

DESIGNED TO OUTPERFORM FLOODED AND SPRAY FEED BEARING TECHNOLOGY

The LEG SlimLine's bearing design has proven itself through exhaustive testing and field research to represent the ultimate in directed lubrication technology. Yet the design concept is remarkably — and elegantly — simple.

The bearing pads and carrier ring are constructed so that cool undiluted inlet oil flows from the leading edge groove in the bearing pad directly into the oil film. The cool oil in the oil film wedge insulates the babbitt face from the hot oil carryover that adheres to the rotating collar.

In contrast to the LEG SlimLine bearing, the oil for spray-fed bearings is injected not directly onto the bearing surfaces but between them. This can result in uneven bearing lubrication and the need to supply impractically high pressure to get true effective scouring of the hot oil carryover adhering to the thrust collar. There is also a tendency of the small jet holes to clog with foreign material, further hampering distribution. Greater friction, higher operating temperatures and more power loss are the ultimate results.

With the LEG, friction power loss is lower than both flooded and spray feed bearings due to the reduced oil flow. The flow of cool oil over the leading edge lowers pad surface temperatures, increasing the SlimLine's capacity.

The resulting performance improvements are shown in these graphs.