# TIH 100m

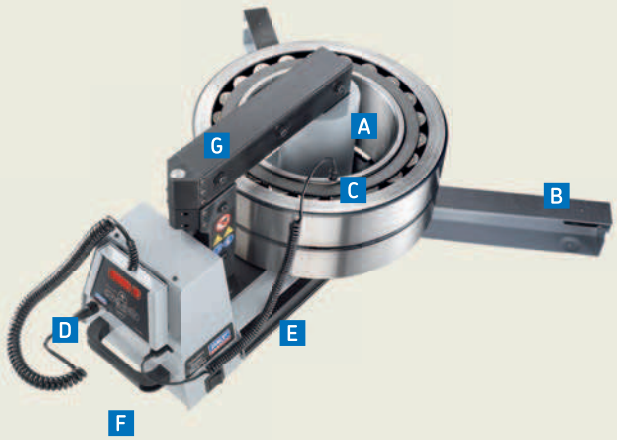
Medium induction heater with a 120 kg bearing heating capacity

The SKF medium induction heater TIH 100m has the same high standards of efficiency and performance as the small heater combined with increased capacity. The advanced design of the power electronics allows features of accurate electric current control, cut-outs to avoid overheating, controls on rate of temperature increase, these are as some of the standard features in the TIH...m range.



- Capable of heating a 97 kg *(213 lb)* bearing in less than 20 minutes
- Supplied standard with three yokes, allowing bearings with a bore diameter from 20 mm *(0.8 in.)* up to a maximum weight of 120 kg *(264 lb)* to be heated
- Swivel arm for large size yoke

## Features and benefits




**A** Induction coil located outside the heater's housing enables a shorter heating time and lower energy consumption

**B** Foldable bearing support arms allow larger diameter bearings to be heated, and reduce the risk of the bearing toppling during heating

**C** Magnetic temperature probe, combined with a temperature mode pre-set at 110 °C *(230 °F)*, helps prevent bearing overheating

**D** Unique SKF remote control, with operating display and control panel, makes the heater easy and safe to use

**E** Internal yoke storage, for smaller yoke(s), reduces the risk of yoke damage or loss

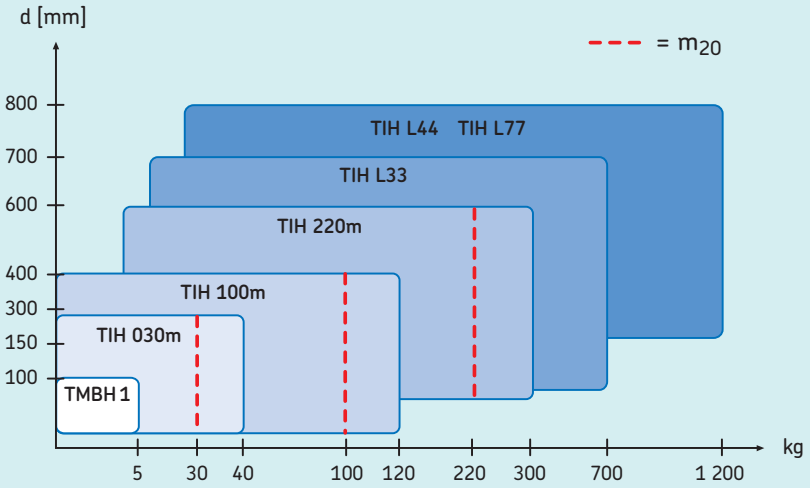
**F** Integrated carrying handles allow for easy movement of the heater in the workshop

**G** Sliding or swivel arm allows for easy and quick bearing replacement, reducing operator fatigue (not for TIH 030m)

## Technical data

| Designation | TIH 100m |
|---|---|
| Max. bearing weight | 120 kg *(264 lb)* |
| Bore diameter range | 20–400 mm *(0.8–15.7 in.)* |
| Operating area (w × h) | 155 × 205 mm *(6.1 × 8 in.)* |
| Coil diameter | 110 mm *(4.3 in.)* |
| Standard yokes (included) to suit bearing/workpiece minimum bore diameter | 80 mm *(3.1 in.)*<br>40 mm *(1.6 in.)*<br>20 mm *(0.8 in.)* |
| Application example (bearing, weight, temperature, time) | 23156 CC/W33, 97 kg, 110 °C, 20m |
| Max. power consumption | 3,6 kVA (230 V)<br>4,0–4,6 kVA (400–460 V) |
| Voltage [1] | |
| 100–240 V/50–60 Hz | – |
| 100–120 V/50–60 Hz | – |
| 200–240 V/50–60 Hz | TIH 100m/230 V |
| 400–460 V/50–60 Hz | TIH 100m/MV |
| Temperature control [2] | 20 to 250 °C *(68 to 482 °F)* |
| Demagnetisation according to SKF norms | <2 A/cm |
| Dimensions (w × d × h) | 570 × 230 × 350 mm *(22.4 × 9 × 13.7 in.)* |
| Total weight (incl. yokes) | 42 kg *(92 lb)* |

## SKF induction heater range




The comprehensive range of SKF induction heaters is suitable for most bearing heating applications. The chart gives general information on choosing an induction heater for bearing heating applications [3].

The SKF $m_{20}$ concept represents the weight (kg) of the heaviest SKF spherical roller bearing of series 231 which can be heated from 20 to 110 °C *(68 to 230 °F)* in 20 minutes. This defines the heater's power output instead of its power consumption. Unlike other bearing heaters, there is a clear indication of how long it takes to heat a bearing, rather than just the maximum bearing weight possible.

1) Some special voltage versions (e.g. 575V, 60 Hz CSA ready) are available for specific countries. For additional information, please contact your local SKF authorised distributor.
2) Maximum heating temperature capacity depends on the weight and geometry of the bearing or workpiece. The heaters can achieve higher temperatures, please contact SKF for advice.
3) For heating components other than bearings, SKF recommends consideration of TIH L MB series heater. Contact SKF to help you select a suitable induction heater for your application.

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**PUB MP/P8 14385/2 EN** · August 2017