



## SKF portable induction heater TIH 30m reduces downtime in paper making

### Benefits

- Reduces downtime by cutting time to mount bearings
- Increases safety and cleanliness by making the use of oil baths redundant
- Contributes to bearing performance by greatly reducing the risk of contamination
- Saves energy through efficient heating methods

### Typical applications

- Bearings
- Belt wheels
- Couplings
- Gears
- Pistons
- Pulleys
- Shrink rings
- Sleeves

### Why risk productivity?

A paper machine is a significant capital investment – an investment that must be producing in order to generate returns. While planned maintenance is a fact of life, reducing planned or unplanned downtime can have a significant impact on a mill's bottom line.

Replacing bearings is a common maintenance task in a mill and correct mounting practices are essential if acceptable bearing service life is to be achieved. Techniques like heating in oil baths, which can lead to problems with uneven heating and contamination before the bearings are even mounted, should be avoided where possible.

### Save time, energy and maintenance cost

SKF induction heaters are a far superior solution as they save time, energy and money. In addition, they represent a much safer heating method compared to traditional methods, contribute to a cleaner working environment and greatly reduce the risk of bearing contamination during mounting. Evidence suggests

that, by switching to induction heaters, premature bearing failure can be significantly reduced.

Combining high heating capacity with portability, the compact, lightweight design of the SKF induction heater TIH 030m makes it easy to use wherever bearings need to be mounted. Bearings up to 40 kg and with a bore diameter ranging from 20 to 300 mm can be heated to the right temperature in up to 20 minutes. Temperature presets at 110 °C (230 °F) prevents bearing overheating and subsequent damage to the heater's induction coil and electronics. The heater also provides automatic bearing demagnetization, thereby reducing the risk of contamination with metallic particles. In addition, the heater's two-step power setting and smaller yokes accommodate the heating of smaller components at lower power consumption. Each unit has a three year warranty and repair and calibration services, when necessary, are available at specialist SKF facilities.



*SKF induction heaters enable safe, effective mounting, and use less energy than conventional heating methods.*

For more information about SKF products and solutions for the pulp and paper industry, contact your SKF Authorized Distributor.





## Increase the return on your maintenance investment with SKF

The whole idea behind the SKF 360° Solution is to help you get more out of your plant machinery and equipment investment. This may mean lowering your maintenance costs, raising your productivity, or both! Here's an example of the SKF 360° Solution at work in the pulp and paper industry.

### Newsprint producer reduces downtime and achieves significant benefits with an SKF TIH 30m induction heater

A newsprint mill with a single, large paper machine was looking for ways to increase productivity. Reducing downtime and the time spent replacing bearings were identified as areas where improvements could be made. Finding a fast, efficient and safe way of correctly mounting bearings looked like it could produce results.

The mill's maintenance staff was using either oil baths or an old induction heater to mount the bearings. It took four hours to mount one bearing with the oil bath method. There were also concerns



related to uneven heating, the risk of bearing contamination during the process, oil spills and injuries to workers. In some cases, an induction heater was used but, due to its age, it was very slow.

The mill purchased an SKF TIH 030m portable induction heater. As a result, mounting time fell from four hours per bearing to one and a half hours and machine uptime increased.

### Return on Investment [ROI] summary\* over a 5-year period

Total benefits (increased production availability and cost savings) . . . . .	€ 62 060
Investment in SKF solution . . . . .	€ 1 760
<b>Return on investment . . . . .</b>	<b>&gt; 3 400%</b>

\* All numbers are rounded off and based on customer estimates. Your particular cost savings may vary.

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