

For Extreme Conditions... *EZ* does it!



“Traditional Needle-Roller Bearing and it’s small load distribution footprint.”



“Isky’s Revolutionary New Wide-Footprint/Low Friction EZ Roll™ Bearing.”

The *not so* Plain Bearing Revolution

2006 PRI Show Release: Introducing Isky’s new *EZ Roll™* “needle-less” roller bearing option for *Red Zone™* roller lifters. Although they contain no needles, there is nothing plain about the cutting edge technology behind their proprietary material and design. Spintron® and field test proven over the past 2 years, *EZ Roll™* bearings carry far greater loads because of their vastly improved surface area to load distribution footprint, and *near-zero*, ultra low frictional drag coefficient.

Background: Plain vs. Needles

For decades, engineers have realized that nothing carries more load than a plain bearing. The problem has always been in delivering enough oil to cool and lubricate its inner raceway. Needle-roller bearings have gained a foothold in applications such as roller lifters because they have traditionally faired better under sparse (less than optimum) lubrication conditions, in reducing friction. Recent advances in materials technology have changed this concept forever and Isky is proud to be leading the charge for the plain bearing revolution!

Cutting Edge Material & Oil Delivery Science

A revolutionary new ultra low friction material is the key to the new *EZ Roll™* bearing’s success. This proprietary bearing raceway carries tremendous loads and has a drag coefficient which approaches that of ceramic, without any of the poor impact resistance (shock load) properties of these materials. Coupled with Isky’s precisely engineered exclusive multi-point oil delivery system, the *EZ Roll™* bearing is absolutely the best engineered, best performing roller lifter bearing on the market today!

Problems with Needles in Heavy Load Applications

Extensive Spintron® testing in the Isky research lab has confirmed that rather than being continuous and orderly, needle-roller motion in the typical roller lifter bearing is anything but! To the contrary, needle roller motion is actually subject to a harmonic wave-like action which oscillates between the ‘bunching-up’ and spreading apart of the needles, due primarily to the deflection or bending of the outer bearing race. This deflection (because of extremely heavy valve spring loads and tremendous dynamic forces) is aided by the relatively poor ratio of load distribution to surface area in contact of the needle roller bearings. This is why even the premium priced \$2,000+ lifter sets occasionally fail! The problem is not one of material, but in the design of needle roller bearings and their small footprint of contact. In contrast, the *EZ Roll™* bearing boasts a solid 350% higher load rating because of the elimination of the needles! Their ultra low friction raceway material rolls so easy under heavy load (drag and pro-street) applications, it’s no wonder **Jim Oddy** & other racers report they seem to practically run forever!

Record Setting Performance

Jim Oddy’s recent record setting performance in his 10,000 RPM Pro-Mod (Doorslammer) was set running over 450 lbs seat and 1300 lbs open valve spring pressure. He reported his Isky *EZ Roll™* bearing equipped *Red Zone™* roller lifters performed flawlessly.

Tremendous Value

Because Isky’s new *EZ Roll™* bearing option (for *Red Zone™* roller lifters) delivers such dramatic improvements in roller lifter performance, they are of course priced as an upgrade/premium. In many cases however, such as with the more accurately machined after-market engine blocks, you eliminate the need to ‘over-bore’ the lifter holes, so you avoid the costs involved to do so and the increased weight associated with ‘oversized’ lifters. This and their dramatic increase in longevity make the *EZ Roll™* bearing option a tremendous value!

DO IT RIGHT...



... RACE WITH THE LEGEND

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16020 S. BROADWAY • BOX 30 • GARDENA, CA 90247-9990 • (323) 770-0930 • FAX: (310) 515-5730

www.iskycams.com