



FULLY DESIGNING YOUR PROCESS IN

# Medicinal Crops





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# Who we are

Viscon is your global partner in offering turn-key innovative solutions to automate and improve your medicinal crop cultivation. Based on years of experience and the expertise of our members, we can offer the most effective and proven solutions for all steps of the cultivation and post-harvesting process. From genetics up to tracked & traced packed product.

## Open platform

Together with our members and preferred suppliers, Viscon is a full-service platform for all your needs. Through the platform, we can connect your request to the right offering with the addition of knowledge, research and innovation.



**& preferred suppliers**



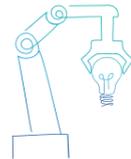
## Supply chain expert

The Viscon platform is filled with skilled companies. All experienced in the horticultural and material handling sector, with a fast-growing expertise in the sector of medicinal crops.



## Turn-key solutions

Viscon offers you a wide range of innovative products from genetics up to end products. A one stop shop solution for many projects that requires turn-key automation.



## Innovation

Viscon develops game changing machinery, technologies, genetics and cultivation methods. We can develop and create for every need (R&D).



## Global network

A worldwide sales- and service network enables Viscon to offer service locally, with a high service level in each country. In addition, the machinery can be supplied according to: CE, UL and CSA regulations.



From plant propagation  
to marketable product

# Turn-key solutions

Viscon offers solutions for all steps of the production and cultivation process. From plant propagation to delivery of packaged product, including traceability in every step of the process.

A one stop shop solution for many projects that require turnkey automation. Together with our software company, we also provide all the software necessary to control the entire process and provide full traceability management. Our strong position in the industry makes it the perfect meeting point for new technology trends and developments. In addition, our ongoing R&D and our consultancy services help you to achieve excellence.



# Preservation of high quality genetics



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## Genetic preservation

Cryopreservation is a method that allows in situ long-term storage of genetic material in minimum space. Ultra-low temperature of liquid nitrogen (-196°C/-320°F) guarantees the optimal conservation of plant material, using storage tanks or freezers as gene banks.

Storage of plant material is important to backup or secure the future availability of high quality genetics, and medicinally important cultivars with unique attributes. This is useful for breeding programs, pharmaceuticals, and research & development.

### We offer:

- ✓ Safe storage of plants
- ✓ Minimal use of space
- ✓ Protocol development
- ✓ Cryopreservation training



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# Young plant production

Our partner Visser Horti Systems has been specializing in the automation of young plant production since 1967. To achieve a good start there are multiple propagation methods such as tissue culture, clones and seed. Each method requires a different approach in automation. Viscon offers turnkey solutions for all three methods to grow the ideal young plant, no matter which cultivation system you have implemented in your nursery.

Our array of seamlessly connected machinery can achieve levels of optimization and scale that previously weren't possible. Leading the way in medicinal crops cultivation!

Tissue Culture



1



Clones



2



Seed

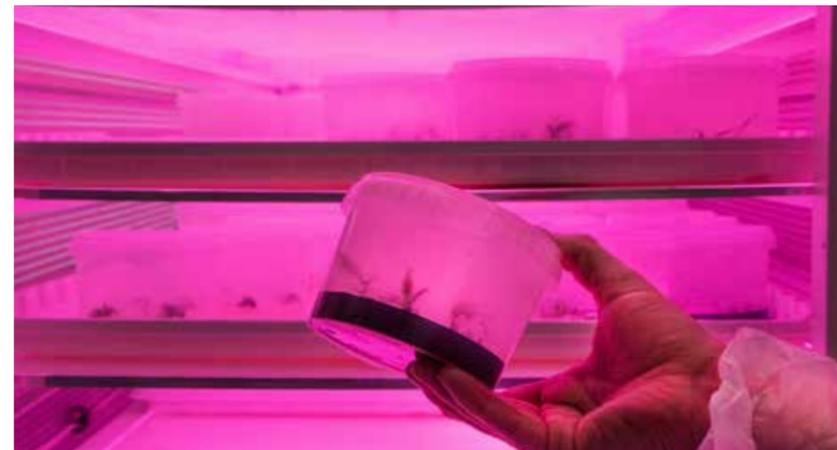


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Great start and  
**fully controlled process**

