

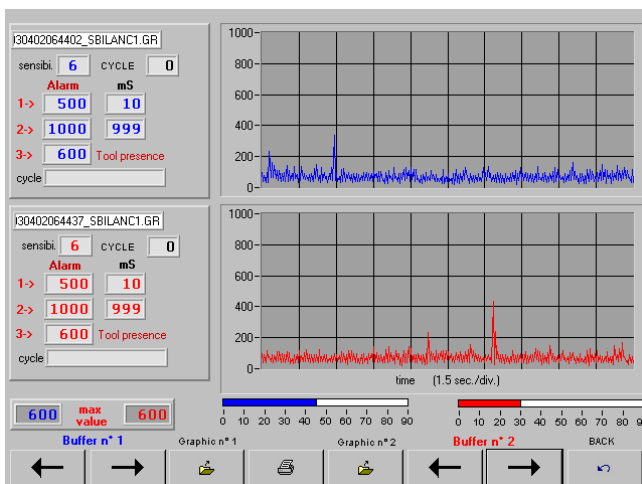
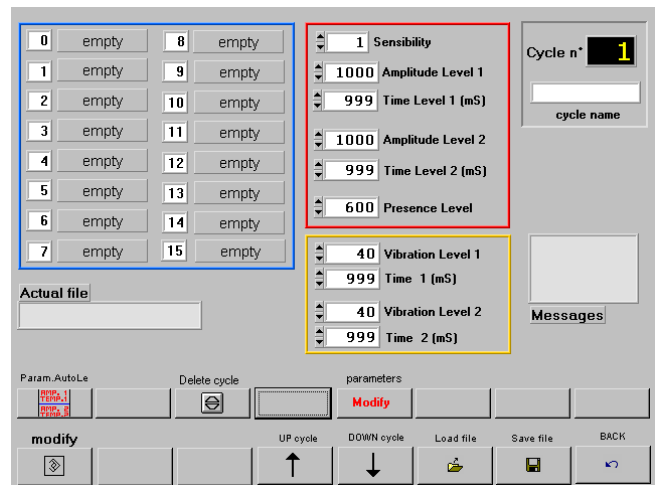
TOOL MONITOR

All under control

The spindles OMV are endowed with a complete sensors system for the control of the bearings what temperature, vibration and collision.

A system of tool monitoring, optional in the tool monitor pc version, allows to view the different values of the parameters: two are setted to the origin, maximum vibration and collision, while other 254 cycles have programmable thresholds of alarm from the user. The system checks and memorizes all the anomalous events:

- entity of the vibrations during the machining, with two alarm thresholds
- entity of axial strain during the machining, with two alarm thresholds
- recording of the strains during the machining and following analysis of these through a graphic
- verification of the tool presence
- verification of the unbalancing of the tool to the first march of the spindle
- continuous background monitoring of the axial strain and of the unbalancing of the spindle, with recording on protected file, of possible collisions and/or possible excessive vibrations



The first five functions constitute a useful support in the circle of the machining and production, the last two, constitute a tool of continuous attending on the formalities of use of the machine.



Command panel of the MBOX system

Particularly are recorded possible uses don't conform to the specifications dictated by the builder, for example, excessive vibrations in work, collisions or the use of unbalanced tools. All these options are particularly useful when the machine is used in not attending mode or as safety guarantee and quality in event that the machine is submitted to less experienced operators.



Is important to underline that the monitoring of the machine is continuously recorded inside a device memory that allows a continuous control for all of its working life and that creates a historical memory of the anomalous events. Thanks to this device is therefore possible to avoid irreparable damages caused by repeated anomalous values dependent by wrong manoeuvres of the operator or by malfunctions of the machine.