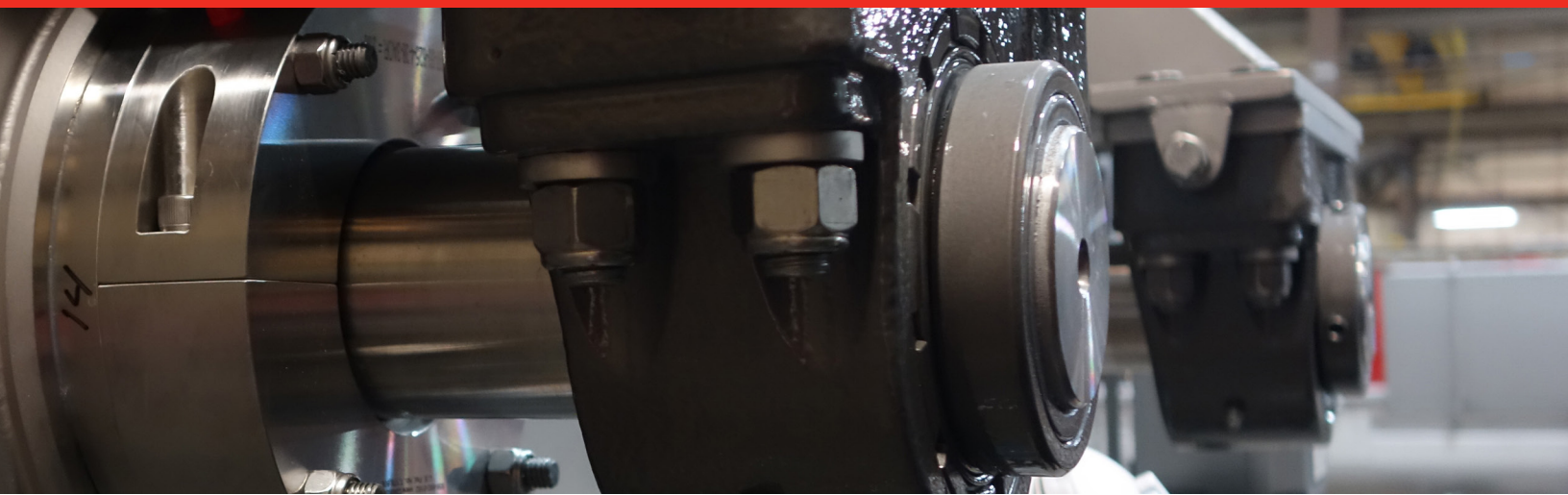




RELIABLE BY DESIGN



TOP 3 SEAL TROUBLE SIGNS and HOW TO FIX IT

The following tips are from Mepaco®'s Field Services and Engineering Team who have been on hundreds of calls to troubleshoot and make repairs to seals on all types of food processing equipment and in many applications.



Product loss is a sign of seal or shaft issues.

First, The Trouble Signs

- 1 Product escapes or purges out of the seal
- 2 Downstream food contamination
- 3 Loss of vacuum

The Possible Problem

- A grooved or broken shaft
- A broken seal
- Missing packing



Excessive wear resulting in grooves on shaft caused by worn mechanical seal.

Grooved or Broken Shaft

A worn shaft may cause a loss of vacuum in your equipment. Depending on the space available and extent of the damage, a worn shaft may be able to be repaired on site.

Ignoring a grooved shaft can lead to a broken shaft resulting in a catastrophic failure. The timeline to order a replacement shaft may take two to three weeks. Even if there is an extra shaft in inventory, there is a minimum of two days of lost production to replace it.

If you suspect a grooved shaft, call Mepaco®'s Field Services to troubleshoot the issue.



Worn and broken seal

Worn Seals and Missing Packing

Seals should be checked for wear and sanitized daily. Seals should also be part of your preventative maintenance program with two to four extra seals in your parts inventory, depending on usage. Changing the seal during scheduled times will help save lost production instead of seal replacement that requires a shut-down.

Proper Installation

It is also essential that seals are correctly installed with recommended packing. Check to make sure that the seal housing is within tolerance. Revisit the documentation for seal installation instructions. If you have new staff, ask for a training session by Mepaco®'s Field Services experts to have them watch and advise your people on seal installation.

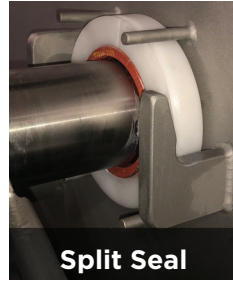
In review, seal performance issues can be caused by:

- Improper installation
- Improper and irregular seal maintenance
- Improper disassembly for sanitation
- Overuse of seal beyond life cycle
- Incorrect seal for the application

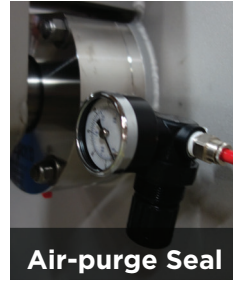


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Split Seal



Air-purge Seal



Mechanical Seal

Recommended Seals

There are three types of seals that are recommended by Mepaco®.

Split Seal: A split seal provides ease of removal and installation. The construction is made up of rubber and metal reinforcement. It can be specified for a variety of applications. It is easy to disassemble for sanitation and holds up to rigorous COP (clean-out-of-place) processes.

Air-purge Seal: These seals are often specified for applications that have a high degree of food safety risk and abrasive food product situations. The internal components of the seal rotate with the shaft, so there are no typical issues with worn shafts or missing packing. These seals are engineered to reduce maintenance and sanitation costs.

Mechanical Seal: This type of seal is suitable for applications with course, gritty food product. These seals are precision-installed and are not forgiving with tolerance. Mechanical seals are engineered for CIP (clean-in-place) sanitation processes.

Contact Mepaco®'s Field Services for answers to your current seal issues or for a consultation for a seal solution to fit your application.



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