# Young plant production



STATE OF THE ART LABS

## 1. Tissue culture

Through our partner ViVi® we offer a groundbreaking, sterile and patented tissue culture technology. ViVi® consumables act as a 'greenhouse in a box' which has its own microclimate inside. A uniform and clean product is guaranteed without the need for expert TC knowledge of the breeder. The unique ViTray enables an easier transition from tissue culture to the greenhouse. ViVi® combines rooting and hardening in one phase which reduces plant loss significantly.

We provide everything for a state of the art TC lab: climate chambers, LED trolleys, clean rooms, media preparation, workers materials, consumables and consultancy.

### We offer:

- ✓ Turn-key tissue culture labs
- ✓ Revolutionary & patented growing method
- ✓ Clean rooms with climate and airflow control
- ✓ ViVi production trolley with LED solutions
- ✓ Drying chambers
- ✓ Development of growing protocols
- ✓ Consultancy and on-site training



FULLY AUTOMATED

## 2. Clones

Viscon can offer you a revolutionary system for the automated transplanting of clones; named AutoStix®. Our partner Visser Horti Systems developed this patented system, where clones from the mother stock can be directly inserted in the biobased strips which degrade over time. The machine automatically transplants the clones into pots and trays of any size. Your plants can also be graded in the system for a uniform result.

### We offer:

- ✓ Patented system for automated transplanting of clones, including a complete filling and transplanting line
- ✓ Transplant clones into tray/pot up to 10.000 clones/hour
- ✓ Biobased cartridge with 51, 34, 26 or 17 positions
- ✓ Different strips for different plants and purposes
- ✓ Rooting in motherstock location



