

# CASE STUDY

**Customer:** A leading global manufacturer of agricultural and construction machinery, engines and drivetrains for heavy equipment and lawn care

**Industry:** ACE (Agriculture, Construction, Earthmoving)

**Application:** Oil Pan for Diesel Engine

**Fluid:** Engine oil

**Solution:** Select-A-Seal®

## Significant warranty claim reductions on OEM's largest volume engine

### CHALLENGE

The OEM had a significant number of warranty claims on its 4-cylinder diesel engine. Warranty claims are quite costly and negatively impact the OEM's bottom line and brand reputation. The OEM's Warranty Service Center reported that the claims were due to a leak in the engine's oil pan. When they pulled the engine apart for further diagnosis and repair, they realized the leak was from oil weeping through engine T-joints. T-joints are particularly difficult to seal due to assembly tolerances and design constraints.

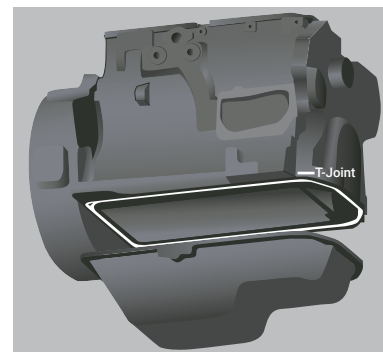


### SOLUTION

The OEM switched to one of Lydall's Select-A-Seal gaskets for the oil pan because they have a very soft rubber sealing element that can improve T-joint sealing by helping 'fill the gap.' Lydall designed and verified with FEA that a new Select-A-Seal gasket would withstand the application conditions. The new gasket then passed all OEM bench and field tests and was released for production.

### RESULTS

Data suggests a significant decline in warranty claims related to the seal leaking. After successful implementation on this oil pan, the OEM approved Select-A-Seal gaskets on several other applications.



The following are registered trademarks of Alkegen: Interface.

The test data shown are average results of tests conducted under standard procedures and are subject to variation. Results should not be used for specification purposes. Product Information Sheets are periodically updated by Alkegen. Before relying on any data or other information in this Product Information Sheet, you should confirm that it is still current and has not been superseded. A Product Information Sheet that has been superseded may contain incorrect, obsolete and/or irrelevant data and other information.

Form A-5843  
Effective 02/25  
© 2025 Alkegen  
All Rights Reserved

**Alkegen**  
Headquarters  
5215 N. O'Connor Blvd, Suite 2300  
Irving, TX 75039  
Telephone: 716-768-6500  
Website: [www.alkegen.com](http://www.alkegen.com)  
Email: [info@alkegen.com](mailto:info@alkegen.com)