

PC BASED TECHNOLOGY

To grant a qualified and efficient long-term after-sales assistance for the mechanical, mechatronic and software parts, Eurosicma Group invested a lot in order to increase and stratify as much as possible its specific know-how also as far as control axis systems is concerned.

Since the nineties, due to the rapid electronic components' development and their very fast intrinsic obsolescence, **Eurosicma**, instead of employing many heterogeneous and low performance control systems available on the markets, **chose to develop a specific and optimized control axis system for its products which it would be able to preserve the value of the application and know how developed in the years to come.**

To satisfy such corporate needs, in 1990 the Company O.A.SYS, owned by Eurosicma, was founded.

Preserving the value of the application is **the intrinsic system's capacity of evolving together with the technological development that makes available even more complete and performance Hw and Sw.**

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The driving goals that led to the development of the control axis system have been the absolute separation and independence between the choice **of the hardware parts** and the **software**, both as **standard** as possible, that is independent from the manufacturer, and **“open source”**.

The most suitable technology to achieve these aims was the **PC Based Technology** and today is still the most performance one.

Thanks to this courageous choice, Eurosicma is able to give its Customers the right support, supplying autonomously the electric and electronic spare parts primarily installed or, in case of components out of production, Eurosicma is able to supply the currently ones, granting the full compatibility. **Our machines have the possibility of updating with minimal costs. Past, present and future become one thing.**

Since 1997 the Pc based architecture has drastically simplified the realization of any project. All the projects are equal and what changes is only the number of the linked elements. The configuration is essential: industrial PC, an open operative system and a fieldbus that interconnects the I/O cards, and the control drivers of the brushless motors. **The current generation is characterised by the appreciated canbus Ethercat, the only one able to grant the three main requirements: high technical characteristics of speed and reliability; open source ; the only standard universally and concretely employed on the market.** Their use and interchangeability are granted since they correspond to the rules of the Ethercat Technology Group (ETG) and so widely provable on the market.

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Hardware and software elements are two separate entities, therefore it is possible the updating of only one part to improve the performance of the machine.

Since the 1997 up to now, over than **1500 controls** have been employed and over than **15.000 drivers** have been linked to the digital bus.

The software configuration options are registered in a **dynamic-link software library** by the Automation Department. The methodology requires the principle of the **compatibility of the releases**, therefore **the latest versions of the software can be installed also on machines previously supplied.**

Practical examples of the advantages coming from the employment of the PC Bases Technology are that **applications realized 15 years ago can be easily adapted to the current technologies** and that, for all the machines supplied, for the oldest ones too, any kind of spare parts are always available.



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