1



2

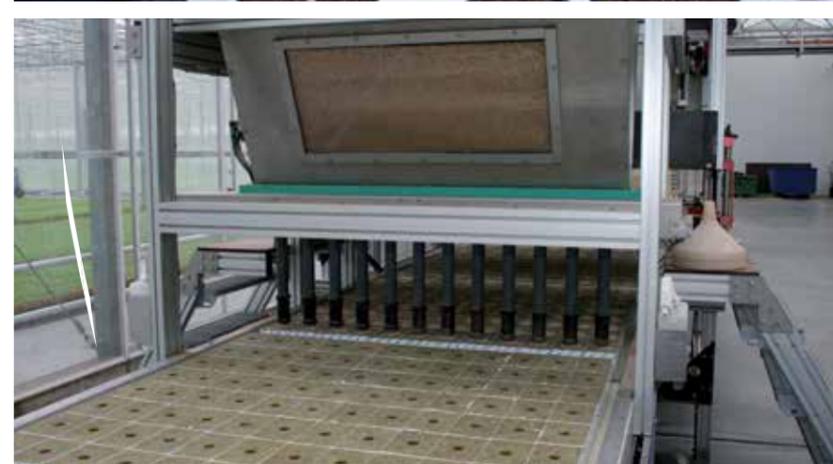
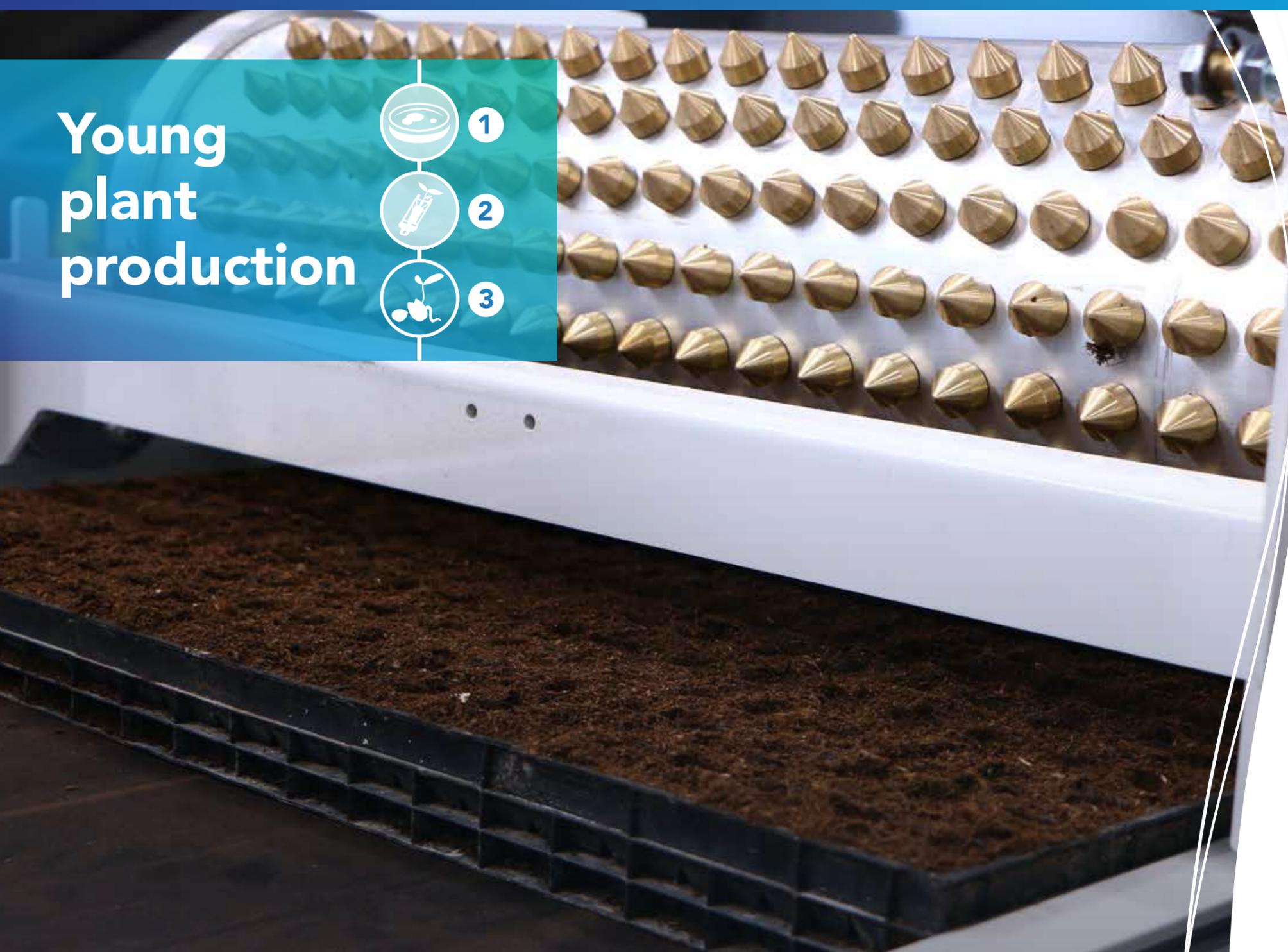


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# Young plant production

# Young plant production



UPSCALE YOUR PRODUCTION

## 3. Seed

The Viscon platform offers automation for seed propagation. Together with our partner Visser Horti Systems, we have over 50 years of experience in automated seeding. Our seeding lines consist of a wide range of automated seeders for pots and trays, which can be used for different types of substrates. The accuracy of our seeding machinery minimalizes valuable dropouts. Our high capacity seeding lines can be complemented with pot filling lines, watering tunnels, pot handling machines and transplanting machines, to offer a total turn-key solution.

