



PRESS RELEASE

Annecy (Haute-Savoie, France), 18 February 2019

NTN-SNR's SMART TEMP: parts heated and mounted in complete safety for optimal reliability

NTN-SNR launches SmartTEMP, its new range of induction heaters. They control the temperature whilst mounting, to preserve the integrity of the materials and ensure total safety when mounting components (bearings or gears). Heating gradually and controlling temperature deltas, preserves the functionality of sensitive parts. The touch screen along with the ability to store heating information leads to better traceability. Ease of use and the scope of range make SmartTEMP a very high-performance tool for all industries. With this innovative induction heating device, NTN-SNR furthers the dissemination of good practices concerning the heating and mounting of rotating parts. This is an essential phase when one considers for instance that 17% of bearing failures are caused by incorrect mounting. With the market release of SmartTEMP, NTN-SNR continues to pursue its objective of improving the productivity of its industrial clients by extending the useful life of their parts and machines.

Unique cutting-edge functionality

The SmartTEMP range offered by NTN-SNR is designed primarily to ensure the safety of the operator and the part being heated. The unique design featuring a coil system beneath the workpiece heats the bearing's two rings evenly and consistently to prevent any temperature distortions between the different components. Two probes constantly control the difference in temperature between the two rings, thereby ensuring full control of the heating process and the total integrity of the bearing's physical characteristics. The range comprises seven models that are capable of heating parts with masses ranging from a few grams to 1.6 tons.

The *RAMP mode* allows the rise in temperature to be set evenly over a given period of time in order to heat up sensitive parts very gradually. This innovation is crucial for protecting such parts as gears, whose teeth may become brittle if heated too quickly.

The SmartTEMP ensures accurate control over the mounting procedure to fully protect the integrity of the physical characteristics of the materials making up the various parts being heated. It thereby extends the useful life of rotating parts and the machinery.



High performance, user-friendly and a rugged design

The SmartTEMP's new processor optimises the device's performance by adapting its power requirement to the characteristics of the part. The current efficiency rises to 0.8 against 0.3 with a traditional heating device. Heating time is thus reduced by 30%, thereby offering significant energy savings.

The SmartTEMP features an easy-to-use and intuitive touch screen. The software, which can be set to the operator's language, downloads the heating data and exports it on a USB stick for full traceability of the mounting of the part. Nowadays this data is essential for connected 4.0 factories, the unit can also carry out self-diagnostics.

In order to operate continuously, SmartTEMP's new design is rugged and highly reliable. The electronic components are located in a separate compartment, and the aluminium frame enable it to bear heavy weights, withstand impacts and extreme temperatures.

Good practices

Over 17% of bearing failures recorded by NTN-SNR are due to mounting errors, particularly uncontrolled heating of the parts, which is sometimes carried out using a blowtorch or oil bath, which have no accurate temperature control. The recommended heating temperature is generally 110°C, but this can vary according to the materials. Through its Experts & Tools service, NTN-SNR is keen to pass on information regarding good practices, training and the use of the correct tools. The SmartTEMP, is available for all industrial maintenance professionals, ensuring precise mounting of component parts and so increasing the productivity of the machines.

NTN-SNR ROULEMENTS is an NTN Corporation entity. Generating revenue in excess of €5.7 billion, NTN Corporation is a world-leading designer, developer and manufacturer of bearings (world no. 3) and transmission seals (world no. 2). NTN Corporation is present on all industry markets, from automotive to aeronautics. The takeover of SNR Roulements in 2007 by the NTN Corporation group enabled the latter to consolidate its presence in Europe and its position as world leader. NTN employs nearly 7,000 people in Europe and has 15 production sites, 7 of which in France.

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