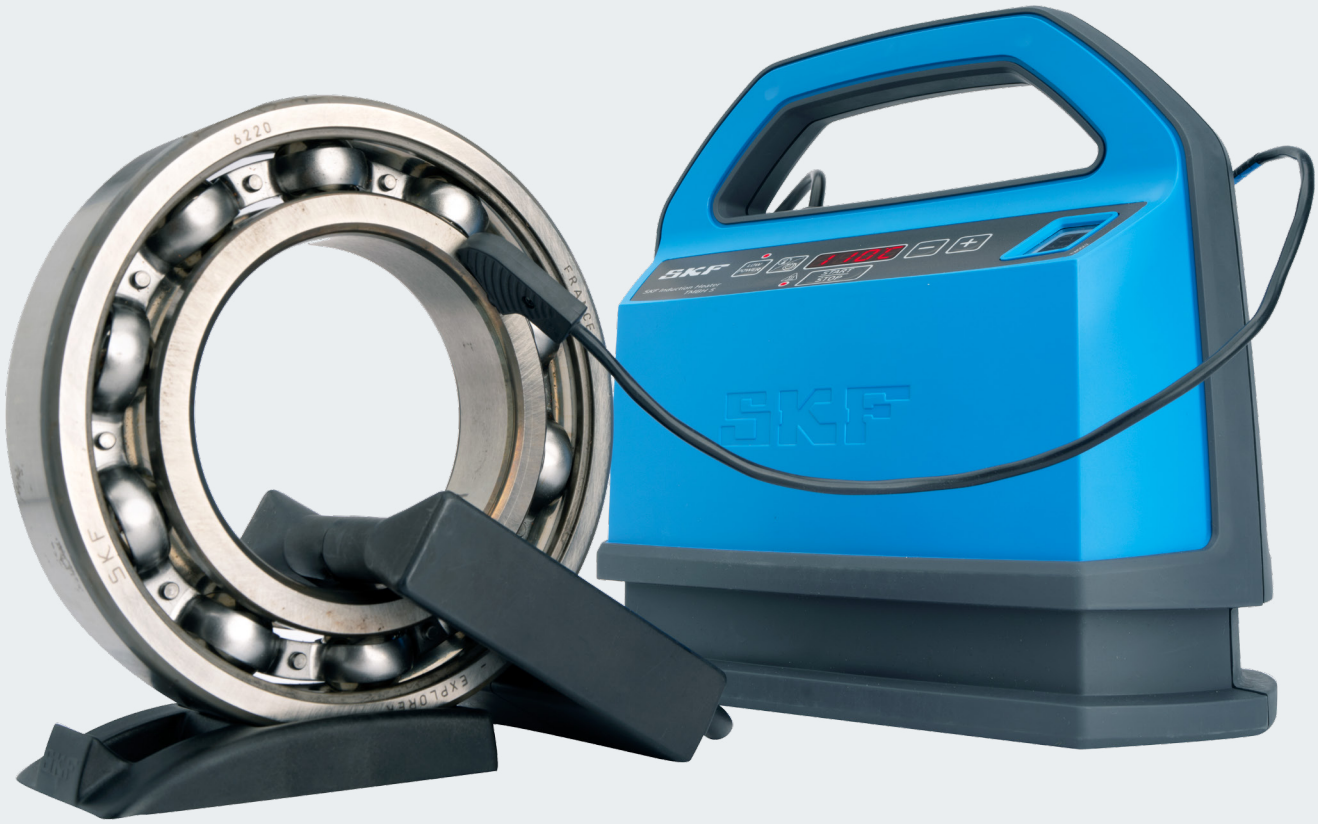
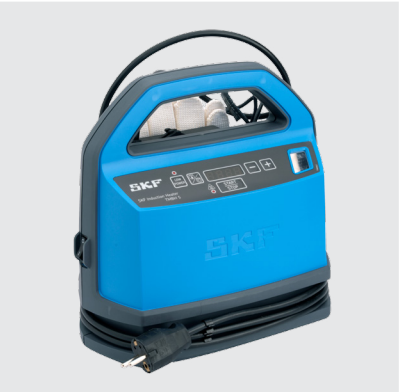
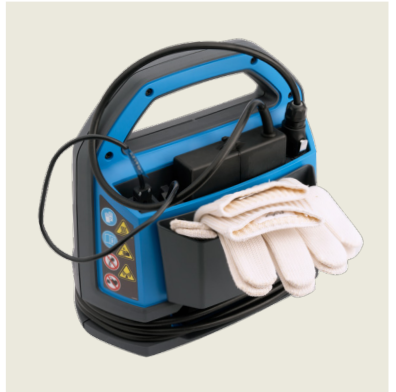
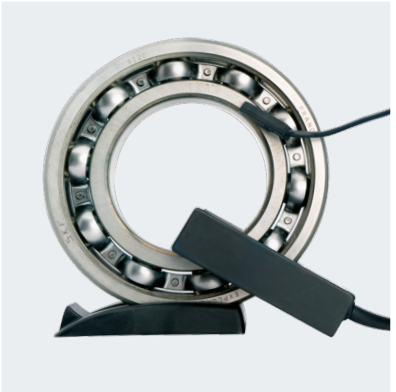
SKF TMBH 5