### We offer:

- ✓ Complete seeding automation for any kind of substrate
- ✓ The fastest drumseeder in the market
- ✓ Additional filling line for pots and trays
- ✓ Selection and transplanting equipment for greater uniformity
- ✓ Suitable for peak production

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# Plant cultivation

Different kind of production systems are seen in the cultivation of medicinal crops. With Viscon you have access to a wide range of equipment, whether you grow indoors or outdoors. Our automation solutions can be implemented into any greenhouse structure and are customized for all kinds of growing mediums (soil, rockwool, etc.).

We offer high-tech, fully automated solutions, whether the production line is based on table systems or concrete Ebb&Flow floors in greenhouses. Viscon can also provide a fully controlled indoor multi-layer growing factory.

## We offer:

- ✓ Complete automated production for pots and rockwool, suitable for tables and concrete floors
- ✓ Grading and transplanting lines
- ✓ Cultivation tables
- ✓ Internal transport
- ✓ Irrigation



# High-tech automation solutions



50 years of experience  
in handling systems



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## Post harvest & processing

Based on years of experience around the world Viscon offers post harvesting automation solutions and automated processing equipment through our partner Viscon Fresh Produce. Ranging from internal handling of picked flowers to unloading product carriers for processing, storing and final product handling.

### We offer:

- ✓ Turn-key post harvest automation
- ✓ Automated de-budding and trimming lines
- ✓ Drying chambers
- ✓ Inspection / sorting lines
- ✓ Packing lines
- ✓ Many other types of handling equipment

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# Edibles

With our partner OTC Candy we supply a total process solutions for the production of active candy, like vitamins, CBD, and pain relieving candy. We are your one-stop-shop, where we can help you from concept development to the production of your own unique product. Our Innovation Centre is available for consultancy and pilot case study to develop or improve of your product recipes.

In order to avoid any cross-contamination, our focus lies on designing hygienic solutions that are easy to clean. In addition, we are fully aware of the importance of accurate dosage and consistency in your end product, thus we guarantee a process within the for you required guidelines.

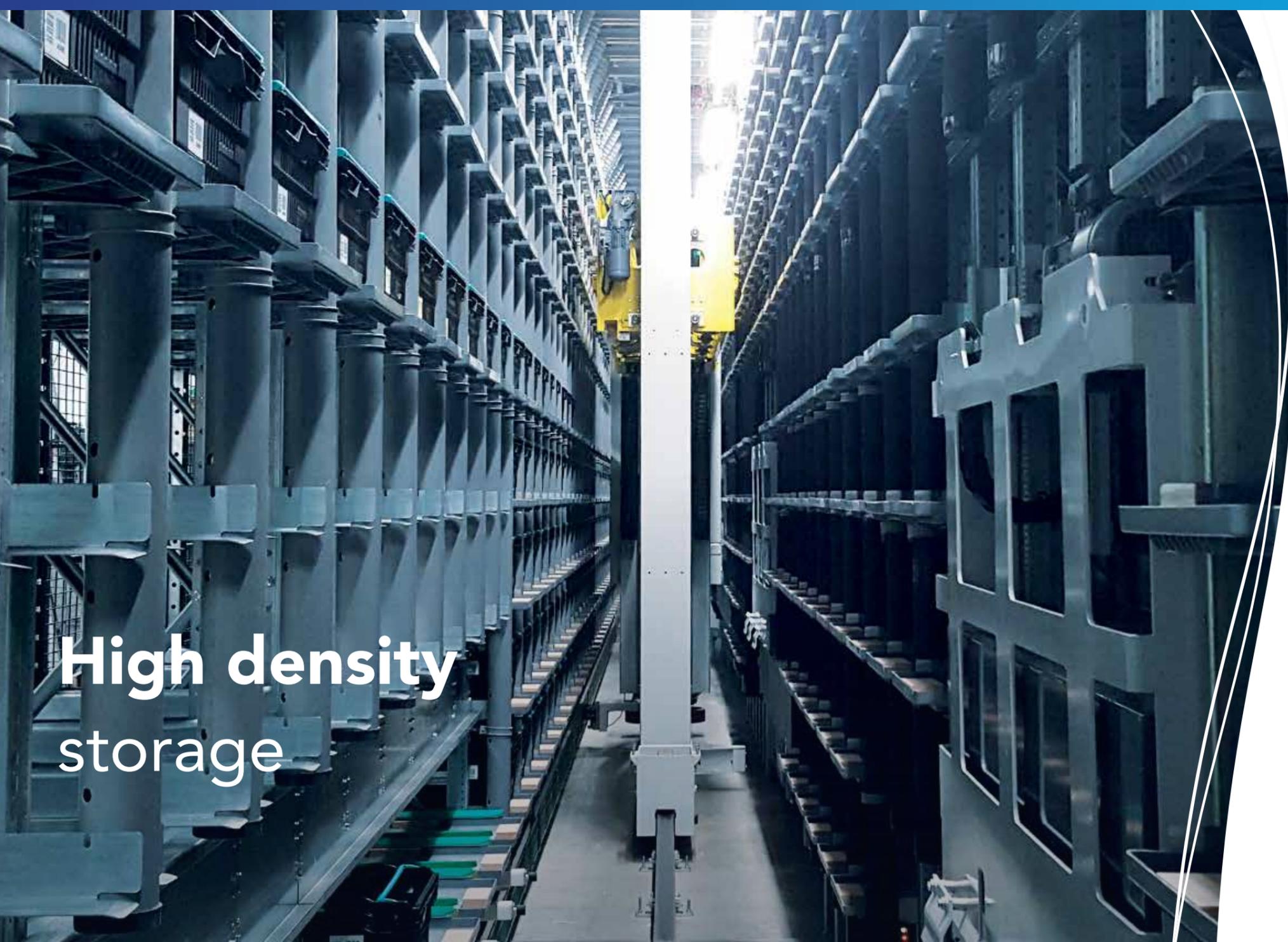
## We offer:

