

# Maintenance

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## Maintenance products

### Products that meet your expectations



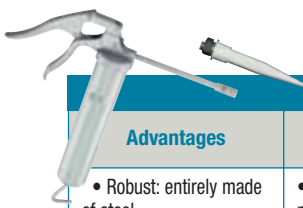
SNR LUB greases

Advantages	Description	Operating conditions	Applications
<ul style="list-style-type: none"> <li>Reliable : developed by a bearing manufacturer and approved petroleum suppliers.</li> <li>Adapted to the needs:                             <ul style="list-style-type: none"> <li>- different types as per applications</li> <li>- packaging method adapted to the types of grease.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>NLGI 2 grade for all greases.</li> <li>Operating temperature between -50°C (-122°F) to +250°C (+482°F) according to type.</li> <li>Very good resistance to water and corrosion.</li> </ul>	Range adapted to following applications: <ul style="list-style-type: none"> <li>Multiservice MS,</li> <li>Extreme pressure EP,</li> <li>High speed GV+,</li> <li>high viscosity FV,</li> <li>Low speed, extreme pressure VX,</li> <li>High temperature HT,</li> <li>Very high temperature THT,</li> <li>Food compatible grease AL1.</li> </ul>	<ul style="list-style-type: none"> <li>All types of bearings, pillow blocks and mounted units as per load and environmental requirements.</li> </ul>



SNR automatic lubricator

Advantages	Description	Operating conditions	Applications
<ul style="list-style-type: none"> <li>Safe: inert gas produced within a sealed chamber.</li> <li>Cerchar and Ineris approvals: electrical equipment usable in an explosive atmosphere.</li> <li>Reliable lubrication: not readily accessible or dangerous areas.</li> <li>Automatic: less frequent monitoring.</li> <li>Flowrate adjustment: one product for all applications.</li> <li>Sealed: operation possible when immersed.</li> </ul>	<ul style="list-style-type: none"> <li>Flowrate programmable via switches.</li> <li>Can be stopped during operation (ON/OFF).</li> <li>Pressure: 3 bar (43 psi) maximum.</li> <li>Volume: 125 cm<sup>3</sup> (4,2 ozfl).</li> <li>Different types of grease can be used.</li> </ul>	<ul style="list-style-type: none"> <li>Direct installation on the component to be lubricated.</li> <li>Remote installation (1m or 3 ft away) in case of excessive temperature, uneasy access or vibration.</li> <li>Range of lubricators:                             <ul style="list-style-type: none"> <li>AL1</li> <li>EP</li> <li>HT</li> <li>MS</li> <li>VX</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>All types of machines regardless of the environment.</li> </ul>



### Grease gun for bearings

Advantages	Description	Operating conditions	Applications
<ul style="list-style-type: none"> <li>• Robust: entirely made of steel.</li> <li>• Practical use: knurled body for an excellent grip, the pump can be actuated with one hand.</li> <li>• Precise: especially designed SNR union combined to a special profile greasing nozzle to inject the grease at the right point.</li> <li>• Clean: clean for the environment and the use.</li> </ul>	<ul style="list-style-type: none"> <li>• Material: heavy steel plate.</li> <li>• Weight: 2-1/2 pounds with steep section and clip.</li> <li>• Content: 500 cm<sup>3</sup>.</li> <li>• Operating pressure: 180 bars.</li> <li>• Maximum pressure: 360 bars.</li> <li>• Flow rate: 0.80 cm<sup>3</sup>.</li> <li>• Greasing accessories supplied with the gun.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance operations (greasing, regreasing).</li> </ul>	<ul style="list-style-type: none"> <li>• For all bearings.</li> </ul>



### Induction heaters (Fast Therm 20/35/150/300/600/1000)

Advantages	Description	Operating conditions	Applications
<ul style="list-style-type: none"> <li>• Easy to use: pivot arm, operator's safety, cleanliness.</li> <li>• Heating control and safety: temperature control.</li> <li>• Efficiency: turbo-boost technology that heats the part twice as rapidly.</li> </ul>	<ul style="list-style-type: none"> <li>• 6 devices range.</li> <li>• Automatic demagnetizing on completion of the cycle.</li> </ul>	<ul style="list-style-type: none"> <li>• All circular parts with a maximum bore diameter from 215 to 1150 mm.</li> </ul>	<ul style="list-style-type: none"> <li>• Steel ring bearings, gear etc. with interference fit on the shaft.</li> </ul>



