

Induction Heating Devices

for mounting rolling bearings

When it comes to bearings, Schaeffler, together with our INA and FAG brands, has always been at the forefront of technological innovation. Industry firsts such as the development of the needle roller & cage assembly or the groundbreaking ball grinding machine that is regarded as the foundation of the entire rolling bearing industry have earned Schaeffler a unique distinction among the world's great bearing companies. Consequently, when you need the best bearing mounting equipment and the most convenient equipment sourcing options, it has to be Schaeffler.

How induction heaters work

Induction heating is an electro-magnetic process that basically consists of a) a current-carrying coil with an iron core that serves as the transformer primary coil and b) the part to be heated (i.e., the bearing) that becomes a short-circuited secondary coil. As a result, heat is evenly generated at the molecular level within the bearing itself, while non-metallic components and the induction heater itself remain cold.

Benefits of induction heating

Fast, Intuitive and Energy-Efficient

- Heating times reduced by up to 90% vs. heating in an oil bath
- Heating times reduced by up to 99% vs. heating in a hot-air oven

Environmentally Friendly

- Oil-free process (no waste generated)

Extremely Safe

- Process does not generate any chemical effects or vapors
- No risk of fire since only the workpiece is heated; no leakage

Uniform, Controlled Heating

- Workpiece is simultaneously and consistently heated from all sides
- Rate of heating is controlled automatically by unit

Reduced Risk of Contamination

- Heating process automatically demagnetizes the bearing - less risk of metal contamination

Benefits of Renting

try before you buy!

Why rent a Schaeffler induction heater?

- Low cost: rent for a fraction of the cost of a new unit
- Unexpected, last-minute need: short lead times with fast shipping options
- Depending on availability, receive your unit within a matter of days
- Perfect for shut-down situations or when planned downtime is approaching
- Temporarily boost existing capacity
- Service to Canada and Mexico: 575 Volt and 230 Volt options available for select models
- Rent by the week or by the month
(Best Deal - get 4 weeks for the price of 3!)

Rent or buy — you decide.

Schaeffler offers one of the industry's most comprehensive lineups of induction heating devices, along with a complete array of accessories for handling/mounting bearings as well the right safety gear. Most rental customers end up buying the unit outright after experiencing the convenience and flexibility offered by these incredibly versatile devices.

So go ahead, try before you buy!



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Rental Program



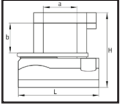




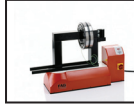

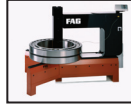
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Product Range

Heating Device	HEATER10	HEATER20	HEATER35	HEATER150	HEATER300	HEATER600	HEATER1200
							
Power Consumption max. ¹⁾	2.3 kVA	3.6 kVA	3.6 kVA	12.8kVA	12.8 kVA	25 kVA	40 kVA
Voltage/frequency ²⁾	230 V / 50 Hz	230 V / 50 Hz	230 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz
Current	10A	16 A	16 A	32 A	32 A	63 A	100 A
Mass	7 kg	17 kg	31 kg	51 kg	75 kg	350 kg	850 kg
Length	230 mm	345 mm	420 mm	505 mm	870 mm	1100 mm	1500 mm
Width	200 mm	200 mm	260 mm	260 mm	300 mm	850 mm	1100 mm
Height	240 mm	240 mm	365 mm	440 mm	580 mm	1250 mm	1400 mm
Dimension a	65 mm	120 mm	180 mm	210 mm	330 mm	430 mm	700 mm
Dimension b	95 mm	100 mm	160 mm	210 mm	260 mm	400 mm	450 mm
Ledges (incl.) for workpieces with bore min.	20/45/65mm (graduated supports)	20 mm 35 mm 60 mm	70 mm	100 mm	115 mm	145 mm	215 mm

All induction heater models are single phase.