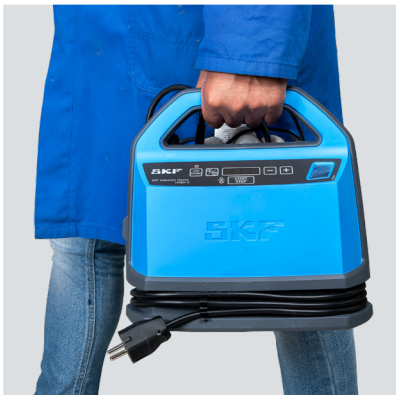
A light and compact solution for bearing heating







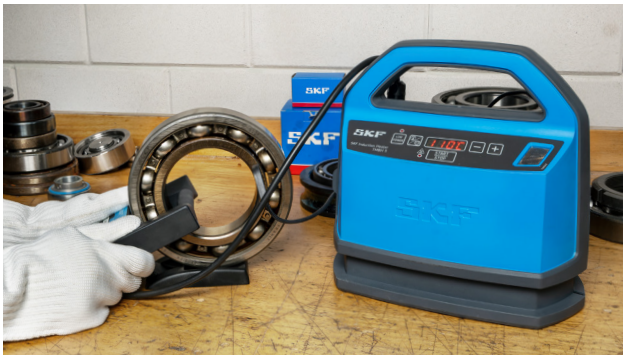


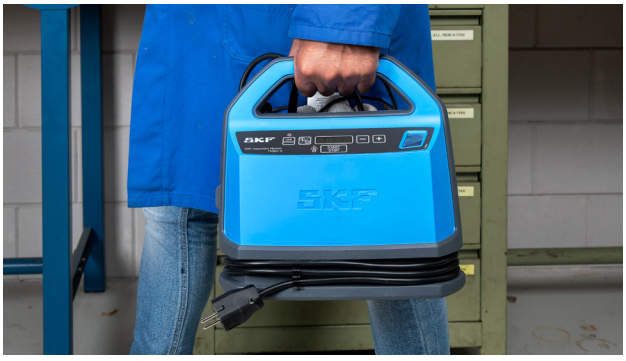


A light and compact solution for bearing heating

Portable induction heater TMBH 5

The SKF Portable induction heater TMBH 5 is designed for use in maintenance, to heat roller bearings that are mounted onto a shaft with an interference fit. Heat causes the bearing to expand, which removes the need to use force during installation. The TMBH 5 generates a temperature difference between bearing and shaft – enough to enable installation. It can also be used to heat other ring-shaped, metallic components. A reduced power setting allows sensitive components to be heated more slowly.



