**Cibus Tec Digital Factory**

In **Hall 4**, within the **CIBUS TEC DIGITAL FACTORY** area, the future of the food industry comes to life. You will be able to interact with **a model of Food Factory 5.0**, where digital technologies such as Industrial **IoT (Internet of Things), VR (Virtual Reality), and Artificial Intelligence** enable the optimization of production efficiency, simplification of maintenance and training operations, making production more sustainable, and enabling new post-sale business models for machine manufacturers.

Monitor the efficiency of connected machines and identify any bottlenecks by accessing real-time operational data. Perform maintenance and training operations in virtual reality. Order spare parts directly from the machine's interactive 3D catalog. Know the production costs and energy consumption of your facilities at any time. But the surprises don't end there! Discover **how cognitive artificial intelligence simplifies technical support for facilities and access to corporate knowledge, thanks to a virtual assistant based on Chat-GPT.**

Food Factory 5.0 will be based on the technology of **40Factory**; in particular, the Industrial IoT solutions MAT and MAT XR by Linkersys, together with the virtual assistant WILSON.AI, will be connected to the machines of participating exhibitors who have already embarked on a successful path of digitizing their offerings.

The goal is to demonstrate how the proper **integration of new digital technologies in a collaborative ecosystem logic brings significant advantages** to both plant manufacturers, who can expand their service offerings and improve their relationship with customers, and to users of the facilities, who can significantly increase their operational efficiency and optimize asset management costs.

Come to Cibus Tec and discover the potential of the digital factory. The future of the food industry awaits you!

**Cibus Tec Industry and Demos**

Since 2011, Cibus Tec has been the very first exhibition specialized in the food technology sector to enhance its proposals with a unique and innovative initiative, dealing with the opportunity of seeing machines and technologies in operation during the event. And what better showcase for the exhibitors to display the latest solutions dedicated to the Food&Beverage sector?

This concept gave rise to the Cibus Tec Industry project, which, thanks to the collaboration of an ever-growing number of technology partners, has made possible for us to recreate several highly automated and fully operational lines showing some of the phases of processing and packaging of food products.

**Discover Cibus Tec 2023 Demo Lines**

***DOYPACK LINE***

Demo timetables: 11am – 12pm – 3pm

This line recreates the **Doypack packaging** for candies (by the way, the process is extremely versatile). A vacuum conveyor transports the candies to a 10-head weigher, responsible for dosing the product into the Doypack packages. The weigher features a bag loader with pick & place servo assistance and a system for discarding unopened or mispositioned packages. Additionally, this line includes an electronic gas mixer ensuring direct communication with the machine and minimizes gas consumption. Subsequently, the packages will pass through an in-line seal integrity control system, ensuring food safety and the quality of the final product.

***CHEESE LINE***

Demo timetables:: 11.15am – 12.15pm – 3.15pm

A second line consists in the reproduction of the cutting and packaging processes of hard or semi-hard cheese. The first step is the cutting, with different diameters and heights, in order to obtain geometrical standard products or calibrated weight slices.
The robotic system for handling and quality control is characterized by two vision systems (2D and 3D), capable of analyzing both the dimensions and appearance of the products. The handling is done by 2 anthropomorphic robots responsible for positioning the product on two different packaging machines. The first one packages in MAP (Modified Atmosphere Packaging) and then it passes through the automatic weighing and labeling; the second one operates in order to obtain a Skin package on cardboard and features a step through a combined X-ray and weight sorting system with the aim of detecting dangerous foreign objects.
Workplace safety is an important aspect too, since stainless steel protection are used to ensure the human operator's safety during the process.

***“PINSA” LINE***

Demo timetables: 11.30am – 12.30pm – 3.30pm

This line is specially dedicated to an Italian traditional bakery product, that has been adquiring more and more popularity through the latest years, firstly in the Out of Home channel and later in the Large-Scale Retail. This product potential keeps on growing, even outside Italy: its name is *pinsa*. The whole processes of doughing, forming and packaging are firmly oriented to a couple of ambitious goals: a residue-free production and an extremely delicate dough handling, representing the true secret for the preservation of the pinsa’s soft texture, hidden under the typical external crunchy surface. After the baking and cooling process (which are simulated at the show), the product is ready to be flow-packaged. The machine line includes a sealing system to produce hermetically sealed packages with three seals starting from a roll of heat-sealing film. The packages pass through apposite metal detectors, devices for detecting accidentally present metallic contaminants.

