IN-PROCESS APPLICATIONS ON GRINDING MACHINES

Amongst the MARPOSS measuring systems designed to check the work of a single machine or an entire production line, the P7 system’s versatility, processing speed, configurability and hardware/software standardisation place it at the top of its category.

Individual measuring and checking requirements are completely fulfilled in the in-process measuring packages developed as a result of Marposs experience. The visualization can be made either by a graphic panel display or directly on CNC operator panel by means of MHIS software (Marposs Human Interface Software) developed in Windows® environment.

Measuring

Type of measuring cycles available:
- measurements for single comparison (diameters, thicknesses, lengths)
- multi-diameter measurements
- active and passive positioning and centring
- taper check
- measurements on continuous and broken surfaces
- measurements on tables
- pre-process measurements
- combined measurements for parts to be machined together
- ovality
- T I R
- adaptive cycles
Process control

- control of the signal from the acoustic sensors for monitoring the Air Gap and Collision
- possibility of adjusting the zero value (manual input from keyboard and automatic with logic signals)
- possibility of connecting Marposs MIDA touch probes

Versatility

Operator intervention is facilitated by the graphic interface, by hot keys for the main views and by an efficient debug of all input/output signals.
A selection of languages and measuring systems further extends system flexibility.

Configurability

A configuration tool is used to customise the device for the specific application so that the software, using preset menus, asks the operator only for the parameters relative to the measuring cycles envisaged by the application.
The software’s flexibility allows the person defining the application to select from the various types of measuring heads the one most suitable for the specific requirements and the input/output signal mode for interfacing with the PLC / machine CNC and transmission of the measuring values by selecting either conventional 37-pin cannon connectors or a fieldbus connection.
The high degree of P7 system standardisation allows it to adapt to different types of machines, including the development of dedicated solutions, and optimisation of the number of spare parts, containing the overall investment.

Maintainability

Measuring device management is made noticeably easier by programs developed in the Windows® environment designed to archive and restore the data programmed and to install the Marposs application packages.
Clear gauge diagnostics allow immediate checking of any hardware problems and appropriate messages facilitate process control.