

# SKF Induction Heater TIH L series

## High efficiency, energy saving induction heater with a 1 200 kg bearing heating capacity

The SKF Induction Heater TIH L series are intended for heating large size rolling bearings and components forming a closed circuit such as housings, gear wheels and couplings.

With advanced power electronics and a dual coil design, the TIH L series can heat large bearings up to 1 200 kg (2 600 lbs), using just 20 kVA of electrical power. This is a power saving of almost 50 % compared to traditional induction heaters. Unusually for a bearing heater for large bearings, the TIH L series can be supplied in medium and low voltage versions. Available with two different operating areas, the TIH L series suits most bearings up to 1 200 kg.

- High heater efficiency saves energy costs and helps to reduce CO<sub>2</sub> emissions.
- Bearings and work pieces can be heated vertically or horizontally. This gives users real flexibility in using TIH L series heaters.
- Easy bearing loading thanks to an ergonomically designed sliding yoke. No need to use valuable crane time to lift the yoke.
- Bearing support arms can be used when heating bearings horizontally. This improves handling and improves user safety
- Supplied with a remote control panel, detachable from the heater. This improves ease of use and helps reduce the risk of contact with the hot bearing during operation.
- Compact design allows the TIH L series heaters to be easily transported by forklift
- Temperature mode pre-set at 110 °C (230 °F), helps prevent bearing overheating
- Time mode for heating components other than bearings, allows flexibility in application
- 2-step power setting is ideal for use with sensitive bearings, helping to ensure that the bearing's rolling elements don't lock up during heating
- Automatic demagnetisation
- 3 year warranty



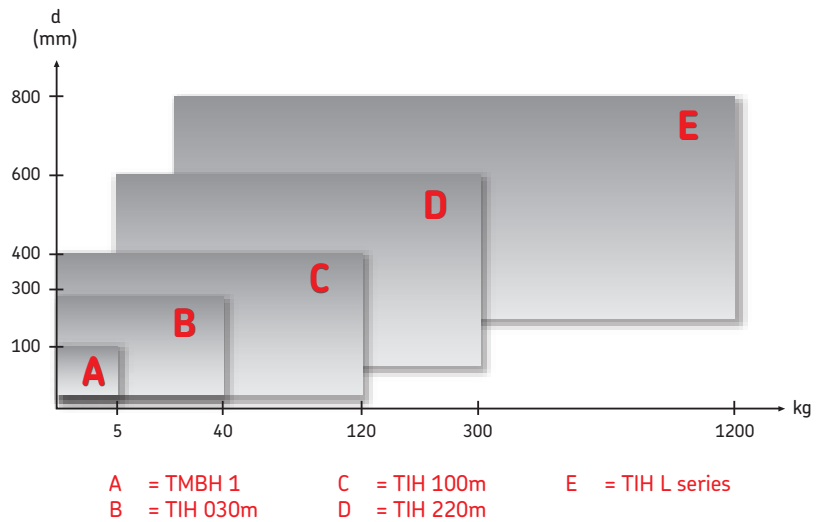
Mounting and lubrication



## Selection guide

There are no totally restrictive guidelines to follow when choosing your SKF bearing heater. Nevertheless, SKF offers the following helpful general selection guide for bearing applications.

For work pieces other than bearings, the maximum weight can be different dependant on geometry, material and required heating temperature. Contact SKF for more information.



## Technical data

Designation	TIH L44/MV, TIH L44/LV, TIH L77/MV, TIH L77/LV
Voltage	MV: 400-460 V/50-60Hz LV: 200-240 V/50-60Hz
Work piece maximum weight	Bearing: 1 200 kg (2 600 lbs) Solid component: consult SKF
Coil diameter	175 mm (6.8 in) for minimum work piece bore diameter of 185 mm (7.2 in)
Standard yoke cross section	100 x 100 mm (3.9 x 3.9 in) for minimum work piece bore diameter of: 150 mm (5.9 in)
Operating area (w x h)	
TIH L44:	425 x 492 mm (16.7 x 19.4 in)
TIH L77:	725 x 792 mm (28.4 x 31.2 in)
Maximum heating temperature (approx)	400 °C (750 °F)
Temperature control	0-250 °C (32-482 °F); in steps of 1°
Probe type	thermocouple, K type
Temperature accuracy (electronics)	± 2 °C (± 3.6 °F)
Time mode	0-120 minutes; in steps of 0,1 minute
Power reduction	50 % - 100 %
Demagnetisation	Automatic; residual magnetism <2A/cm
Error guidance codes	Yes
Thermal overload protection	Yes
Recommended line protection	50 A fuse rating for MV execution 100 A for LV execution
Power consumption (maximum)	MV: 20.0-23.0 kVA LV: 20.0-24.0kVA
Overall dimensions (w x b x h)	
TIH L44:	Excl. legs: 1 200 x 600 x 850 mm (47.3 x 23.6 x 33.5 in) Incl. legs: 1 550 x 1 330 x 850 mm (61 x 52.4 x 33.5 in)
TIH L77:	Excl. legs: 1 320 x 600 x 1 150 mm (52 x 23.6 x 45.3 in) Incl. legs: 1 850 x 1 330 x 1 150 mm (72.8 x 52.4 x 45.3 in)
Weight	
TIH L44:	300 kg (660 lbs)
TIH L77:	370 kg (815 lbs)
Warranty period	3 years

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