

# Improve Performance and Reduce Costs with Timken SURE-FIT™ Universal Backing Ring

## Advantages Using the Timken Sure-Fit™ Universal Backing Ring:

- ▣ Increased performance
- ▣ Reduced wheel set removals
- ▣ Enhanced journal axle fillet protection
- ▣ Improved safety and reliability
- ▣ Maintain premium wheel set investment
- ▣ Increased axle life and reduced axle scrap rate
- ▣ Eliminates axle sorting costs to obtain fitted applications

## Timken Sure-Fit Universal Backing Ring Removal Force Range

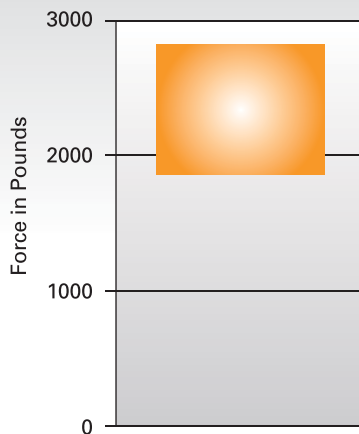


Figure 2

## Timken Innovation Provides Solution to Rail Industry Problem

For more than 80 years customers have depended on Timken friction management solutions to keep freight cars running dependably. We know reliable products are essential to keeping your company's operating costs low. In fact, The Timken Company's rail team developed the first self-contained freight car bearing in 1954 and the industry standard Timken® AP-2™ Class K bearing in 1994. We are now offering a solution to a problem that has plagued the rail industry for more than thirty years - loose backing rings. The Timken Sure-Fit™ universal backing ring is designed to significantly reduce loose backing ring problems on 'untoleranced' axles.

Recently given conditional approval by the AAR, the Timken Sure-Fit universal backing ring provides an interference fit between the axle dust guard diameter section and the backing ring - regardless of the axle dust guard diameter [.050" range]. This significantly reduces the potential for the backing ring to loosen in service. Loose backing rings currently cost the rail industry more than \$60,000,000 annually in premature wheel set removals. These removals account for more than 50 percent of all bearing related wheel set removals.

## Sure-Fit Consists of Two Basic Components:

- Compressible insert ring
- Modified backing ring designed to accompany the insert [Figure 1].

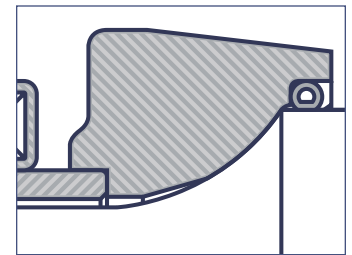


Figure 1

The Timken Sure-Fit universal backing ring may be applied to axles with dust guard diameters up to .050" range under current AAR minimum dust guard specifications. The forces necessary to pull a seated Timken Sure-Fit universal backing ring assembly from the axle ranges from approximately one to one and a half tons [see Figure 2].

**To find out how your company can benefit from the Timken Sure-Fit™ universal backing ring, or to learn more about Timken rail services, contact your local Timken sales or service representative or visit [www.timken.com/industries/rail/](http://www.timken.com/industries/rail/).**

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