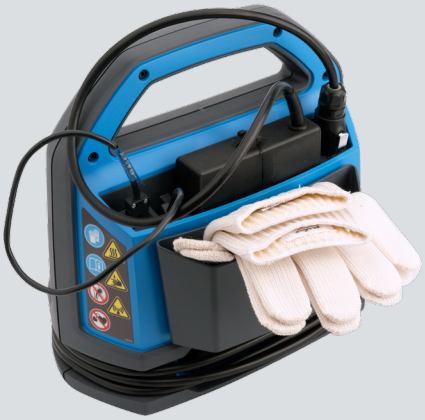


The TMBH 5 relies on an induction clamp that contains internal coils. A current in the coils generates a fluctuating magnetic field. This induces currents within the component, which are converted to heat. Because this heat is generated within the component – and not the clamp – the process is highly energy-efficient.

The unit's LED interface is intuitive to use, allowing the user to select either Temperature Mode or Time Mode. An LED indicates when the TMBH 5 is in operation – as it hardly makes any noise.

TMBH 5 benefits:

- Highly portable, compact and light in weight
- Automatic temperature monitoring
- No need to choose separate yoke for each component
- Use of advanced medium frequency electronics
- Choice of power settings
- User-friendly control panel
- Silent operation



The TMBH 5 portable induction heater package includes:

- Portable induction heater TMBH 5
- Magnetic K-type 600 mm (23.6 in.) temperature probe TMBH 5-3
- Clamp TMBH 5-4
- Bearing stand TMBH 5-5
- Heat resistant gloves TMBA G11
- Operating instructions

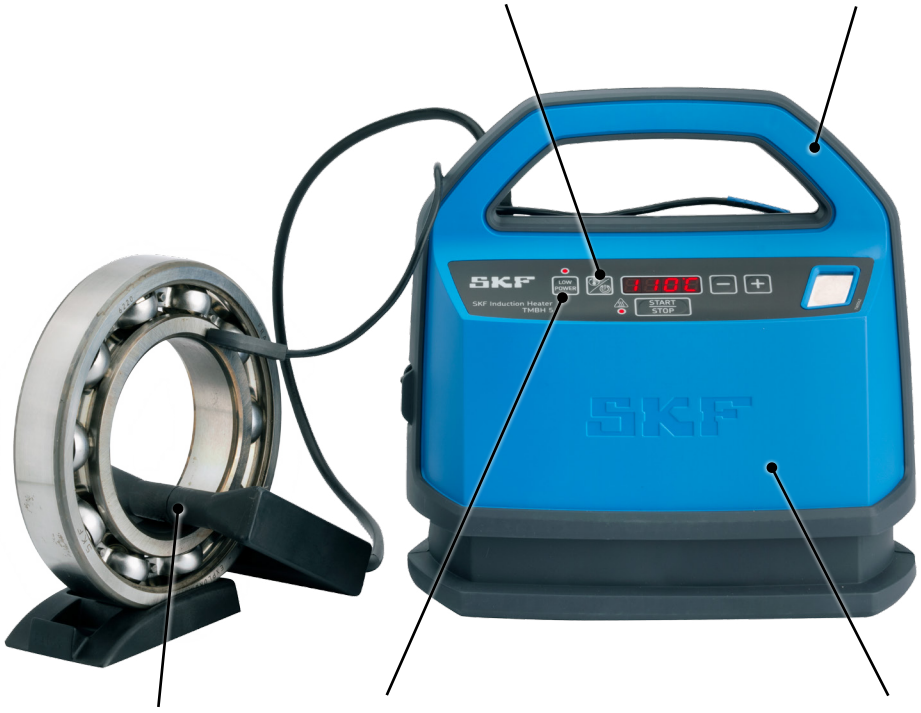
TMBH 5 features

Operation

The TMBH 5 runs in two modes: Temperature Mode, where the operator selects the desired bearing temperature; and Time Mode, allowing a bearing or component to be heated for a specified length of time.

