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## Company

#### Made in Italy. Global presence

For over 75 years, Idromeccanica Lucchini has been designing, manufacturing, and installing professional greenhouses made of plastic materials, along with the related technological systems for horticulture and floriculture. The company has established itself as a strategic partner for agricultural and nursery businesses worldwide.

Thanks to a vision focused on innovation, construction quality, and design flexibility, the company has steadily consolidated its leadership position in the sector. Our offering stands out for its comprehensive solutions, adaptable to various production environments, with the goal of maximizing efficiency, sustainability, and agronomic yield.

Headquartered in Guidizzolo (Mantua), Idromeccanica Lucchini operates through a cutting-edge manufacturing facility that ensures advanced industrial processes, continuous quality control, and a punctual, efficient logistics system. Our greenhouses, developed with state-of-theart technologies, are exported worldwide by land and sea, and installed by specialized technicians to ensure high standards of reliability and performance.





### Advantages and Added Value of Greenhouses Compliant with European Standards

#### 1.

**Certified Structural Safety Compliance with Eurocodes** 

#### Standards: EN 13031-1 | EN 1990 | EN 1991 | EN 1993

Engineering reliability: designed in accordance with structural Eurocodes, with certified static calculations for wind, snow, and permanent loads.

Resistance under any weather conditions: suitable for installation in areas with extreme climatic conditions (e.g. snow load  $>XX \text{ kg/m}^2$ , wind pressure >YY km/h).

Durability guarantee: reduced structural risk and extended greenhouse lifespan.

Eligibility for funding: designed in line with requirements for European agritech standards, PNRR, and EU grants.

#### 2.

### Material Quality Galvanized steel compliant with EN 10346

#### Standard: Sendzimir Z275 - EN 10346

High corrosion protection: Sendzimir Z275 galvanization (275 g/ $m^2$  coating), ideal for humid environments, heated greenhouses, or intensive irrigation.

Mechanical stability over time: structural-grade steel with high load-bearing capacity and resistance to aging.

Certified industrial production: constant quality control and coating uniformity.

#### 3.

### Advanced Options Hot-dip galvanization for extreme environments

#### Standard: UNI EN ISO 1461

Maximum protection: hot-dip galvanizing by immersion, ideal for greenhouses in coastal, tropical, or high-salinity environments.

Long-lasting and maintenance-free: thick, continuous coating ensures protection even on critical points (edges, perforations).

Added value for international projects: a highly regarded solution in global markets for certified reliability and robustness.

#### 4.

#### **Competitive Advantage for the End Customer**

- Lower long-term maintenance costs
- Certified safety to protect workers and investments
- Extended infrastructure lifespan (20+ years with minimal maintenance)
- Compliance for export, audits, and international standards



#### **Company Certifications**

#### ISO 9001:2015

Idromeccanica Lucchini S.p.A. has adopted a company-wide Quality Management System compliant with this standard.

#### UNI EN 1090-1:2012 EN 1090-1:2009+A1:2011

Idromeccanica Lucchini S.p.A. operates a Factory Production Control system for structural steel components, in line with the requirements of EU Regulation 305/2011 on the CE marking of construction products. This regulation mandates that structural steel and aluminum components placed on the market must be CE marked and comply with the technical specifications set forth in UNI EN 1090-1:2012 "Execution of steel and aluminum structures - Part 1: Requirements for conformity assessment of structural components".



Idromeccanica Lucchini underwent EcoVadis evaluation both for internal management purposes and to strengthen its market positioning.

EcoVadis provided a clear overview of the company's sustainability performance based on the obtained scorecard, highlighting strengths, areas for improvement, and weaknesses compared to competitors.

Analyzing this data will allow Idromeccanica Lucchini to evaluate its positioning, act on areas in need of development, and meet the expectations of customers who seek insight into the environmental and social performance of their suppliers through a dedicated communication tool.





### Comparative Table: Standard Greenhouses vs. EU-Compliant Greenhouses with Certified Galvanization

Technical Features	Standard Greenhouse	EU-Compliant Greenhouse + Certified Galvanization
Structural Design	Simplified approach, often not verified for actual loads	Certified structural calculation according to EN 13031-1, EN 1990, EN 1991, EN 1993
Snow and Wind Load Verification	Not always suitable for severe weather conditions	Full static verification per Eurocodes – suitable for high-risk climate zones
Weather and Wind Resistance	Limited	Optimized for extreme weather events, wind >XX km/h and snow >YY kg/m²
Structural Material	Generic steel, often uncertified	Certified steel compliant with EN 10346
Galvanization	Light or inconsistent galvanization	Sendzimir galvanization Z275 (275 g/m²) according to EN 10346
Durability in Humid/Saline Environments	Low - corrosion risk within 5-7 years	High durability - over 20 years in standard conditions
Hot-Dip Galvanization (optional)	Not available	Available upon request - UNI EN ISO 1461 - ideal for marine or aggressive environments
Maintenance Over Time	High, frequent replacements	Low, due to certified corrosion protection
Compatibility with High- Tech Systems	Limited	Designed for integration with precision farming, automation, and advanced systems
Compliance for EU Grants and Funding	Not compliant	Eligible for EU funding, PNRR, export, and sustainable agriculture
Perceived Value and ROI	Low technical value – risk of obsolescence	High technical and commercial value, extended lifecycle and greater return on investment









