Industrial automation
solutions

Advantages

2T Automazioni, with its own technical staff, can support a client needing to automate a plant or industrial process.
We solve plant control logic (PLC, PC, HMI and SCADA) expansion or revamping needs, identifying the best technical solutions and the most flexible software architecture.

2T Automazioni designs and creates certified control panels (CE,ATEX,UL/CSA) conforming to standards required and for free circulation in the Canadian and North American markets, provided with electrical diagrams and layouts.

The 2T Automazioni organisation has a UNI EN ISO 9001:2008 certified Quality Management System.

For industry needing to be competitive, automation technologies are that decisive competitive factor to contribute to:

- optimising the process and reducing production costs
- improving product quality
- better flexibility (the same plant is used to produce more products)
- fast adjustment to laws and regulations
- optimising resources used.

Electrical engineering

The 2T Automazioni technical office, in synergy with the production department, supports the following solutions:

- to design and implement control, power, MCC panels
- to design and implement plants on board the machine
- for electrical-instrumental engineering
- to design process control hardware and software
- to design industrial electric plants
- revamping
- on-site services (start-up, assistance)

Based on documents provided by the client - including motor lists, instrument lists, technical specifications - 2T Automazioni draws up electric and electro-instrumental engineering projects:
- functional specifications
- I/O lists
- electric diagrams
- wiring lists
- electric projects
- electro-instrumental specifications
- assistance with electric certification procedures
- manuals

Software for industrial processes and programming PLC/PC/HMI/SCADA

Our typical actions involve:
- implementing PLC/PC software to manage and control machines and production plants;
- specific industrial process applications (integration of PLCs, sensors, artificial vision systems, microcontrollers, I/O cards);
- configuration of SCADA solutions for the supervision/control of machines/plants
- development of material handling solutions
- management of recipes and datalogging, trends, alarms

Sectors

Our main solutions concern automation and control software applications for the following sectors:

- PACKAGING
  - sack palletizers
  - box palletisers
  - un-palletisers for bottles
  - moulders of cartons and boxes
  - boxing machines
  - horizontal and vertical packaging machines
  - management of labels, barcodes, markers

- FOUNDRY
  - cast iron forming lines
  - die-casting machines
  - core-making machines

- BUILDING
  - automation of intelligent buildings
  - energy consumption control and monitoring

- ENVIRONMENT
  - liquid separation/filtering plants
  - water purification and treatment plants

- HANDLING AND ROBOTICS
  - material handling systems
  - Cartesian, SCARA, interpolated, anthropomorphous

- ASSEMBLY AND TESTING MACHINES
  - Assembly units on rotating unit or pallet
  - Loaders and inserting tools
  - Drilling /screwing / punching units
  - Marking units
  - Tests and testing on sub-systems and components
  - Integration between quality control and packaging

- OTHER
  - storage, transport, weighing, powder and raw material dosing plants.