### Heat-insulating gloves

Advantages	Description	Operating conditions	Applications
<ul style="list-style-type: none"> <li>• Non-flammable, resistance to temperatures up to: +350°C / 660°F.</li> <li>• High protection: arm + hand (glove length: 35 cm / 14 inches).</li> <li>• Very high resistance to cuts, tears and abrasion.</li> </ul>	<ul style="list-style-type: none"> <li>• Made of Kevlar®.</li> <li>• Certified for EN388 mechanical and EN407 thermal risks.</li> </ul>	<p>–</p>	<ul style="list-style-type: none"> <li>• Handling of oily and hot bearings.</li> </ul>



## Maintenance products *(continued)*



Installation kit			
Advantages	Description	Operating conditions	Applications
<ul style="list-style-type: none"> <li>• Do not damage the bearings during installation.</li> <li>• Complete kit.</li> <li>• Practical, thorough transportable kit.</li> </ul>	<ul style="list-style-type: none"> <li>• 3 impact tubes.</li> <li>• 1 set of 33 impact rings.</li> <li>• 1 special hammer, anti-bounce, shot-loaded, to ensure maximum impact.</li> </ul>	–	<ul style="list-style-type: none"> <li>• Bearings (bore diameter from 10 to 55 mm), spacer rings, pulleys and seals installation</li> </ul>



Spanner wrench			
Advantages	Description	Operating conditions	Applications
<ul style="list-style-type: none"> <li>• Solid, safe, simple to use.</li> <li>• 5 sizes to cover all needs.</li> <li>• Capacity: 15 to 180 mm.</li> <li>• Pins are heat-treated to 40HRC rockwell hardness.</li> </ul>	<ul style="list-style-type: none"> <li>• 2 types of wrenches to tighten drilled nuts (e.g. precision nuts) and castellated wrenches to tighten nuts with straight slots (or castellated nuts).</li> </ul>	<ul style="list-style-type: none"> <li>• 5 sizes: 15-35 mm; 35-50 mm; 50-80 mm; 80-120 mm; 120-180 mm.</li> </ul>	<ul style="list-style-type: none"> <li>• Tightening and removal operations for standard and precision nuts.</li> </ul>



Fitting compound			
Advantages	Description	Operating conditions	Applications
<ul style="list-style-type: none"> <li>• Contact corrosion reduction.</li> <li>• Extended shaft and bearing housing life.</li> <li>• Water and washout resistant.</li> <li>• Stick-slip reduction.</li> </ul>	<ul style="list-style-type: none"> <li>• Composition: lithium soap, synthetic oil, solid organic lubricants.</li> <li>• Operating temperature: -45°C (110°F) to +150°C (302°F),</li> <li>• NLGI grade: 1.</li> </ul>	–	<ul style="list-style-type: none"> <li>• Installation or removal by fitting (bearings, wheels, flanges,...).</li> </ul>



### Hydraulic extractor

Advantages	Description	Operating conditions	Applications
<ul style="list-style-type: none"> <li>• Simple thanks to its integrated hydraulic pump.</li> <li>• Solid, robust.</li> <li>• No energy loss.</li> </ul>	<ul style="list-style-type: none"> <li>• 2 or 3 interchangeable jaws.</li> <li>• Light weight.</li> <li>• Extraction force: 10 tons.</li> </ul>	<ul style="list-style-type: none"> <li>• Always position the protection cover over the jaws when using the extractor.</li> </ul>	<ul style="list-style-type: none"> <li>• Removal of bearing assemblies.</li> <li>• Removal of bearings either by the bore or by the outer diameter, by reversing the jaws.</li> </ul>



