

Save money and time with

simatherm induction heaters

*Having produced over 50,000 heaters, Swiss company simatec ag from Wangen an der Aare is the world's most successful manufacturer of induction heaters for bearings. The heaters are now sold under the product name **simatherm**.*

Reduce costs with **simatherm**

Investing in a **simatherm** induction heater pays off in a number of ways. Within seconds, a roller bearing is gently heated to the required mounting temperature. This results in a huge saving in time, energy and money compared with previous heating methods such as oil baths, heating plates or ovens. A component is heated to the preselected temperature, where it is maintained using the keep-warm function, which means that it is never overheated and is ready for mounting at any time. A further advantage is that the temperature of the components is monitored using a temperature sensor and displayed on the unit.

Fast heating possible

The recommended heating temperature for mounting roller bearings is 110°C. With average bearing sizes, this temperature is reached after a matter of seconds, which saves both time and money. Besides heating bearings, however, **simatherm** units can also be used to heat other circular metal components such as gear wheels, flanges, bearing rings, pinions, etc. Temperature monitoring allows components to be warmed to a maximum of 250°C. Depending on the material and dimension of the components, they can even be heated to 400°C in time mode.

Easy mounting

The compression force required for mounting increases considerably as the bearing size increases. If the heat expansion of the metals is utilised, it is possible to mount bearings and other circular components on a shaft or in a housing without exerting any force. When heating a component, the **simatherm** unit remains cold and is therefore safe to touch. Plastic seals and lubricant also do not become hot. This also allows pre-lubricated bearings to be heated, which is a unique advantage of **simatherm** units. The grease is not damaged when the bearings are heated, and the latter can be mounted as soon as the preselected temperature is reached.

How **simatherm** works

The heater technology is similar to that of an electric transformer in that a high electric current with a low voltage is induced into the component by means of an induction coil, thereby ensuring even heating.

Benefits over conventional heating methods

simatherm induction heaters far surpass conventional heating methods. They offer the only direct heating method whereby the expended energy is fed directly into the part to be heated. There is no need to heat a heat transfer medium as well. Inductive heating is thus more energy-efficient than all other methods. Only the metal parts are heated, which also increases occupational safety. With induction heating, there is no risk of fire or burns from oil splashes as there is, for example, with an oil bath. **simatherm** induction heaters offer maximum mobility. Their light weight allows them to be deployed at alternating mounting sites - the unit is brought to the mounting site and not the other way round!

Innovative development of **simatherm**

In order to achieve optimal efficiency, in the latest generation of heaters the induction coil has been moved to the centre of the component to be heated. This new feature reduces heating time and thus energy consumption by up to 80%.

Range

simatherm induction heaters come in four sizes. Depending on the size of the heater, components up to 800 kg can be heated. Each heater has yokes of various cross sections. The larger heaters have a sliding yoke, which above all makes it easier to handle heavy components. Versions with a swivel arm are also available. The standard delivery includes a temperature sensor for continuous monitoring of the components as well as the special **simatherm** heat protection gloves which allow the heated part to be touched safely.

Company Profile

simatec ag is an independent, globally active family business with its head office in Switzerland (Wangen an der Aare). Since 2005 it has been run by the second generation of the family, Mischa N. Wyssmann.

Since the company was founded in 1983, motivated staff have been developing and producing innovative products for the maintenance of bearings. Globally known brand names such as **simatherm**, **simatool** and **simalube** originate from simatec.

simatherm induction heaters allow fast heating of roller bearings and other circular metal parts. **simatool** tools facilitate the assembly and dismantling of roller bearings.

With the **simalube** lubricator, the Swiss company opened up another successful sector, and consistently ranks among the leading suppliers in the global industrial market. The development of the patented gas producing dry cell enabled the launch of the single-point automatic grease and oil lubricator, which allows clean, safe and maintenance-free long lasting lubrication of bearings. Thanks to this innovative technology, complex maintenance processes on thousands of machines worldwide can be greatly simplified and the maintenance costs considerably reduced.

Use of the gas producing dry cell allowed simatec to open up another field of business in the room scenting sector in 2009, under the brand name **aromino**. The **aromino** scenting system offers almost unlimited options for scenting rooms in a variety of industries.

At the end of 2007, the subsidiary simatec inc. successfully started operations in Charlotte, NC, USA.

Manufacturer and sales:

simatec ag
Stadthof 2
CH-3380 Wangen a. Aare
Tel. +41 (0)32 636 50 00
Fax +41 (0)32 636 50 19
www.simatec.com
welcome@simatec.com