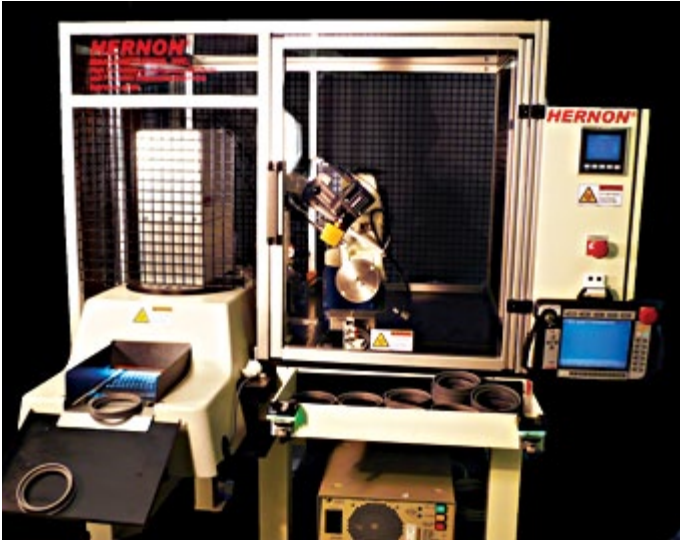


# How To

## Make Better Oil Seals



**O**il seals are an integral part of rotary applications. They ensure consistent and reliable performance of mechanical equipment such as gearboxes and hydraulic cylinders as well as in other power transmission and automotive applications. They do this by closing spaces between stationary and moving components of an engine which helps stop lubricant from leaking. They also prevent harmful contaminants, such as other fluids or dirt from entering machinery.

### Traditional Problems

Traditionally, solvent based, rubberized sealants and coatings were used to make oil seals. This lengthy, batch process had numerous problems.

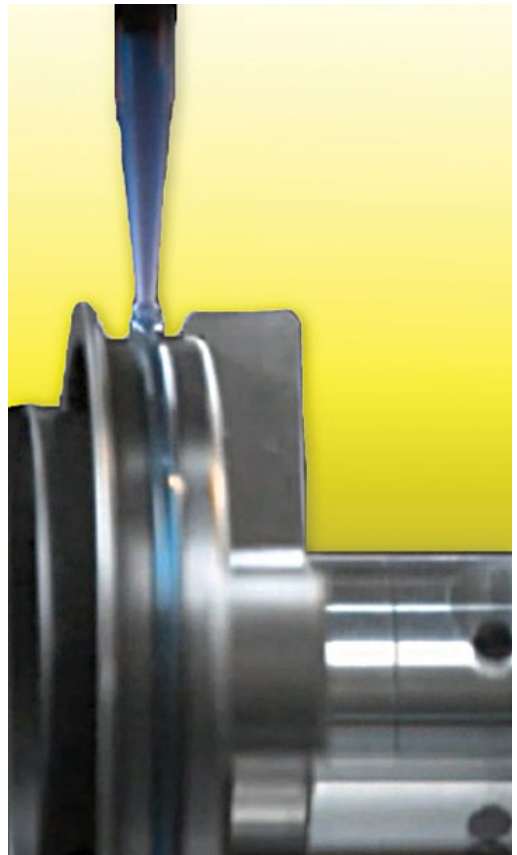
**Long Drying Times** – After the seal was applied, each batch would need excessive drying time for evaporation.

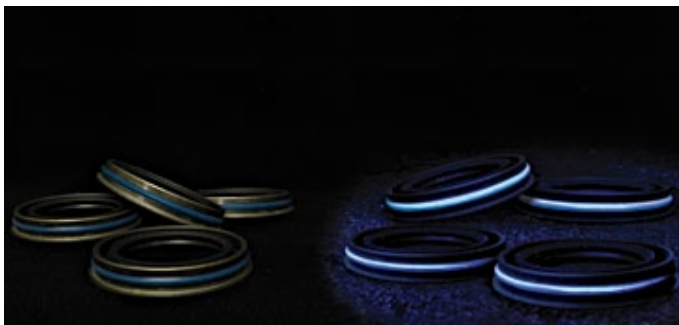
**Expensive Equipment & Operating Costs** – Overhead conveyor belts and large ovens were needed to move each batch and dry the seals. Costly ventilation systems were also necessary to protect workers from harmful solvents. Maintenance costs, coupled with electric expenses, made for some steep operating costs too.

