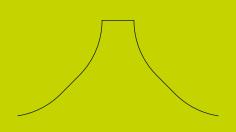


## Turning even the toughest challenges into breakthroughs









# Tackle labor shortages and costs

Automation reduces reliance on manual work by handling repetitive tasks. Solutions like automated planting, sorting, and harvesting streamline operations and allow workers to focus on specialized activities.

# Maximize throughput

By integrating vision-driven robotics and enhancing essential operations such as transplanting plugs and cuttings, and sorting young plants.

#### Improve yield

Automation is crucial for meeting rising demand by significantly reducing resource waste in every step of the process, from harvesting and cutting to delivering the final product.



### **Ornamentals**

At TTA-ISO, we have strong foundations in the ornamental sector. Our journey began in ornamentals, and it remains one of our primary focus markets today. With decades of experience, we recognize the distinct challenges that growers encounter.

Global labor shortages and rising wages are pushing traditional manual workflows to their limits. With fewer skilled workers and higher operating costs, growers are being forced to rethink how they manage their businesses—seeking smarter and more efficient ways to maintain quality and profitability.

We assist ornamental growers in addressing these challenges directly through state-of-the-art automation. From transplanting plugs and cuttings to sorting young plants and germination correction, our vision-guided robotics automates the most labor-intensive processes with exceptional precision and consistency.





#### **Bulbs and Cut flowers**

The Netherlands has long been the center of the global bulb and cut flower industry. However, even in this leading sector, growers are facing increasing pressure from rising labor costs and a shortage of skilled workers.

Many of the processes in bulb production—such as planting and harvesting—have traditionally relied on manual labor, with automation seen as nearly impossible, until now. With innovations like the Bulb Planting System, which automatically places tulip bulbs into crates, and the BulbPacker, which removes bulbs from crates and positions them for processing, we eliminate the two most time-consuming manual tasks.

Our automation solutions reduce labor dependency, streamline operations, and enhance consistency, empowering growers to stay competitive in a rapidly changing market.

Get detailed sector insights:







# **Carbon and Forestry**

Global demand for carbon removal and sustainable fiber is driving the expansion of large-scale forest plantations. This places increasing pressure on nurseries to boost output, maintain quality, and streamline production processes.

To meet these demands, nurseries often rely on lower-grade seed batches, resulting in reduced germination rates and increased variability in young plants. As a result, advanced automation and precision sorting have become essential.

At TTA-ISO, we provide forestry nurseries with advanced automation solutions tailored for large-scale tree production. Our systems utilize vision technology and robotics to efficiently sort seedlings by quality, automate transplanting, and optimize spacing—ensuring greater uniformity and improved yield, even when dealing with variable seed material.

With TTA-ISO, forestry nurseries acquire the tools to scale sustainably, decrease labor dependency, and fulfill the growing global demand for forest-based resources.



Get detailed sector insights:







### **About TTA-ISO**

Born from the merger of two pioneers, TTA and ISO, we are a force of innovation, driven by a shared vision: to remove the barriers that hold growers back. Labor shortages? Inefficiencies? Rising costs? We don't see these as obstacles— we see them as opportunities to create smarter, more sustainable automation solutions.

With a team of over 250 professionals across the Netherlands, North America, South America, Australia, and the Emirates, we provide global automation solutions.

Together, we transform ideas into technologies that empower our customers to grow smarter and more sustainably. From advanced robotics to Al-driven systems, our solutions are designed to grow beyond limits.

#### Contact

Ready to take your operations to the next level with cutting-edge automation? Let's talk — we're ready to help you help you grow beyond limits.

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