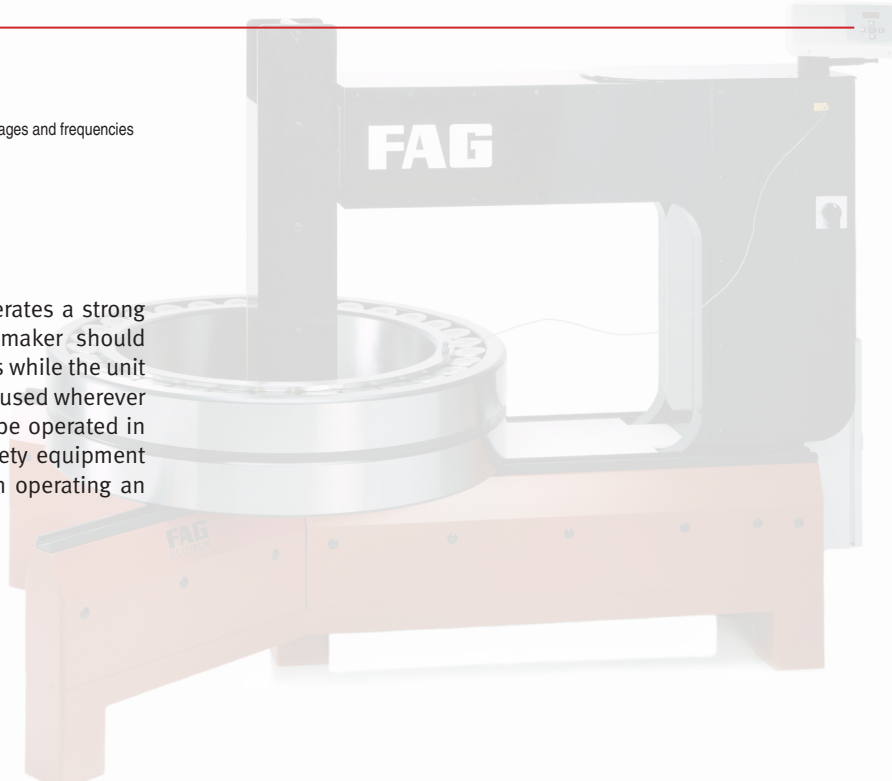
Note: all devices are subject to availability.

¹⁾ If lower voltage is used, the power will be reduced.

²⁾ Upon request, Schaeffler supplies heating devices with other rated voltages and frequencies and higher power levels.

Safety First!

Because every induction heating device generates a strong magnetic field, individuals wearing a pacemaker should maintain a safe distance of at least two meters while the unit is in operation. Bearing heaters should not be used wherever there is a risk of explosion, nor should they be operated in damp environments. Always wear proper safety equipment (safety goggles, protective gloves, etc.) when operating an induction heater!



Accessories

Rental Accessory Kit:

Every Schaeffler heater rental comes with a comprehensive accessory kit that includes the following:



- Instruction manual (English version is standard; other languages available upon request)
- FAG Arcanol Multi3 grease – for lubricating the contact points between ledges to increase induction efficiency
- GLOVE-PRO-TEMP – Heat-resistant / non-flammable gloves rated to 250° C
- Magnetic temperature probe

Now available: BEARING-MATE – the incredibly versatile bearing transport and mounting tool



BEARING-MATE is designed to quickly, easily & securely handle medium- and large-size rolling bearings. It can also be utilized whenever bearings are heated prior to mounting.

BEARING-MATE consists of two handles and two steel strips that firmly grip the outer ring of the rolling bearing. Also included are two brackets for use with self-aligning ball bearings and spherical roller bearings to prevent tilting of the inner rings.

BEARING-MATE can be carried by two people or by crane. If two carrying slings are used, the bearing can be rotated to any position when transported by crane. During the induction heating process, BEARING-MATE remains mounted on the bearing. The steel strips expand uniformly with the bearing, thereby ensuring that optimum tension is always maintained.

Three tool sizes are matched to different bearing outside diameters:

Ordering Designation	Bearing Outside Diameter		Bearing Mass	Operating Temp	Tool Mass
	min. mm	max. mm	max. kg	max. ° C	kg
BEARING-MATE250-450	250	450	500	160	6.3
BEARING-MATE450-650	450	650	500	160	6.4
BEARING-MATE650-850	650	850	500	160	6.5