La linea si conclude con gli ultimi due step: un sistema di controllo per le produzioni a peso fisso (in grado di arrivare a cadenza di 240 confezioni al minuto) e l’etichettatura. The line concludes with the last two steps: a weight control system for fixed-weight production (capable of achieving a rate of 240 packages per minute) and an in-line compact labeling system.

**LabWorld Arena
Special focus on testing laboratories and food safety**

For the very first time in its 80-year-long history, Cibus Tec 2023 strongly focuses on the world of testing laboratories and food analysis, by showcasing the most relevant technics and newly-implemented laboratory tools. Over 100 exhibitors specialized in spectroscopy, untargeted metabolomic analysis, food and feed quality control and hosted in the Hall 5. The visitors can join a non-stop 4-day-long event session, aimed to both disseminate scientific contents and show all the most relevant novelties about the world of testing laboratories: from October 24th to 27th, this special area called **LabWorld Arena (Hall 5 – F 072)** will host several seminars and conferences, dedicated to the **technics, tools and burning sector issues linked to food analysis**.

**StartUp Area**

In the **Cibus Tec StartUp Area** you will find the innovative projects designed for changing the future of the food & beverage industry.

Some of the most promising research and development projects are in the hands of highly innovative startups, that try to provide creative and technological solutions to several contemporary challenges. Together with our Partners, **Le Village by Crédit Agricole**, **Eatable Adventures** and **Italian Trade Agency** (ICE-Agenzia), we have selected the best startups to boost innovation and digitalization in the food and beverage industry:

* 3Bee srl
* Aizoon Consulting srl
* Biorsaf srl innovativa
* Byprotrade srl
* Codyfarm s.r.l semplificata
* Compopack srl
* Cooki srl
* Deestr
* Feelera srl sb
* Food and Flavours Engineering
* Genuine Way srl
* HACCP Facile
* Heallo srl
* IN4Agri Start-up innovative Società Benefit
* Innovabile srl
* Innovative press srl
* Intellico s.r.l.
* Laboratori Fabrici srl
* Mach3D srl
* Maltese srl
* Neoma srl
* Nutras srl
* Pimento: promoting innovation of fermented foods
* Quindi by Prorob s.r.l.
* Rurall S.p.A.
* Smart Domotics s.r.l.
* Tomorrow Tech
* Trusty s.r.l. Società Benefit

**Cibus Tec Talent Academy**

The research for highly skilled young talents is today a burning sector issue for the most dynamic, innovative and technologically advanced companies, including those of the food supply chain. The question is **how to integrate the right talents in the mark of such complex businesses?**

In our country, the **ITS Academy Foundations are the only tertiary non-university channels offering immediately professionalizing education**: that means ITS represents a cutting-edge educational-training chain. With special regard to the local area of Parma, the ITS Foundations range from mechanics to the agri-food system, up to logistics. ITS politics is firmly based on the co-designing educational activities with companies aimed at developing tailored courses on the working world's real needs.

Therefore, on the one hand **companies are looking for specialized technical staff** not easily available in the labor market, on the other hand **young talents strongly feel the need to apply for qualified and solid career-oriented employment opportunities**.

**"Cibus Tec Talent Academy"** is a special area of the show, powered by  **[CisitaParma](https://www.cisita.parma.it/giovani/its/)**, partner of all ITS Academy Foundations active in Parma and its local area   ([ITS Tech&Food](https://www.itstechandfood.it/), [ITS Maker](https://itsmaker.it/), [ITS Logistica Sostenibile](https://www.itslogisticasostenibile.it/home-page-it)). Located at **Hall 3 – booth A 026**, the Academy is aimed at promoting a fruitful and virtuous matching between education and food supply chain corporate representatives, in order to share the added value offered by the multi-level collaboration between the high specialization centers represented by the ITS Academy and the industry.