### Year 2 • N. May/June • 201

# IoT pioneers

Minerva Omega Group has developed a human-machine-network relationship and has won. Three times.

According to forecasts, between 20 and 100 billion objects in the world will be connected to the network by 2020. This may be a chilling thought to some, but it is actually a natural progression of machine-to-human interaction. Household appliances, cars, vending machines, machine tools, operating machines - in short, any device or equipment will be connected to the network to exchange data and provide information without human intervention. These data will then be available for verification, analysis and processing in order to improve the relationship between humans and machines or humans and devices.

At Minerva Omega Group the importance of this vision was acknowledged immediately and, thanks to its forward-thinking management and its agreements with strategic suppliers, it has developed a start-up and become the very first food processing company to adopt the innovative system NEmoSY (Nexus Monitoring System), designed and produced by the all-Italian firm DSC Nexus.

"We are pioneers in this. We are innovative, but above all we are ready," says Minerva Omega Group. "This kind of functionality might seem too modern or technological right now, but we are certain that for some organisations, such as large-scale retail or food processing centres, this management system can meet primary requirements and optimise costs over time." In the last 3 years, the company received three important awards from the sector: in 2016 the Innovation Award at Smau; in 2017 the Smart Label Award at Host in Milan; and finally the International Foodtec Award silver medal at Anuga. "This is a major recognition from an international group of experts, which had not been won by an Italian

company since 2000. This makes us proud of our Made in Italy credentials."

## What is NEmoSY?

NEmoSY (registered trademark) is a system that collects all the data, used in the management of all the machinery at our various centres or laboratories, which are analysed, compared and made legible and viewable, through tables, diagrams, text lists, either by the operator or by maintenance managers, equipment buyers, security managers, financial and management controllers. The exchange of information between operating machine and human takes place through secure connections and reliable devices (interfaces) designed specifically to enable this interaction. Put simply, Minerva Omega machines, as well as all other machines already within a point of sale or off-site laboratory, can send information with a PC, tablet, smartphone or through text/email alerts on work/operating status for effective management of predictive maintenance - for example by identifying potential faults before they occur or suggesting the replacement of worn parts before machine functionality is compromised - rather than just energy consumption, emergencies, malfunctions, downtime, operating temperature, hours worked, and so on. The data acquired is extracted, processed with algorithms and synchronised using external systems (ERP, CRM, Business Intelligence etc.) for subsequent integration into business processes. Last but not least, NEmoSY requires no great investment in servers or installations, as cloud computing services may be used. The on-premises platform may be used as an alternative, if requirements mean data cannot be sent over the internet.



## **NEMOSY CONNECTIVITY OFFERS:**

- lower fixed costs
- improved management of all machinery
- notification of machine downtime
- centralised access and controlsmedium and long term economic benefits
  - fewer calls for support
    - less downtime
    - higher productivity

# Pionieri dell'Internet-of-things

L'IoT applicato alle macchine per il settore alimentare è una realtà che Minerva Omega Group, azienda leader nella progettazione e costruzione di macchine e sistemi per l'industria alimentare, ha saputo concretizzare in modo pratico applicando una soluzione sviluppata dalla startup DSC Nexus. Un modo per proporre innovazione e aumentare il valore aggiunto delle sue macchine, prodotte con standard qualitativi elevati e con uno stile 'made in Italy' riconosciuto nel mondo. Mettere in relazione le macchine e l'uomo è il principio dell'IoT. Acquisire dati, trasformarli e renderli fruibili a sistemi di gestione centralizzati esterni per poi integrarli nei processi di business e controllo di responsabili di manutenzione, buyer di attrezzature, responsabili di sicurezza, controller finanziari e di gestione, è compito di NeMoSy.