- ✓ Custom-made production equipment for active candy
- ✓ Complete process solutions; from raw ingredients to finished product
- ✓ Proof of concept on our pilot plant in our Innovation Centre
- ✓ Process and Confectionery Training
- ✓ Assistance in new product development



Leading player in the active  
edible process industry





High density storage



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# Storage & distribution

Through our partner Viscon Logistics we provide smart and efficient solutions for compact storage systems, material handling processes like sorting, order picking, and palletizing lines. These automation solutions give you full control of your product flow and space-efficient use of your storage and production building.

## We offer:

- ✓ Fully automated storage systems for different type of products
- ✓ Different types of order picking systems
- ✓ Palletizing lines
- ✓ Many other types of handling equipment

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# Industrial washing

Through our partner Unifortes we offer optimal cleaning solutions. Unifortes is strongly represented in the horticultural sector worldwide. Working with some of the biggest plant cultivators has given them significant knowledge of the washing needs in this sector. Unifortes developed a wide range of highly efficient and hygienic washing and drying installations for all product carriers used in medicinal crops cultivation.

## We offer:

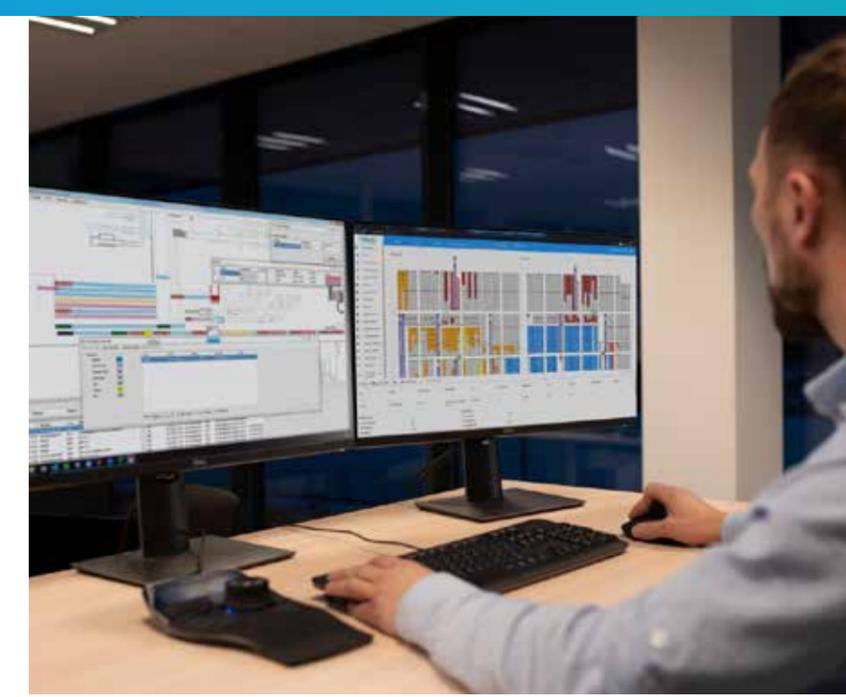
- ✓ Industrial washing machines for trays, crates, plates, racks, pallets and trolleys
- ✓ Blow off dryers to remove up to 99,8% of the remaining water
- ✓ Low, mid and high-pressure modules to remove each type of pollution
- ✓ Filter systems for different types of dirt



Cleaning every type of  
product carrier



# Full traceability & real-time monitoring



- We offer:**
- ✓ Tracking & tracing from genetics up to packed products
  - ✓ Integration of fault finding displays on the production lines
  - ✓ Labor registration management tools, e.g. dashboards

SOFTWARE

## Factory intelligence

As part of our integrated solution, Viscon's Factory Intelligence software gives you optimal control and management of your entire logistical process, and ensures traceability in every step of the process.

Moreover, we can align your new machinery to communicate and store data and information to your management systems. With this software you can monitor and control your complete production line from behind your desk.



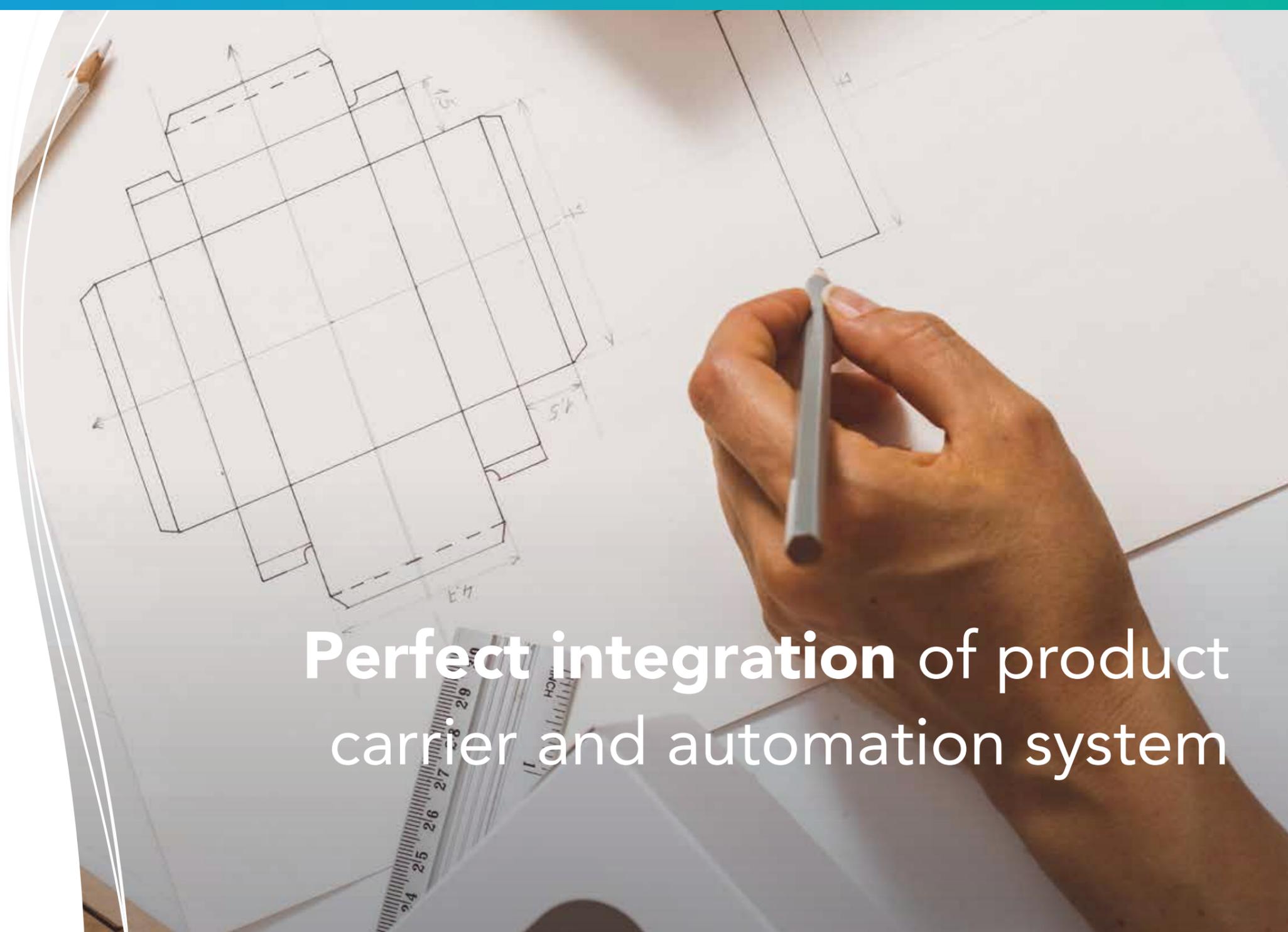
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# Industrial concept development

