

Intelligent test technology

Integrated smart technologies have enabled these environmental test chambers to remain at the forefront of innovation and in line with the latest demands of Industry 4.0

IoT technology, a key feature of the fourth industrial revolution, is being implemented globally to digitize manufacturing and is offering companies new development prospects in increasingly demanding and innovative markets.

Objects equipped with sensors and actuators will be more interconnected via the internet and will feature multiple functionalities. This includes interaction with the surrounding environment, data processing, and the capacity to connect themselves and communicate the information they hold, collect and/or process.

The revolution is already taking place: technology in some cars is able to prevent downtimes before they happen; smartphones and smart watches can monitor vital functions such as heartbeats; home automation systems can control domestic lighting and heating.

ACS is one of the first manufacturers of climatic chambers to use the IoT in its machines, with the aim of offering solutions to meet the testing needs of today and tomorrow.

In line with the emerging trends of Industry 4.0, ACS chambers have been equipped with a highly advanced control system, MyKratos. This management software, integrated in the machine in



Test chambers can be connected anywhere at any time thanks to the VPN connection with Angelantoni servers, which enables online diagnostics and remote assistance

dedicated special hardware, enables control of the chamber's functions.

MyKratos does not require installation and is accessible from a PC via an internet browser or through the app developed for mobile devices (tablets and smartphones); hence, it is possible to have multiple connections from multiple devices. All data is saved inside the chamber (built-in datalogging), so it

is always available to users regardless of the device used.

For a more complete offer ACS includes, in the basic configuration, MyAngel24 services – an online diagnostic and remote assistance system. Through the chamber's local panel or by remote, a customer can quickly and easily activate or deactivate at any time the MyAngel24 connection with Angelantoni servers.

The connection provided runs via a virtual private network (VPN), which guarantees maximum protection and security.

The system provides many advantages. MyAngel24 enables problems to be identified through a remote test and an examination of the recorded data. Then, depending on the problem at hand, ACS will solve it remotely, avoiding on-site intervention just for troubleshooting. Service

staff can immediately identify which part is causing the problem and make sure everything is ready for its replacement.

ACS can also adjust PID parameters remotely and make changes to PLC programs for chamber optimization.

In addition, ACS is able to schedule maintenance, according to the chamber's testing plan, thanks to the lifetime monitoring of the main components.

Thanks to MyKratos, test chambers can be managed via Ethernet, wifi (point-to-point) or internet VPN connection. The wifi is generated directly by the chamber, so no other accessory is necessary. Whether it is in the test lab or elsewhere, MyKratos makes chamber management simple and easy with just a few steps: customers need only a PC or a mobile device and an internet connection. ◀

