

Bigger better bearings

BIGGER ISN'T ALWAYS BETTER. BUT IF YOU'RE LOOKING FOR LARGE BEARINGS FOR HEAVY DUTY APPLICATIONS IN HARSH ENVIRONMENTS, THEN YOU'D BE HARD PUSHED TO FIND BETTER THAN TIMKEN'S LATEST RANGE OF SPHERICAL ROLLER BEARINGS.

Timken quality is well-known wherever bearings are used. The only manufacturer with their own in-house steel-making division – producing super-clean, high-alloy bearing steels – Timken understands the correlation between quality of materials and product performance. No matter how effective the design, if it is manufactured from inferior materials, or to poor quality standards, it will never live up to its potential. That's why, in addition to using high quality materials, Timken ensures the highest standards of manufacture are maintained at all times, by operating a strict Quality Management System. This is applied across the company's manufacturing output, wherever it may be produced.

Timken's focus has always been on larger, heavy-duty bearings for harsh operating conditions – such as the quarrying industry. So now the introduction of a new range of

larger, redesigned Timken Spherical Roller Bearings (SRBs) is important news for the industry, bringing to bear Timken's many years of experience in these applications on an innovative SRB product. The resulting bearings promise improved productivity, greater reliability, less equipment downtime and increased bearing longevity. The new Timken bearings are also a match for – or even an improvement on – the performance of comparative products from the market leaders, and are coupled with the quality for which Timken is known.

Manufactured in Europe to the highest standards, Timken's new SRBs are the result of a major investment in design and manufacturing, which delivers a product that represents a major leap in performance. The new brass cage version of the Timken SRBs is particularly well-suited to quarrying equipment applications, being designed to handle the heavy loads and shock loads only too common on this type of machinery. The new, optimised, internal geometry of the product ensures good roller guidance, which means that even under extreme external stresses, the bearings continue to run true. Straighter running of the rollers also means less edge loading or pinch loading, with the result that the bearings carry the load better, generate less heat during operation, perform better, and last longer.

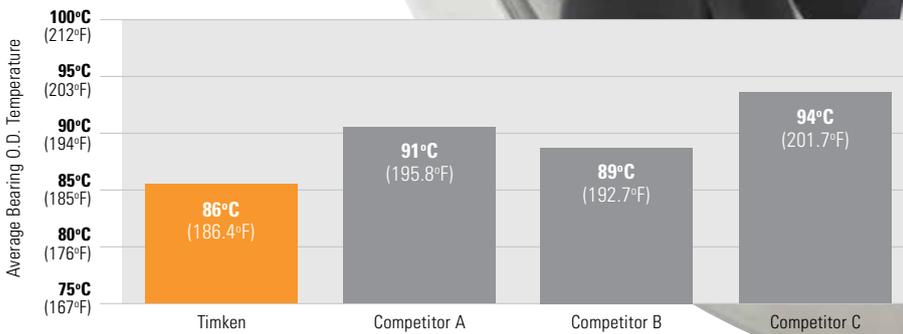
At the same time, the optimised internal geometry of the bearings helps the lubricant to flow faster and more comprehensively

within them. This means that any heat generated is more effectively dissipated, and any contaminants which find their way into the bearing are purged more thoroughly.

If the theory is impressive, so are the facts and figures.

Thanks to their new design, new cage designs, and improved surface finish, the new Timken SRBs deliver an 18% increase in load-carrying capacity. At the same time, they run cooler than previous Timken bearings – with a 17% increase in average thermal speed rating. Tests have also shown that Timken spherical roller bearings run cooler than competitive bearings. Test results show that Timken SRBs run at consistently lower temperatures than competitive bearings of the same size. Since a 5% decrease in operating temperature can result in an increase in bearing life of as much as 9%, this means the Timken SRBs are also almost certain to run longer as well as cooler.





In addition to the brass cage version, the new Timken SRB range includes a brand-new steel slotted cage version, with a two-piece window. This version is manufactured from case-hardened steel for increased strength and reduced wear, with – as in the brass cage version – features designed-in to enable better distribution of the lubricant around the bearing. This not only enables higher-speed running but also – a more important benefit in the quarrying environment – ensures longer operating life.

The product innovations to be found within the new Timken SRB range will enable customers to operate leaner, more reliable equipment, and to reduce operating costs. The increased reliability of the new range

should mean less maintenance, whilst the cooler operating temperatures should mean longer bearing service life.

Although the Timken name is well-known and trusted in many industries and for numerous applications, many potential customers have been unaware of their SRB offering. Now with this new, comprehensive range of SRBs, users can benefit from Timken quality, reliability and availability in a whole new area. The new SRBs are available in a range of sizes, from 25mm bore to 2,000 mm outside diameter. Popular part numbers are available immediately, whilst even less common orders can be fulfilled with short lead times, to help you keep your critical operations up and running.

All of which proves that you can sometimes have bigger and better. You just have to know where to look.



TIMKEN