

TECNOMATIC, THE ITALIAN EXTRUDERS MAKER, FOCUSES ON INDUSTRY 4.0. FOR PLASTIC PIPES COMPANIES.

The world is going to enter Industry 4.0, in which computers and automation will come together, in an entirely new way, with robotics connected remotely to computer systems equipped with machine learning algorithms, that can understand and control the robotics with very little input from human operators.

Industry 4.0 introduces what has been called the “smart factory,” in which cyber-physical systems monitor the physical processes of the factory and make decentralized decisions. The physical systems become Internet of Things, communicating and cooperating both with each other and with humans in real time via the wireless web.

In this regard, Tecnomatic supports its customers during the design, the implementation and the integration of systems aimed at supporting the new digital industrial revolution, providing to the plastic pipes manufacturers a complete and integrated portfolio of

products, solutions, industrial softwares and automation technologies.

The system provides a simple user-friendly program for the networking of extrusions pipes lines. Via the machine’s EPC (Extrusion Process Control) system, several machines and peripherals are connected and linked together to be operated via a uniform user interface, which enables interaction between the individual appliances. In this way, the entire manufacturing process, including material feeding, temperature control, synchronisation is coordinated and tracked.

Another important point is having all parameters centrally recorded and monitored. The system allows, not only to carry out energy monitoring, but to convert numbers and data into valuable information on the processes within the line. This enables optimal analysis of a line's performance. From the relevant key performance indicators for





shift supervisors up to the clear presentation of the line performance for the management.

Perfectly in line with the concept of “smart factory” of the Industry 4.0, all data, including

preventive maintenance and service parameters or alarms can be monitored via internet or intranet, to Pc, servers or to mobile devices.

INDUSTRY 4.0

The investment in Industry 4.0 brings as main benefits an increasing of the production quality and processes, and as a consequence a reduction of the overhead costs.

- Higher productivity with fewer raw materials and less energy
- Higher flexibility and efficiency of the extrusion line through a reduced set-up period, reducing errors and downtime
- A new ability to economically produce small-batch “one-off” of production, without regard to the economies of scale
- High product customisation
- Use of integrated systems and equipment with sensors for self-monitoring.
- More transparency and efficiency by providing real-time information, making the dialogue between Tecnomatic machines and machines of other OEM easier
- Possibility of big data collection and analysis to optimise the processes

INDUSTRY 4.0 – Higher quality & costs reduction