

Induction heater TIH 100m

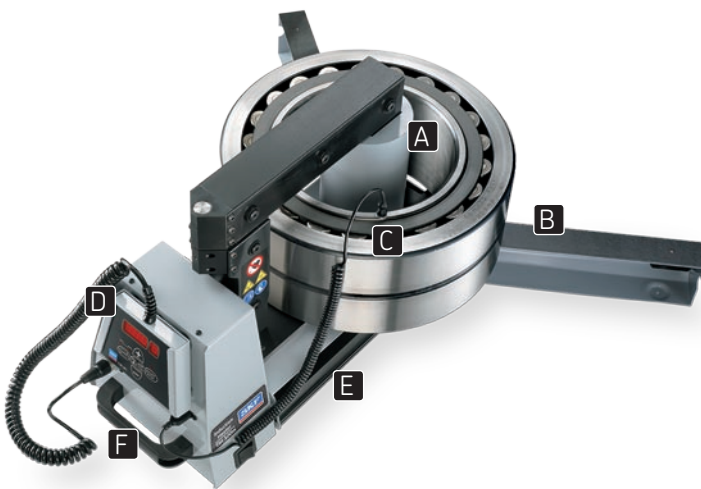
Medium bearing heater with high heating capacity of up to 120 kg bearing

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.

Placing the induction coil outside the heater's housing allows the heating of bearings weighing up to 120 kg (264 lb). The heater is equipped with thermal overheating protection to reduce the risk of damage to the induction coil and the electronics. In addition to temperature mode, the TIH 100m is equipped with a time mode for heating components other than bearings. The heater is supplied standard with three yokes and is available in two executions: 230V/50-60Hz or 400-460V/50-60Hz.



- Standard swivel arm for large size yoke
- Capable of heating a 97 kg (213 lb) bearing in less than 20 minutes, saving time and energy
- 2-step power setting and smaller yokes allow heating smaller bearings safely and at lower power consumption
- Temperature mode pre-set at 110 °C (230 °F) to help prevent bearing over-heating
- Automatic demagnetisation
- 3 years warranty



- A Induction coil outside the heater's housing allows shorter heating time and lower energy consumption
- B Foldable bearing support arms facilitate the heating of larger diameter bearings
- C Magnetic temperature probe helps prevent bearing overheating
- D Easy-to-use control panel and LED display integrated in a remote control
- E Internal storage for all 3 yokes reduces the risk of yoke damage or loss
- F Integrated carrying handle facilitates portability



Mounting and lubrication



Technical data

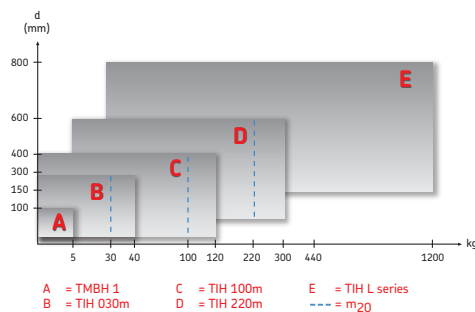
Designation	TIH 100m
SKF m ₂₀ performance	97 kg (213 lb)
Voltage, V/Hz	230V/50-60Hz or 400-460V/50-60Hz
Work piece:	
– Maximum weight	120 kg (264 lb)
– Maximum bore diameter	20 – 400 mm (0,8 – 15,7 in)
Temperature control:	
– Range	0 – 250 °C (32 – 482 °F)
– Magnetic probe	Yes, K-type
– Accuracy (electronics)	± 2 °C (± 3,6 °F)
Time control:	
– Range	0 – 60 minutes
– Accuracy	± 0,01 sec.
Maximum temperature (approx.)	400 °C (750 °F)
Thermometer mode	Yes
Bearing mode	Yes
Power reduction	2-step; 50 – 100%
Demagnetisation according to SKF norms (automatic)	Yes (<2 A/cm)
Can heat sealed bearings	Yes
Can heat pre – greased bearings	Yes
Error guiding codes	Yes
Thermal overload protection	Yes
Maximum magnetic flux	1,7 T
Control panel	Key board with LED in remote control
Operating area (w × h)	155 × 205 mm (6,1 × 8,0 in)
Coil diameter	110 mm (4,3 in)
Dimensions (w × d × h)	570 × 230 × 350 mm (22,4 × 9,0 × 13,7 in)
Total weight, including yokes	42 kg (92 lb)
Maximum power consumption	3,6 kVA (230V) 4,0-4,6 kVA (400-460V)
Number of standard yokes	3
Standard yokes	56 × 56 × 296 mm (2,2 × 2,2 × 11,7 in), for heating bearings with bore diameter of 80 mm (3,1 in) and larger 28 × 28 × 296 mm (1,1 × 1,1 × 11,7 in), for heating bearings with bore diameter of 40 mm (1,6 in) and larger 14 × 14 × 296 mm (0,6 × 0,6 × 11,7 in), for heating bearings with bore diameter of 20 mm (0,8 in) and larger
Core cross section	56 × 56 mm (2,2 × 2,2 in)
Yoke storage	Yes, foldable
Sliding arm	No
Swivel arm	Yes, large yoke only
Cooling fan	No
Housing material	Steel and glass filled polyamide
Warranty period	3 years

Selection guide

There are no totally restrictive guidelines to follow when choosing your SKF bearing heater. It will depend upon the type and geometrical dimensions of the components you want to heat. Nevertheless, SKF offers the following helpful general selection guide.

SKF m₂₀ concept

"m₂₀" represents the weight (kg) of the heaviest SRB 231 bearing 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.



© SKF is a registered trademark of the SKF Group
© SKF Group 2009

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless prior written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein.

MP/PDS TIH100M EN • October 2009

www.mapro.skf.com • skf.com/mount • skf.com/lubrication

