

## Anaerobic Solutions for the Pulp and Paper Industry

### Introduction

In paper mills, gaskets are used on various equipment throughout the plant to prevent leakage of fluids by forming impervious barriers. In order for the system to remain leak-free over an extended period of time, the seal must remain intact and retain its original shape. LOCTITE® gasketing products are form-in-place gaskets that provide an exceptional seal between components with maximum face-to-face contact while also preventing corrosion between the mating surfaces of the flange. When using an anaerobic gasket product, a low pressure seal is formed immediately. Contrary to traditional gaskets, anaerobic gaskets bond to the mating surface and will not shrink, crack, or relax while in service.

### Problem:

One of the most common paper machine gasket failures occurs on the dryer section gear casing. Continuous vibration and rocking of the machine works gear cover assembly bolts loose, focuses stress onto the gasket leading to compression set, and creates leak paths between the flanges that are vulnerable to corrosion. As a result, oil leaking out of the gear casing can cause high cost equipment failure, contaminate product, and present a safety risk. Reactive maintenance can be reduced by using LOCTITE anaerobic products.

### Solution:

To prevent the loosening and backing-off of gear cover assembly bolts, LOCTITE 243™ Threadlocker should be applied, reducing vibration and stresses being concentrated on the gasket. In smaller gap flange assemblies up to 0.010", use LOCTITE 518™ Flange Sealant to replace traditional gasket materials. For gaps up to 0.050", LOCTITE 7649™ Primer should be applied to the flange in addition to LOCTITE 518™ Flange Sealant. The cured anaerobic gasket forms a rigid, oil-resistant seal that withstands operating temperatures up to 300°F and will not shrink, crack, or relax.

### Benefits:

- LOCTITE 518™ Flange Sealant presents a cost saving opportunity by creating a 100% seal that prevents costly oil leaks and increased equipment reliability.
- Workplace safety in the mill is improved as the possibility of slips and falls relating to oil leaks is diminished.
- Mill workers can make gaskets on demand, in desired shapes and sizes, reducing inventory costs.



Figure 1: Application of LOCTITE 518™ Flange Sealant

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