Portable

Sophisticated medium-frequency technology and the use of appropriate materials make the heater lightweight and portable. A built-in handle, and storage pockets for ancillary equipment, add to its portability and convenience.



Versatile

The induction clamp's thin fingers mean the user does not need to choose a different yoke for each component. This increases the number of different components that can be heated – while reducing the number of accessories needed.

Power regulation

TMBH 5 has a variety of power settings, so can heat sensitive components (such as bearings with shields, or metallic inserts in the seals) more slowly if required.

Noise level

The medium frequency technology that heats the components operates silently. Because it is so quiet, an LED indicator is needed, to show that the heater is operating.

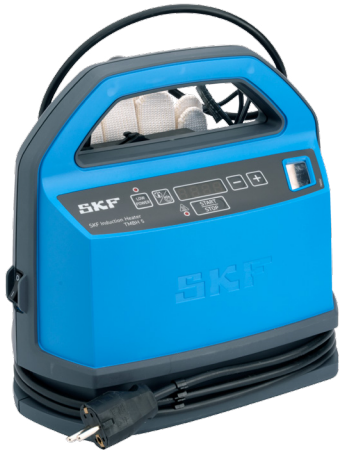
Technical data

Designations	TMBH 5/230V, TMBH 5/120V
Application [1]	
Bearing weight [2]	up to 5 kg (11 lb)
Min. bearing bore diameter	20 mm (0.8 in.)
Max. bearing bore diameter	100 mm (4 in.)
Max. bearing width	50 mm (2 in.)
Maximum power	TMBH 5/230V: 350W TMBH 5/120V: 350W
Voltage and frequency	TMBH 5/230V: 230 V ±10%, 50/60Hz TMBH 5/120V: 120 V ±10%, 50/60Hz
Max. current consumption	TMBH 5/230V: 2A TMBH 5/120V: 4A
Temperature control	40-200 °C (104-392 °F)
Time control	5 seconds – 60 minutes
Demagnetisation	The heater does not magnetise
Dimensions (w x d x h)	275 x 270 x 180 mm (10.8 x 10.6 x 7.09 in.)
Total weight	3 kg (6.6 lb)

[1] SKF does not recommend heating bearings capped with seals or shields above 80 °C (175 °F). However, if higher temperatures are necessary, please contact SKF. The heater is designed for maintenance operations where some cooling in between jobs is allowed.
[2] Depending on the geometry of the bearing, maximum heating temperature.

Light and portable enough to be carried by its handle

TMBH 5



The TMBH 5 is versatile enough to be used in a range of situations – including at a work bench, on the factory floor or out in the field. Typical applications include maintenance and service jobs on gearboxes, pumps, fans and blowers.

It includes a carrying handle, weighs only 3 kg (6.6 lb) and is very compact. This makes it one of the smallest, most portable induction heaters on the market. The light weight and built-in handle make it portable to use in a variety of locations, while it can easily be stored in a locked place such as the trunk of a car or small storeroom.

The heater can handle bearings up to 5 kg (11 lb) in weight, with a minimum bore diameter of 20 mm (0.8 in.), a maximum of 100 mm (3.9 in.) and a maximum width of 50 mm (19.7 in.).

The TMBH 5 incorporates extra equipment to ensure safe, efficient heating. This includes: a 600 mm (23.6 in.) temperature probe; a heater clamp; and protective gloves. All this can be stored in an external compartment, which further enhances the unit's portability and convenience.

Features:

- Accessories fit into convenient side compartments
- Carrying handle boosts portability
- Weighs only 3 kg (6.6 lb)
- Compact enough to fit in small spaces, such as the trunk of a car
- Designed to handle bearings up to 5 kg (11 lb) in weight

skf.com | skf.com/mapro | skf.com/lubrication

PUB MP/P8 19656 EN · August 2023