### Calibrated feeler gauges

Advantages	Description	Operating conditions	Applications
<ul style="list-style-type: none"> <li>• High precision measurement.</li> <li>• Set of gauges protected by a steel frame.</li> </ul>	<ul style="list-style-type: none"> <li>• Set of 18 gauges, round tip.</li> <li>• Calibrated to 1/100th.</li> <li>• 2 lengths available: 90x10 mm to 150x10 mm.</li> </ul>	<ul style="list-style-type: none"> <li>• Control of bearings fit.</li> <li>• 2 sets available (+1 in inch).</li> </ul>	<ul style="list-style-type: none"> <li>• Internal radial clearance measurement in spherical and cylindrical roller bearings.</li> </ul>



### Laser-targeting thermometer

Advantages	Description	Operating conditions	Applications
<ul style="list-style-type: none"> <li>• Simple to use.</li> <li>• Precise.</li> </ul>	<ul style="list-style-type: none"> <li>• Non-contact infrared measurement.</li> <li>• Emissivity adjustment 0.20 to 1.00.</li> <li>• °C/°F switching.</li> </ul>	<ul style="list-style-type: none"> <li>• Functional monitoring.</li> </ul>	<ul style="list-style-type: none"> <li>• Bearings, plain bearings, lubrication systems, surface temperature, live components...</li> </ul>



## SNR Industry services

### → Expertise

If the bearing is damaged or operates incorrectly, our experts are at your disposal to analyse the failed bearing. They can visit your site upon request.



In case of premature bearing damage, the bearing state will provide significant information.

Just send the bearing, without cleaning it along with an analysis request sheet, duly completed (available from your SNR contact or distributor).

Please provide maximum information concerning the bearing operation and environment.

### → Installation / Removal

Our experts can intervene on-site, everywhere in the world and on short notice.

Their mission consists of providing suitable consulting advice for bearing installation and removal to ensure optimum service life.

Therefore, this service is effective at all collaboration stages between SNR and its clients, before and after sales, and also during the bearing service life. If you do not possess suitable means, or if you lack the time or availability, SNR is there to help you.



## → Shaft alignment

Misalignment causes stress loading and vibrations that give rise to premature deterioration of bearings, and also coupling, packing and sealing, etc.

Abnormal stress loading associated with misalignment also causes increased energy consumption. Misalignment has a direct impact on maintenance costs and the availability of your production tool.

By entrusting your shaft alignment operations to the teams of SNR experts, you will guarantee the precision of alignment and will ensure the quality of your rotating machines elements.

## → Vibration analysis

Vibration analysis is the most commonly used on-site condition monitoring method for rotating machines, which are essential elements at the heart of the manufacturing process. Measurements on operating machines are easy to implement and the process allows early detection of most faults encountered on production machines.

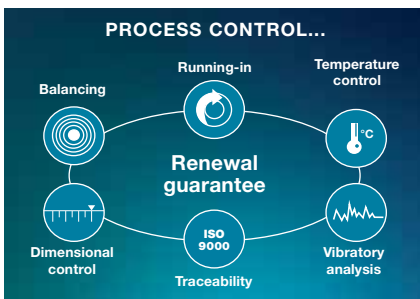
Many anomalies such as shaft line unbalance play, misalignment of coupled machines, coupling deterioration, clearances, bearing wear, or even electrical faults can be detected with sufficient anticipation to plan an intervention before failure.

SNR has developed a whole range of measuring and monitoring instruments in order to accurately analyse all environmental constraints likely to affect correct operation of your facilities and, notably, your bearings.

In order to detect weak points in your equipment and facilities and solve them, we also propose a range of products and services, suitable for vibration monitoring of the rotating machines, together with our partner, 01dB, a renowned expert in this field.



## → Spindle renewal for machine-tools\*



Based on its extensive experience in the field of machine-tool bearings and in the machine-tool spindle renewal activity for the maintenance of its own machine fleet, SNR proposes a machine-tool spindle renewal service to its French clients.

This renewal service is proposed for all types of spindles (either mechanical or electro-mechanical), all activity sectors (mechanics, platurgy, wood industry, etc.) and all bearing makes or brands.

\* Service available in France only.

