

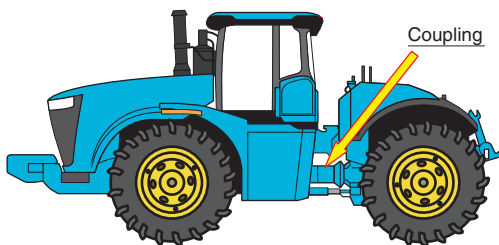
## Bearing with Special Coating



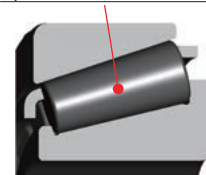
We have developed a “bearing with a special coating” for general industrial machinery, such as construction and agricultural machinery, that achieves over three times longer life than the conventional product. This product is introduced below.

### Aim of development

In construction machinery, and in agricultural machinery such as tractors, a rolling bearing is employed on the coupling that connects the front and rear of the vehicle. This bearing is used in conditions with micro-oscillation, and therefore micro-wear (fretting) occurs if there is an oil film shortage between the rollers and the inner ring or outer ring. This causes the coupling to lose function. The rollers of the “bearing with a special coating” undergo a special surface treatment in order to prevent fretting, thereby improving wear resistance.



Special surface treatment for rollers

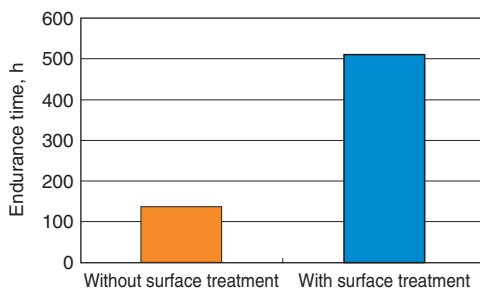
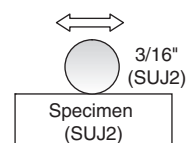


### Features

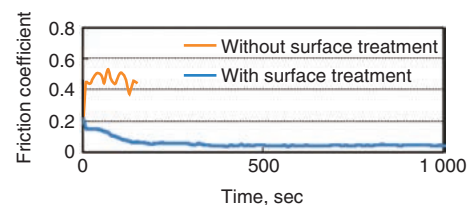
An original JTEKT special surface treatment is applied to the rollers, dramatically improving wear resistance and achieving roller life over three times longer than that of the conventional product.

Item	Condition
Evaluated bearing	Tapered roller bearing
Lubrication	Grease
Oscillation angle	1.5deg
Frequency	5Hz
Criterion	Until roller cracks

Item	Evaluated bearing
Average linear velocity	40mm/s
Sliding distance	10mm×2 (reciprocal)
Load	10N
Lubrican	Dry



Results of endurance evaluation test



Results of sliding characteristic evaluation

(Industrial Machinery Application Engineering Dept., Bearing Operations Headquarters)

**JTEKT CORPORATION**