

# デブ用 超低トルク 円すいころ軸受(LFT III)

Super-Low-Friction Torque Tapered Roller Bearings for Axle Differential

LFT III

## 低トルクで燃費向上とCO<sub>2</sub>排出量削減に貢献

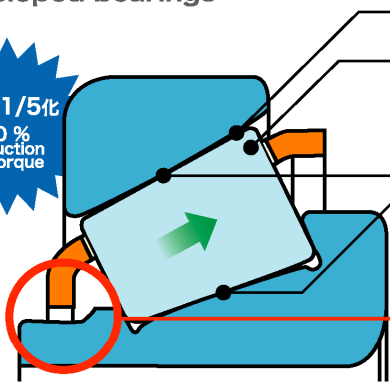
Low friction contributes to improved fuel efficiency and reduced CO<sub>2</sub> emissions in automobiles

### 特長 Features

#### 開発品

Developed bearings

トルク1/5化  
80% reduction of torque



#### 1. 内部諸元最適化 Optimized internal geometry

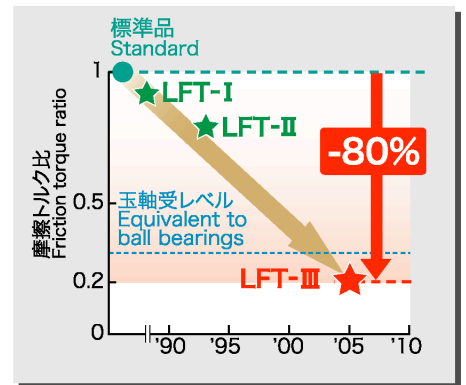
- 接触角を大きく  
Larger contact angle
- ころを太く、短く、少なく、PCDを小さく  
Roller: Bigger diameter, Shorter length, Less quantity, Smaller PCD
- クラウニング量を大きく  
Bigger crowning amount

#### 2. 潤滑油の流れ制御 Lubricating oil flow control

- 流入油量制御  
Control inlet oil amount
- ポンプ作用を高めて油を速やかに排出  
Oil is smoothly flows out due to improved bearing pumping action

#### 3. 小型化 Compact

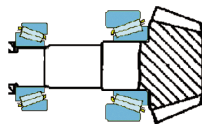
- 長寿命熱処理(KE)適用  
Compact thanks to the application of high-capacity technology



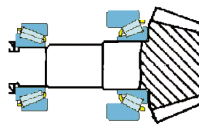
### 効果 Effect

#### 玉軸受と同等の低トルク、低昇温を実機試験で確認

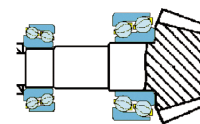
Low friction torque and low temperature rise (equivalent to ball bearings)



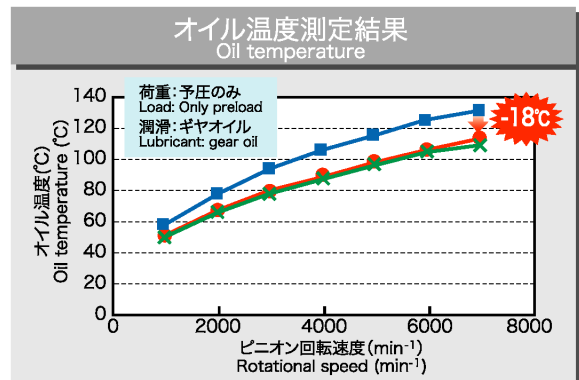
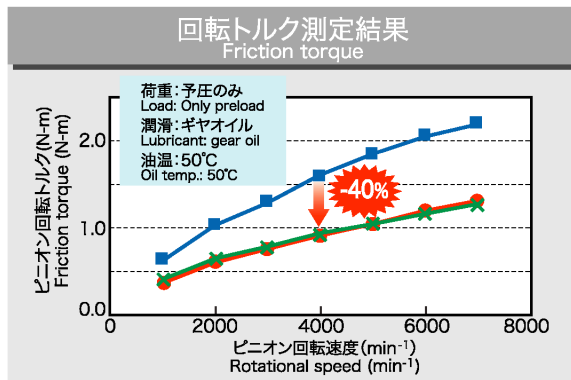
現行品 (LFT-II)  
Conventional bearings (LFT-II)



開発品 (LFT-III)  
Developed bearings (LFT-III)



玉軸受  
Ball bearings



【予想効果】  
[Expected effect]

燃費: 1.5~2% 向上  
Improved fuel efficiency 1.5~2%

CO<sub>2</sub> 排出量: 3.5~4.5g/km 削減  
Reduction in CO<sub>2</sub> emissions 3.5~4.5g/km