SKF Induction Heaters TIH L series

A comprehensive range for bearings and other workpieces



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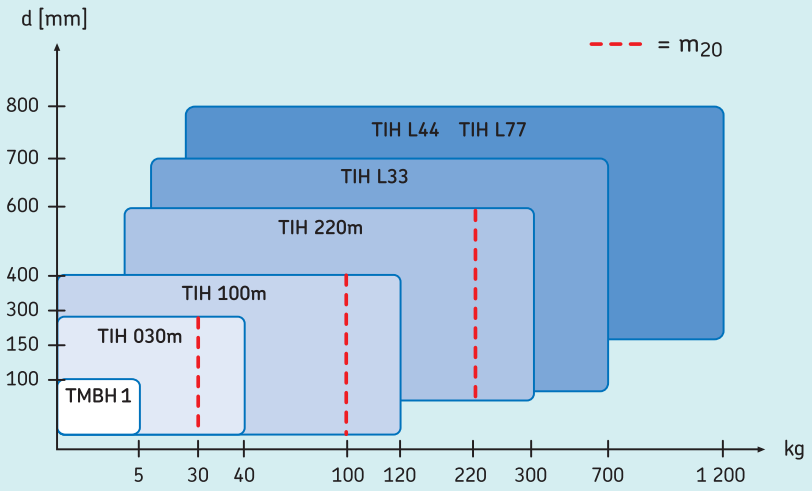
TIH L series

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.

- Using just 20 kVA of electrical power, the TIH L series can heat large bearings up to 1 200 kg *(2 600 lb)*
- Bearings and work pieces can be heated vertically or horizontally
- Compact design allows the TIH L series heaters to be easily transported by forklift
- Available with two different operating areas



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 [1].

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] 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.

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 *(2.4 in.)*	100 mm *(3.9 in.)*	–
Application example (bearing, weight, temperature, time)	24188ECA/W33, 455 kg, 110 °C, 28m	24188ECA/W33, 455 kg, 110 °C, 13m	–
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 400–460 V/50–60 Hz	 TIH L33/LV TIH L33/MV	 TIH L44/LV TIH L44/MV	 TIH L77/LV TIH L77/MV
Temperature control [2]	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
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)*



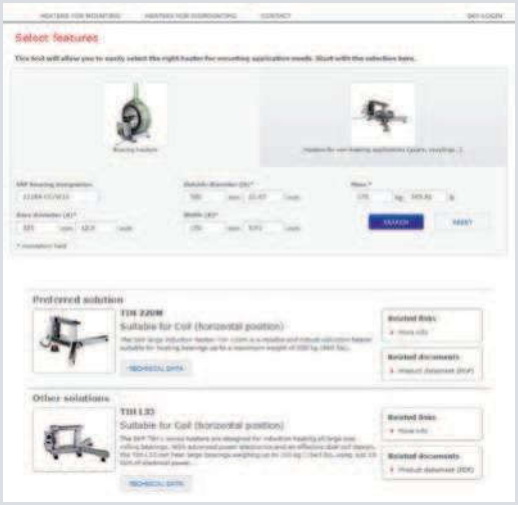
1) Some special voltage versions (e.g. 575V, 60 Hz CSA ready) are available for specific countries. For additional information, please contact your local SKF authorised distributor.
2) Maximum heating temperature capacity depends on the weight and geometry of the bearing or workpiece. The heaters can achieve higher temperatures, please contact SKF for advice.

TIH L33

Large induction heater with a 700 kg bearing heating capacity

- Using just 15 kVA of electrical power, the TIH L33 can heat large bearings up to 700 kg *(1 543 lb)*
- Bearings and work pieces can be heated vertically or horizontally
- Compact design allows the TIH L series heaters to be easily transported by forklift





www.mapro.skf.com/heaterselect

Heater selection tool

The online heater selection tool helps to select the most appropriate SKF heater for a given hot mounting or dismounting application of bearings or annular workpieces.

In just three easy steps, you can define your heating application and receive a list of all suitable heaters for that application, including a recommendation of the heater that offers the best price-performance ratio.

The online heater selection tool is available free of charge, just scan the QR code or visit us on www.mapro.skf.com/heaterselect

The heater selection tool supports all mounting and fixed size EAZ dismounting heaters and offers additional information such as the product data sheet, technical data and product websites for each heater. If you cannot find the right heater for your application or you need more information, please don't hesitate to contact SKF.

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