

## ELECTRIC SPINDLE BREAK-IN PROCEDURE

In today's high production environments it is often necessary for machine users to stock a spare electric spindle to prevent unexpected and costly down-time related to a spindle failure. In many cases, these spare spindle may be stored on a shelf for months or years. The spindle bearings grease can settle in one location of the bearings during this time resulting in a portion of the bearings having no lubrication.

SRD recommends that a spindle bearing break-in procedure be performed on any spindle that has seen no production in over 1 month. The simple break-in procedure must be performed in automatic cycle after the first installation on the machine with the system cooling connected, **with the tool-holder installed** and without applying load:

<b>SPEED (rpm)</b>	<b>TIME (min.)</b>	<b>Δt (TRoom-TMotor)</b>
3000	30'	max 10°C
6000	30'	max 10°C
12000	30'	max 20°C
15000	30'	max 20°C
18000	30'	max 20°C
MAX	30'	max 20°C

The good result of that procedure will assure the correct grease distribution on the balls bearing and will allow a gradual increase of temperature of the bearings and therefore an equable thermal expansion of the bearings tracks.

Only for the HSK execution **do not run the electric spindle without the tool-holder installed.** Run the electric spindle HSK without tool-holder can get the electric spindle unbalanced and damage the clamping group HSK.