

A comprehensive range for bearings and other workpiece

TIH L series

The SKF TIH L series heaters are designed for induction heating of large size rolling bearings. With advanced power electronics and an effective dual coil design, the TIH L series can heat large bearings weighing up to 1 200 kg (2 600 lb), using just 20 kVA of electrical power. This represents a power saving of almost 50% compared to similar induction heaters and highlights how SKF Induction Heaters are simultaneously powerful and efficient. Unusually for a bearing heater for large bearings, the TIH L series can be supplied in medium and low voltage versions.

- Advanced power electronics, with accurate electric current control, help control the temperature rate increase.
- Using just 20 kVA of electrical power, the TIH L series can heat large bearings weighing up to 1 200 kg (2 600 lb).
- Automatic demagnetisation reduces the risk of ferrous debris contamination after heating.
- Thermal overheating protection reduces the risk of damage to the induction coil and the electronics, enhancing reliability and safety.
- Available with three different operating areas.
- Available in three voltage variants to suit most operating voltages worldwide.
- Bearings can be heated vertically or horizontally.



Compact design allows the TIH L series heaters to be easily transported by forklift.



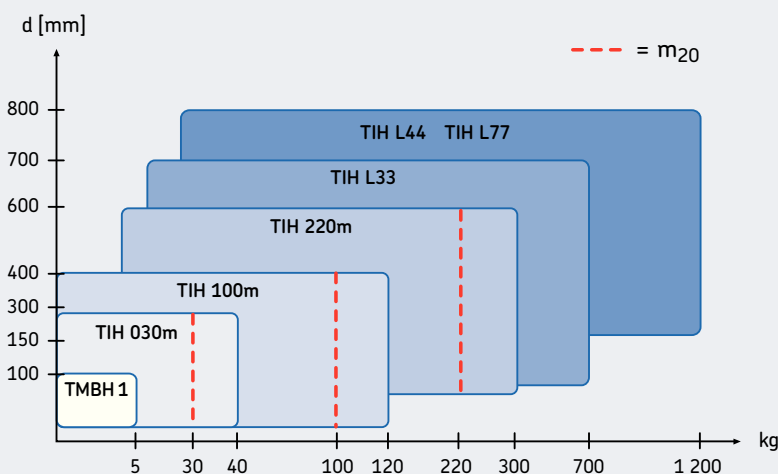
Technical data - TIH L series

Designation	TIH L33	TIH L44	TIH L77
Max. bearing weight	700 kg (1 543 lb)	1 200 kg (2 600 lb)	1 200 kg (2 600 lb)
Bore diameter range	115–700 mm (4.5–27.6 in.)	150–800 mm (5.9–31.5 in.)	150–800 mm (5.9–31.5 in.)
Operating area (w × h)	300 × 320 mm (11.8 × 12.6 in.)	425 × 492 mm (16.7 × 19.4 in.)	725 × 792 mm (28.5 × 31.2 in.)
Coil diameter	150 mm (5.9 in.)	175 mm (6.9 in.)	175 mm (6.9 in.)
Standard yokes (included) to suit bearing minimum bore diameter	115 mm (4.5 in.)	150 mm (5.9 in.)	150 mm (5.9 in.)
Optional yokes to suit bearing minimum bore diameter	80 mm (3.1 in.) 60 mm (2.3 in.)	100 mm (3.9 in.)	–
Max. power consumption	TIH L33/LV: 15 kVA TIH L33/MV: 15 kVA	TIH L44/MV: 20–23 kVA TIH L44/LV: 20–24 kVA	TIH L77/MV: 20–23 kVA TIH L77/LV: 20–24 kVA
Voltage ¹			
200–240 V/50–60 Hz	TIH L33/LV	TIH L44/LV	TIH L77/LV
400–460 V/50–60 Hz	TIH L33/MV	TIH L44/MV	TIH L77/MV
Temperature control	0 to 250 °C (32 to 482 °F)	20 to 250 °C (68 to 482 °F)	20 to 250 °C (68 to 482 °F)
Demagnetisation according to SKF norms	<2 A/cm	<2 A/cm	<2 A/cm
Max. temperature	400 °C (750 °F)	400 °C (750 °F)	400 °C (750 °F)
Dimensions (w × d × h)	400 × 743 × 550 mm (15.8 × 29.3 × 21.7 in.)	1 200 × 600 × 850 mm (47.3 × 23.6 × 33.5 in.)	1 320 × 600 × 1 150 mm (52 × 23.6 × 45.3 in.)
Total weight (incl. yokes)	140 kg (309 lb)	324 kg (714 lb)	415 kg (915 lb)
Warranty	3 years + 1 additional year upon product registration	3 years + 1 additional year upon product registration	3 years + 1 additional year upon product registration

¹ Some special voltage versions (e.g. 575V, 60Hz CSA ready) are available for specific countries. For additional information, please contact your local SKF authorised distributor.

² For higher temperatures please contact SKF

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.

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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