

Lake dredge solid bearing replaced by standard split-to-the-shaft units



The problem

The main bearing in the bucket conveyor of a Polish lake dredge needed replacing at intervals much shorter than their planned lifetime. An SD 23144k fixed double-row spherical unit was clearly unable to withstand the abrasive effects of the wet sand and gravel being extracted. What's more, its trapped position and one-piece structure made it very difficult to access for maintenance or replacement, while the use of cranes and special tools was ruled out because of its location in the middle of the lake.

The solution

Clearly a split-to-the-shaft bearing, with its easy access, was desirable. However there was no budget for modi-

fication of the bucket ladder, so the pedestal of the replacement bearing had to fit neatly into the site of the old pedestal, with all fixing holes lining up. SKF Cooper was able to supply a suitably dimensioned replacement (a 01 BCSDC3144 200 mm GR unit).

Benefits

The quarry operator now has all the benefits of a split-to-the-shaft main bearing:

- Easy assembly and disassembly for inspection and maintenance, even in trapped locations
- Relatively light components
- Simple hand-tool working

In addition, the ability of the SKF Cooper bearing to remain aligned with the shaft, even when the shaft itself is out of alignment, combined with superior sealing, effectively excludes the abrasive materials from the working surfaces. The SKF Cooper solution is still in operation four years after the substitution, already twice the lifetime achieved by the previous double-row spherical roller bearings.



Cooper split-to-the-shaft bearings can be rapidly disassembled using simple tools



The new bearing in place

Converting from solid to split: the SKF Cooper range offers 'drop in' simplicity

If your troublesome double-row spherical bearing has an SN, SAF or SD plummer or pillow block pedestal, there is a complete SKF Cooper split-to-the-shaft bearing and pedestal with exactly the same base-to-centre height and with fixing holes that will line up perfectly.

For more information, visit our website www.cooperbearings.com

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