Viscon offers you A-Z solutions in industrial concepts development. Through our proven partner AimFresh we can design a customer-specific product carrier together with the automation systems to optimize your process. You can think of developing trays, crates and other growing accessories, drying plates, AutoStix® strips, ViTray etc.

## We offer:

- ✓ Development of product carriers to optimize your process
- ✓ Concepts ready for retail
- ✓ Carriers in (bio) plastic or cardboard



Perfect integration of product carrier and automation system



## Expertise in tissue culture & multi-layer cultivation



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## Consultancy and R&D support

Viscon is lead by innovation and science. Our R&D team continues to supply the know-how and best practices to our client network. The experienced consultants in Viscon not only can help to develop your unique growth protocols but also implement trainings and fast track R&D projects in your team. Our strong position in the industry makes it the perfect meeting point of new technology trends and developments, and through our consultancy services we can help your organization with knowledge and achieve excellence.

### We offer:

- ✓ Protocol development in Plant Tissue Culture (PTC)
- ✓ Expertise from our own in-house R&D laboratory
- ✓ Best practices and know-how from the industry experts
- ✓ Tailor-made trainings to ensure a great start of production
- ✓ R&D support through our experienced consultants network
- ✓ On distant support and in person visits to fulfill your R&D needs

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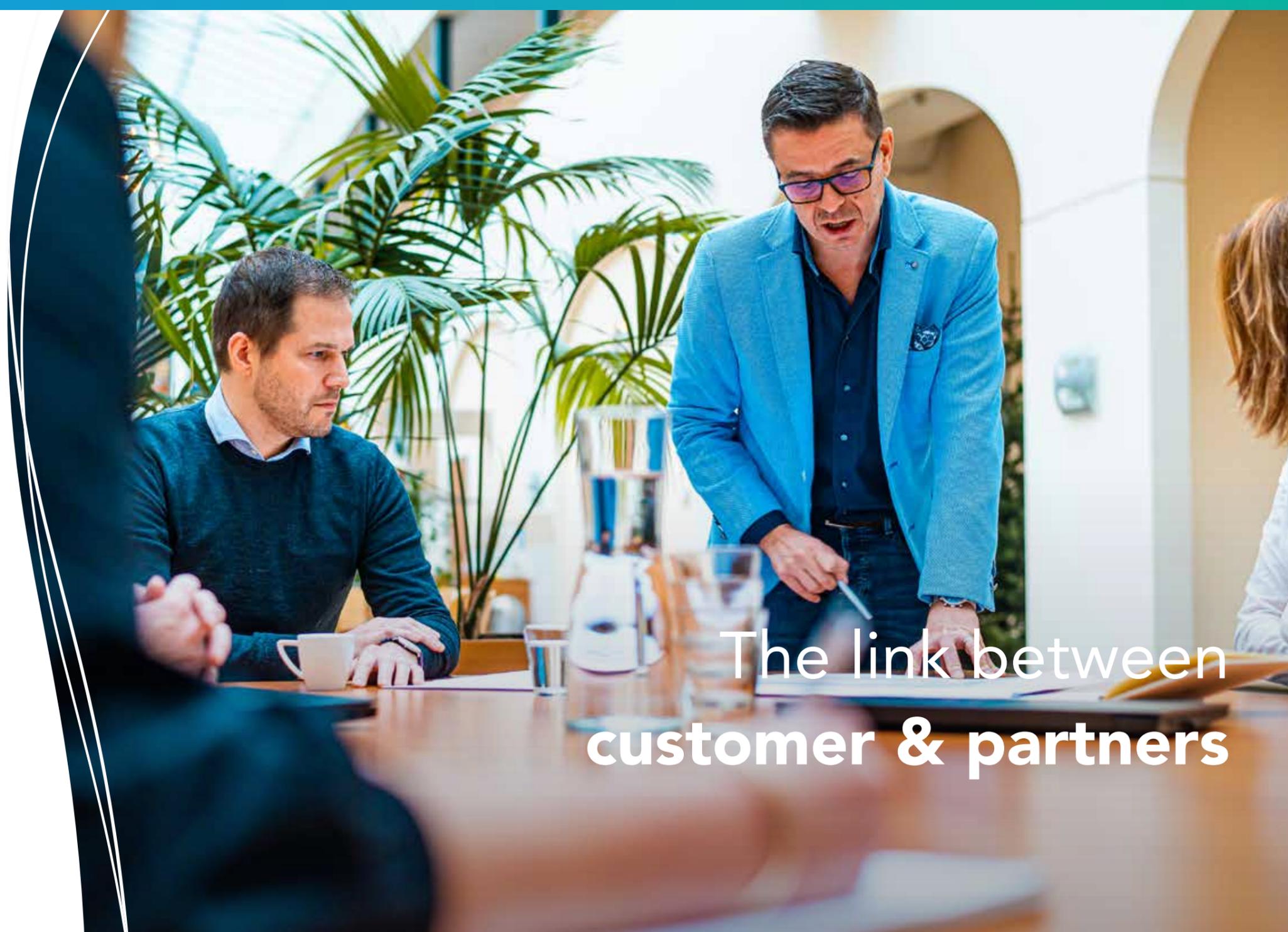
# Project approach & service

Every Viscon project is supervised by a project manager, who is the link between the customer and the Viscon platform members. A project approach is not only elementary to get the best results, it is also an area in which the Viscon expertise significantly stands out.

Viscon Medicinal Crops offers service, mainly focused on maintenance and spare part packages for your machinery. With a 24/7 helpdesk we offer remote and local support.

## We offer:

- ✓ Project management
- ✓ Customizable packages with diversities in service intensity including spare parts packages
- ✓ Viscon Connect: for remote access/control of the machinery
- ✓ 24/7 Helpdesk
- ✓ Service level agreement: scheduled maintenance
- ✓ Global service network (mostly local network), delivering on-site service



The link between customer & partners

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