

STACKER RECLAIMER BROCHURE



**COOPER**  
SPLIT ROLLER BEARINGS

## COOPER STACKER RECLAIMER BEARINGS

Benefiting from over 100 years' worldwide experience in split-to-the-shaft bearing technology, our products help customers boost performance and get the best out of existing equipment.

Cooper bearings are perfect for heavy industrial applications, and offer complete, well-proven solutions for stacker-reclaimers.



Typical stacker reclaimer bucket wheel during inspection for potential bearing conversion



Coal stacker reclaimer

### Struggling to install or service bearings between bucket wheel and drive?

The Cooper split roller bearing, highly effective in most locations, is an ideal solution for stacker-reclaimers. Its unique split-to-the-shaft construction allows easy assembly during initial manufacture and easy change-out in the field, even in the most cramped and inaccessible locations. Adjacent machinery such as large couplings or gearboxes can be left in place.

The smaller, lighter components into which it disassembles are easy to handle, while clearances are pre-set and assembly requires no specialist tools.

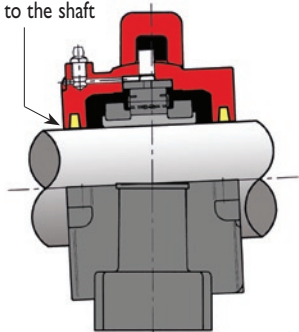
### Looking for longer-lasting bearings?

Cooper split roller bearings have proven time after time their ability to withstand harsh conditions, partly because seals are contained in a swivelling inner housing (the 'cartridge'), mounted to the pillow block in the manner of a ball and socket joint. They thus remain concentric with the shaft, maintaining sealing integrity even when alignment is imperfect.

For bucket wheel shaft bearings, exposed to harsh weather conditions and heavy contamination from spilled material, this integrity is further enhanced with a double seal.

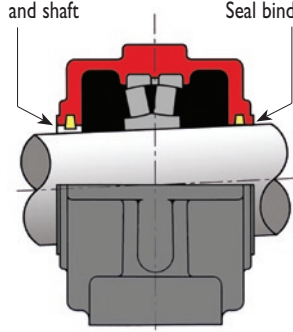
#### Cooper Split Roller Bearing

Seal remains parallel to the shaft



#### Double Row Spherical Bearing

Gap between seal and shaft  
Seal binds



## Easy to design-in, easy to retrofit

Incorporate Cooper split roller bearings into your design thinking from the start. The unique split-to-the-shaft technology gives you total freedom to select and arrange motors, gearboxes, couplings and frameworks. No need to struggle to 'fit the bearings in'.

And if you want to swap in Cooper bearings to an existing machine, we can manufacture housings to fit.

## Are back-up and service an issue?

With worldwide representation and vast experience, Cooper is a full-service provider. Whether you need technical support, installation, training or simply the reassurance of our breadth and depth of knowledge, contact us: we're here to help.



