

AUTOMATION LEVELS

Level 1 • Mechanization

What concretely represents a Level 1 automation project?

The Objective of mechanization is to increase personnel productivity and the quality of the products by increasing the effectiveness and the reliability of the equipment. To reach this objective, you need to pass by the application of principles and mechanical components to the fine point of current technology at the time of the design and the equipments manufacturing. Although the first goal of this level is not to reduce necessary labour for the execution of an operation, that is the result in several mechanization projects.

Services offered by Matiss to reach the level 1

- Functionnal design chart specifically to the clients requirements;
- Custom design equipment, by computer and 3-D;
- Equipments manufacturing and assembling;
- Manufacturing steel materials and stainless steel;
- Equipments reconditioning and improvement by adapting new technologies.



Level 2 • Individual Command

What concretely represents a Level 2 automation project?

The level "Individual Command" deals with the complete automation of the developed equipment in "Mechanization" by adding or by improving the controls. This level is explained by the use of the electric and electronic most recent components into automation control matters and by the programming of these same components. This level aims to offer a better production profitability by a reduction, and even elimination, of the labor for a determined operation.

Services offered by Matiss to reach the level 2

- Design of instrumentation diagrams and of control;
- Design and realization of electric plans, of control and capacity;
- Design and manufacturing control panels;
- Configuration of man-machine interfaces;
- PLC programming.



Level 3 • Production Supervision by Sector

What concretely represents a Level 3 automation project?

The "Production supervision by sector" consist in establishing a communicative bond between the machines and equipments of the same branch of industry (ex. : production line) and one or several working stations. The establishment of this network allocating a bidirectional communication not only makes it possible to supervise the production of all the sector starting from a working station, but also to develop a predictive maintenance programme by the monitoring of real time conditions.

Services offered by Matiss to reach the level 3

- PC design and conception;
- Development of production supervision software by sectors;
- Data base (modelling);
- Acquisition of data system;
- Distant support at all times, allowing an instant service to the users.



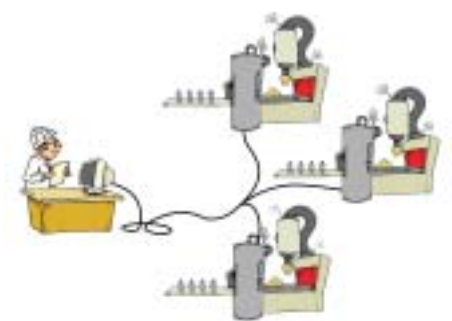
Level 4 • Supervision of Global Production

What concretely represents a Level 4 automation project?

The "Supervision of Global Production" establishes a bond of communication between all the factories production sectors. The servers use, working stations and a management software and the automation processes makes it possible to effectively manage the operations, the equipments, the inventories and the products traceability, to support the establishment of the quality procedures and maintenance and production reports.

Services offered by Matiss to reach the level 4

- Design and PC programmation;
- Development of supervision software of global production;
- Data base (modelling);
- Acquisition of data system;
- Distant support at all times, allowing an instant service to the users;
- Transferring data between different production sectors.



Level 5 • Administrative Management

What concretely represents a Level 5 automation project?

While the previous level "Supervision of Global Production" includes all the factories production sectors, the level "Administrative Management" adds all the inherent departments to the company. The level 4 developed PC network for the production department is now widened in order to establish a communication with the other departments of the company such as: marketing, the sales, human resources, accounting, the supplying department, etc. The establishment of a PC communication link with the customers and suppliers is also part of this level of automation.

Services offered by Matiss to reach the level 5

- Design and PC programmation;
- Development of supervision software of global production;
- Data base (modelling);
- Acquisition of data system;
- Distant support at all times, allowing an instant service to the users;
- Transferring data between the companies different departments (intranet);
- Transferring data with the supplier and customers (extranet).