**Large Manufacturing Areas** – The sheer size of manufacturing space needed to house the equipment and store the oil seals as they dried was voluminous.

**High Waste Disposal Fees** – This outdated procedure meant not only having a large scale, cost-laden operation that included wasted real estate and wasted time, it also meant a facility full of hazardous solvent-based material creating enormous waste. This waste would also need to be disposed of at some point at a hefty price.

**Inconsistent Applications** – As if the above issues weren't enough, certain conditional variations, like changes in the weather and storage conditions made for inconsistent applications. For example, depending on the daily temperatures, viscosity of the material would fluctuate and evaporation times could vary from day to day depending on humidity levels. It was difficult to keep proper tolerances due to the inconsistent bead heights which meant leaks or product failures.





### Total Solutions

So how do you make a better oil seal? One that doesn't require long drying times, steep operation costs and waste disposal fees, and provides a more consistent application? It's simple. Use a total solution - UVFOG.

Hernon Manufacturing solved the issues traditional oil seal manufacturers were having. UVFOG, Ultraviolet Formed on Gasketing, changes this arduous process into a three step, cost-effective, time-friendly process and consistent process. You simply just:

- 1) Dispense and Cure the product.
- 2) Inspect the product.
- 3) Package and ship the product.

UVFOG is an EB/UV curable adhesive product that provides excellent adhesion to shaft seals, oil seals, metals, glass, ceramics and plastics. This product is solvent-free and can be completely cured in seconds. It can be used as a form-in-place gasket in oil and coolant systems. Typical applications include engine covers, oil pans and other fluid seal systems.

Designed to serve the automotive industry, Hernon's UV Cure Dispensing System applies a bead of UVFOG (Form-on-Gasket) adhesive around the circumference of a seal and then cures it in approximately two to four seconds with a UV light. This total solution combines a UV curable adhesive and an advanced automated machine. In this continuous process, visual inspection and packaging can be completed quickly and easily.

Creating a seal on a seal, the combination of Hernon's UV Cure Precision Dispensing System and Hernon's UVFOG sealant adds value and functionality to seals used in automobiles, engines for heavy duty equipment, and the like.

Using UVFOG on an oil seal ensures that even in particularly extreme environments, under high pressure and temperatures, the seals will prevent harmful contaminants from entering the machine and prevent lubricants from leaking out. All test data from one of the world's leading automotive manufacturers shows this oil sealing process is superior.

This is the future of oil seals.

**HERNON Manufacturing** has developed and continues to develop total solutions that solve, automate and improve assembly processes while reducing costs and providing superior solutions. HERNON has been committed to delivering world class adhesive, sealant, and impregnation solutions along with precision dispensing systems for nearly four decades. A long-time member of Central Florida's industrial manufacturing community, HERNON offers strong brands and technologies, all made in the United States, for a diverse range of industries including: Energy/Power Generation, Medical, Electronics, Electrical, LED, Automotive, Appliances, Sporting Goods, Ammunition, Communications, Aerospace, Aviation, High Tech Audio, Defense, Fire Suppression, Transportation, and Marine. HERNON Manufacturing is proud to be an ISO-9001 and ITAR registered company whose products meet or exceed Mil-Specs.

- Awarded 2012 ThinkGlobal Exporter of the Year
- Nominated one of Florida's Top Companies to Watch in 2012
- Received the 2012 William C. Schwartz Industry Innovation Award
- Named 2013 State of Florida Small Business Exporter of the Year
- 

Visit <http://www.hernon.com> or contact 407-322-4000 for more information.

Author Maureen McHale of <http://hiremaureen.com> is a marketing consultant for Hernon Manufacturing. Contact her at 352-406-2011 or via email at [maureen@hiremaureen.com](mailto:maureen@hiremaureen.com).

**HERNON®**  
**MANUFACTURING, INC.**

*High Performance Adhesives, Sealants  
and Precision Processing Solutions*

ISO-9001  
**HERNON.COM**