*Cooper bearing on a stacker reclaimer in China*

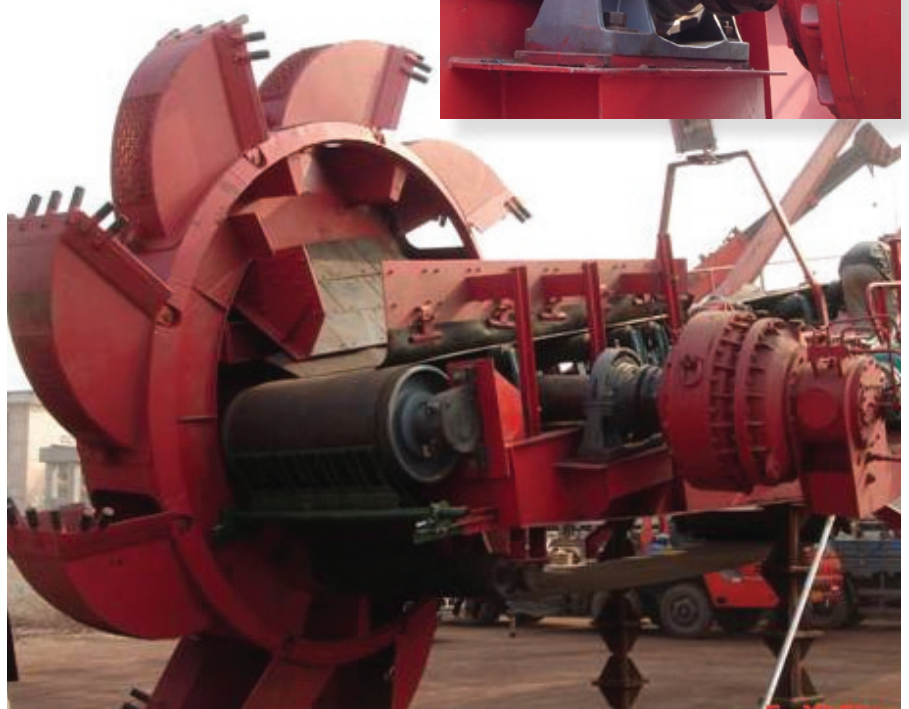


*Cooper bearing during build-up of a new machine*

## A long-term solution

In the long run, Cooper split roller bearings offer a far more profitable solution than double row spherical bearings. Better serviceability and longer life mean reduced downtime and greater productivity.

*Cooper bearing on a newly built stacker reclaimer in China*

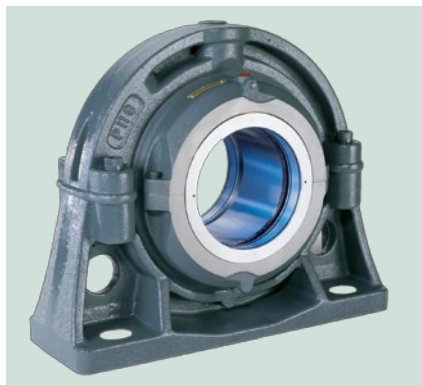


## THE COOPER BEARINGS RANGE

There is no limit to bearing bore size for bucket wheel shafts. Shaft sizes typically range up to 380mm, but we regularly manufacture up to 600mm and beyond.

Pillow blocks are usually manufactured from nodular iron, to resist shock loading, and the split-bearing design allows the inner race of the fixed bearing to be located in a recessed journal, providing positive axial location.

For elsewhere, Cooper offers a wide range of bearings and housings including pillow blocks and flanges. We supply



bore sizes from 35mm upwards in 4 standard series, to suit different loading conditions.

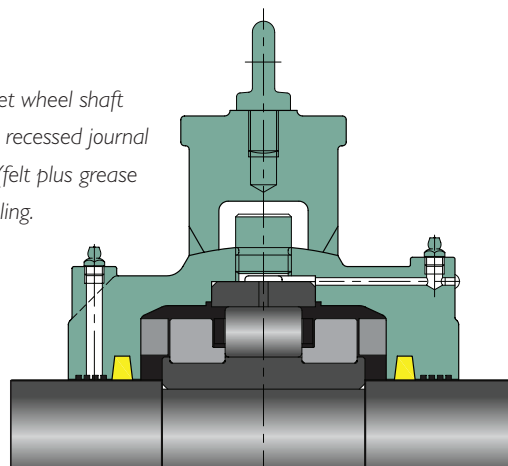
*Typical housing - large pedestal*

## Seals

Extensive sealing experience enables us to recommend exactly the seal your application demands. Usually it will combine two of the following types:

- Felt - for generally dusty conditions
- SRS - rubber lip seal, for exclusion of water
- ATL - machined aluminium triple labyrinth - a non-rubbing seal for general duties
- HTP - an alternative to felt, offering some water-resistance
- Grease Grooves - an additional barrier to general contamination in conjunction with one of the above seal types.

*Typical bucket wheel shaft bearing with recessed journal and double (felt plus grease grooves) sealing.*



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