

When two halves make a whole lot of savings

IF CHANGING A CAPTIVE BEARING MEANS MASSIVE DISRUPTION, MAJOR DOWNTIME, AND HUGE EXPENSE, THERE'S A SIMPLE ANSWER. CHANGE THE BEARING. NOT FOR ANOTHER OF THE SAME TYPE, BUT FOR A NEW ERIKS SNQ SERIES SPLIT ROLLER BEARING, WHICH CAN CUT DOWNTIME FROM DAYS TO HOURS – OR EVEN MINUTES – AND SAVE ON THIRD PARTY COSTS TOO.



Christian Ager
Technical Manager
Revolve



Changing a traditional solid bearing in a captive application can be a costly operation in terms of downtime and lost production.

But if you also have to factor in – as some customers have in the past – the cost of removing the factory roof and hiring a crane to lift the bearing free of the shaft – then the costs go (literally, in this case) through the roof.

Even if the scenario isn't always quite this dramatic, there may be the cost of hiring in third party equipment, or paying for Health & Safety Inspections, on top of the costs already mentioned.

It's precisely to help you evade these avoidable costs that Revolve and **ERIKS** Company has developed the SNQ Series of Split Roller Bearings.

Offering full dimensional interchangeability with SN, SNL and SD Series plummer blocks, the SNQ Series is a time- and money-saving solution you can invest in without having to make further changes to your machines. A straight swap with the existing bearing will mean it's the last time you have to go through the lengthy process of removing the old style bearing and the associated extra work that can involve – such as dismantling or disturbing associated equipment.

The SNQ Series SRB bearings shorten the replacement and maintenance process, and cut the costs of doing both, because they are constructed as two matching half bearings to the shaft. The construction is identical to that of a normal Split Roller Bearing, but the portion of the SNQ bearing assembly which bolts on to the shaft has a

45° split line rather than a horizontal one. This means the bearing can be removed without the need to lift the shaft making installation even quicker.

It's a simple solution, but a highly effective one.

On a 100mm drive shaft, for example, with two plummer blocks, it can take a full eight-hour shift to change the bearings. With the SNQ bearing, it can take just one hour each bearing. So that's a few man hours and a couple of hours' downtime compared with eight hours' labour costs and a full shift's lost production. When those total costs are compared, the difference soon makes up for the higher initial cost of the split bearing over a traditional bearing. And that's without, for example, the costs of crane hire and roof removal and replacement, in our worst-case scenario.





CASE STUDY – D'ARTA FOOD



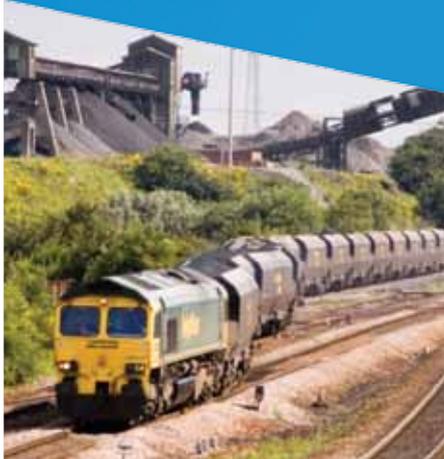
Putting greens in the black

WHEN A BEARING FAILED ON A SPINACH SLICING MACHINE, THE D'ARTA FOOD PROCESSING PLANT IN BELGIUM CALLED IN *ERIKS'* ENGINEERS TO INVESTIGATE THE CAUSE AND PROPOSE A SOLUTION.

ERIKS' investigations revealed that over-greasing and water contamination had led to the premature bearing failure. Access to the bearings was difficult due to location and access, and because they stand idle for 42 weeks of the year (when spinach is out of season) there is plenty of time for water from the previous year's production process to cause damage.

The proposed solution was to replace the traditional bearings with Revolve Split Roller Bearings with a walker seal arrangement to prevent water ingress. Revolve engineers mounted four complete 100mm shaft diameter bearing units for the customer, re-aligned the motor and gearbox, and showed the customer's engineers how to mount and dismount the units, and how to change-out the seals when required.

The result was increased performance, reduced maintenance costs, reduced downtime – and a customer order for six further captive drives on existing machinery, plus specification of Revolve SRBs for three process lines soon to be commissioned.



The advantages of the SNQ Series bearings don't begin and end with their ease of installation, removal and maintenance. Of particular interest to the quarrying industry, where operating conditions are harsh and machinery can quickly be adversely affected by dust and dirt, is the highly effective sealing arrangement of the SNQ – helping to reduce maintenance costs and downtime even further.

A far larger range of sealing solutions is available for the SNQ Series, with different seal types tailored to different applications and industries: such as quarrying, cement works and steelmaking. This means there is far less likelihood of dust and water ingress during machinery operation. Therefore maintenance costs are reduced still further, and contamination is virtually eliminated as a cause of premature bearing failure.

When customers commission an SNQ Series SRB from *ERIKS*, the bearing is only part of the service. *ERIKS* engineers can also fit the bearing – or advise on fitting – and advise and educate on maintenance requirements and procedures. Lubrication advice can also be provided. It's a fact that once an SNQ bearing is installed customers can usually change to a different type of lubricant, and use less of it.

SNQ Series bearings have also been used successfully in OEM applications across numerous applications and a wide variety of industries, from power generation to shipyards.

So whether you're replacing traditional solid bearings, or designing new applications, choosing a bearing of two halves from Revolve's SNQ Series makes a whole lot of sense.