

# SKF Gear Bearing Unit

A compact solution with high load carrying capacity that enables increased power density and engine downsizing

Today's latest generation of truck engines requires significantly higher Power Take Off (PTO) performance – increases from 300 Nm to more than 720 Nm are common. These higher PTO levels demand a more robust bearing between the crankshaft and PTO. Because plain bearings cannot handle the higher PTO requirements without increased wear, SKF developed the SKF Gear Bearing Unit.

## Advantages

The SKF Gear Bearing Unit is a pre-adjusted solution that combines a gear wheel, a roller bearing and a bearing journal in one compact unit. This solution offers higher load carrying capacity and increased PTO torque and enables engine downsizing. Under high load conditions the SKF Gear Bearing Unit ensures optimized running accuracy without significant gear wheel wear.

In contrast, robust SKF Gear Bearing Units retain a stable position despite high loads, which in turn helps increase bearing and application service life.

The SKF Gear Bearing Unit also simplifies lubrication requirements. Unlike plain bearings that need a separate, pressurized oil supply, SKF Gear Bearing Units are instead lubricated with an oil mist.

During manufacturing, plain bearing solutions require assembly of three separate components, increasing the risk of faults as well as assembly time. Because the SKF Gear Bearing Unit arrives pre-adjusted and fully assembled, it installs much more easily and quickly.



## Features

- Roller bearing solution
- Pre-adjusted unit
- Robust design

## Benefits

- High load carrying capacity
- Increased PTO torque
- Reduced friction during high load operation
- Increased service life
- Reduction of oil flow and pump size
- Plug-and-play design for easy installation
- Adjusted oil metering
- High running accuracy
- Stable position under high load conditions
- Easy to interchange with current solution

## Applications

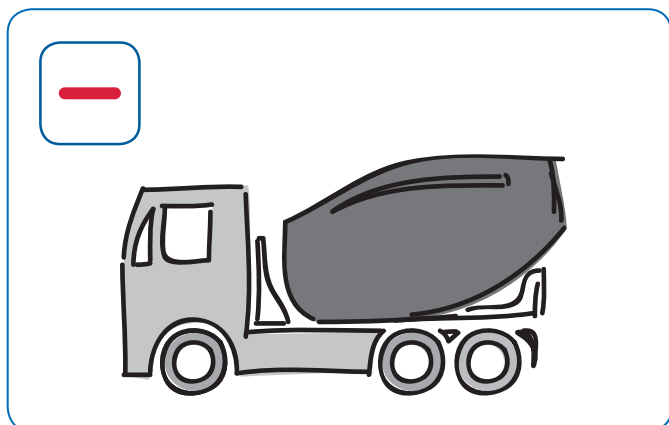
- Truck engines with idler gear train and Power Take Off (PTO)



# Take load carrying to a whole new level

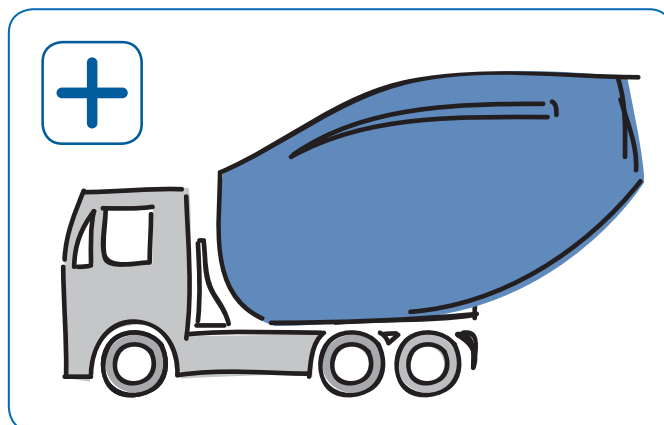
## Standard bearing solution

Limited loads, average performance



## SKF Gear Bearing Unit

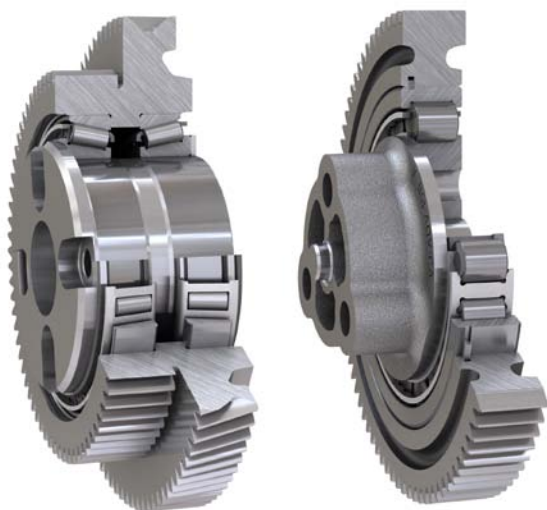
Higher loads, longer life, increased performance



## SKF Gear Bearing Unit options

With options for tapered roller bearings (TRB), cylindrical roller bearings (CRB), spur and/or helical toothed gear wheels and optional integrated outerring raceways, SKF Gear Bearing Units can meet different duty requirements.

### Heavy-duty engines



- Load carrying capacity up to 1 000 Nm on PTO

### Medium-duty engines



- Load carrying capacity up to 720 Nm on PTO

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