



## CASE STUDY - RAIL INDUSTRY - FREIGHT WAGON KWIK DROP DOOR PIVOTS

### Background

The door opening mechanisms on mineral wagons were originally designed and fitted with standard steel spherical bearings. These doors are automatically opened as the wagon passes a trackside trip switch.



### Disadvantages

Due to the frequent operation of the doors, the bearings which are fitted to the main door pivot shaft mechanism get contaminated by mineral dust. This dust is then exposed to high humidity which causes the bearings to seize, thus drastically restricting the doors from opening and therefore payload is not discharged.

### Solution

Following technical evaluation, Devlon S grade bearings were selected for trial and ultimately specified for total fleet refurbishment and all future manufacture.



### Advantages

- Maintenance free
- Non-seizure after exposure to contamination and high humidity
- Ease of fitting
- Directly interchangeable with original steel bearing housing and shafts