

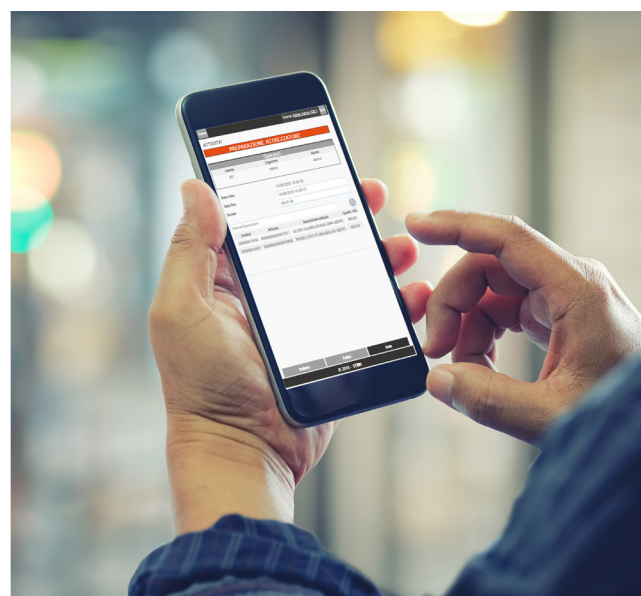


# MTZ+ RUN-TO-FAILURE AND PREDICTIVE MAINTENANCE



LEADS YOU IN  
INDUSTRY 4.0

- **CONFIGURABILITY.** The MTZ+ allows full configurability and parameterisation.
  - Definition of all plant/machine components to be maintained in a hierarchical structure, the number of levels being configured by the user. Intervention costs and times can be analysed at each level.
  - The user can define an unlimited number of types of maintenance (electrical, mechanical, pneumatic, software, etc.), allowing the costs for each type to be recorded separately.
  - Scheduled maintenance frequencies can be established in calendar days or, if integrated with the PRD+ module for machine data collection, the number of items produced, actual hours of production, shifts or other parameters.
  - Definition of authorised operators.
- **INCIDENTAL MAINTENANCE (BREAKDOWN).** With the MTZ+ the entire maintenance cycle is automated, which eliminates costly paperwork for requesting incidental maintenance.
  - When the intervention of a service engineer is required following a breakdown, the operator enters on one of the departmental PCs various details identifying the intervention type.
  - The MTZ+ receives the request, informs the Head of Maintenance by email and enters it in the list of measures to be executed.
- The MTZ+ tracks the progress of the request, calculates the various activity times, records operator field notes and spare parts used, and updates stocks of spares.
- The MTZ+ calculates the cost of the intervention in terms of man-hours (by employees or subcontractors) and spare parts used.
- The MTZ+ allows the service engineer to display data sheets, videos and manuals to speed up consultation and repair operations.
- **ORDINARY MAINTENANCE (PREVENTIVE, PREDICTIVE, CYCLICAL).**
  - The MTZ+ controls the definition, planning and tracking of ordinary maintenance activities for each component in the system.
  - The MTZ+ uses various methods for measuring the lifetime of each component subject to maintenance, based on set parameters (number of items produced, production time, overall time).
  - The MTZ+ highlights planned activities due, and tracks evolution of the status of the planned activities, the times involved at each stage and the number of spare parts used.
  - The MTZ+ module allows the user to associate data sheets, videos and manuals with each intervention to speed up the execution of repairs, eliminate the







need for paper documents and provide centralised control of the version of data sheets used in the course of the intervention.

- **SIMULATION OF ACTIVITIES DUE.** The MTZ+ can be used to simulate which work on components will be due after a set period of operation. Simulation scenarios can be activated by entering specific parameters. Interventions can be grouped together, allowing accurate planning to coincide with scheduled stoppages.
- **SPARES.** The MTZ+ controls stocks of spares coded for maintenance. Each spare part can be associated with the purchase cost to allow accurate calculation of maintenance costs. The module manages the minimum re-order number and informs the operator when a critical component is in short supply, which avoids lengthy stoppages while the spare part is being procured.
- **REPORTING.** The MTZ+ module allows advanced reporting to give a detailed analysis of interventions performed with different search parameters.
  - Analysis of intervention costs by type of intervention, period, department, operator and so on.
  - Analysis of hierarchically grouped intervention costs based on the configuration of each plant/machine.
- Incidence on maintenance costs of extraordinary compared to planned activities.
- Incidence of costs sustained for maintenance performed by subcontractors compared to interventions by internal employees.
- Analysis of the temporal difference between the scheduled intervention date and the actual date of execution of the planned intervention.
- Analysis of the time elapsing until the start of maintenance activities and the execution times.
- **SYSTEM ACCESS.** Full configurability of the users, groups and rights of each group to which the user belongs. For each group, the operator can configure which activities can be performed and which data can be displayed or changed.
- **DATA EXPORTABILITY.** The data processed by the system and present in the query grids can be exported to Excel for local user processing.



## MODULES THAT CAN BE INTEGRATED WITH MTZ+ 360° COVERAGE



**PRD+**  
Production control



**STP+**  
Mould, die and insert management



**OPR+**  
Management of operator indirect activities



**SCT+**  
Technical Sheets (Receipts)



**LGT+**  
Department logistics



**CNS+**  
Energy Consumption



**ATC+**  
Auto-tests



**APP+**  
Process Parameter Acquisition



**SPC+**  
Statistical Process Control



**CM+**  
Full machine capacity