# Atlantic Line

Multyatlantic Evoluzione

Atlantic Evoluzione

Atlantic TS

Atlantic EX













### Multyatlantic Evoluzione

High-performance multi-span professional greenhouse - designed for high-tech protected cultivation

MULTYATLANTIC EVOLUZIONE is the next-generation modular greenhouse developed by Idromeccanica Lucchini, designed to meet the needs of intensive horticultural and floricultural production. Its design combines structural strength, architectural flexibility, and advanced integration with technological systems, providing a high-performance cultivation environment under any climatic condition.

### High-strength Structure and Functional Adaptability

Main columns made of hot-dip galvanized square steel tubes (80x80 mm and 100x100 mm) are combined with truss arches in Ø60 mm round tube or 90x50 mm multi-section tubes with gothic profile. A structural tensioning system is engineered to ensure high mechanical stability.

Upon request, the greenhouse can be designed in full compliance with European standards EN 13031-1, EN 1990, EN 1991, EN 1993, and verified for snow and wind loads according to Eurocodes.

### Steel and Galvanization in Accordance with European Standards

All steel components are galvanized using the Sendzimir Z 275 process, compliant with EN 10346, ensuring excellent corrosion resistance in humid or saline environments.

Hot-dip galvanization compliant with UNI EN

ISO 1461 is available on request, ideal for extreme environmental conditions.

#### **Advanced Climate Technology and Automation**

Long-life plastic film cladding available in single-layer or inflated double-film configuration, offering up to 40% energy savings through improved thermal insulation.

Roll-up side openings (single, double, or up-down) and ridge vents (single or double flap), available in both manual and automatic versions.

Fully integrable with computerized climate control systems, automated ventilation management, and digital IoT sensors for monitoring temperature, humidity, CO<sup>2</sup> levels, and solar radiation.









#### **Customization and Additional Options**

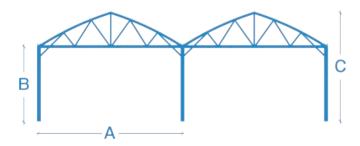
- · Long-life plastic film
- Twin-wall polycarbonate
- · Corrugated polycarbonate
- Sandwich panel for advanced insulation
- Sliding or hinged doors available, with optional certified emergency exit.

#### **Tailored Design and System Integration**

MULTYATLANTIC EVOLUZIONE is optimized for the integration of high-tech growing systems (hydroponic, NFT, Ebb & Flow), fertigation units, LED lighting with controlled spectrum, active climate control systems, and ventilation/cooling units.

Customizable modules are available to suit various production layouts, agronomic needs, and local environmental conditions.

<b>A</b> width M	<b>B</b> tie-rod h. M	<b>C</b> total h. M
8,00	≤6,00	+2,00
9,60	≤6,00	+2,50/3,00
10,00	≤6,00	+2,50/3,00
12,00	≤6,00	+3,00/3,40
12,80	≤6,00	+3,00/3,40

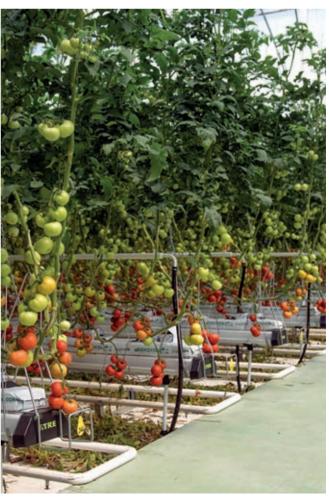


#### **Certifications and Compliance**

All production processes are certified to:

- UNI EN ISO 9001 Quality management system
- UNI EN ISO 14001 Environmental management system















# Atlantic **Evoluzione**

High-performance single-span greenhouse – designed for targeted production such as seedbeds, nurseries, and propagation

ATLANTIC EVOLUZIONE is a technologically advanced single-span greenhouse with vertical side walls, specifically designed for professional applications in horticulture, floriculture, and specialty crops. Its reinforced structure, consisting of truss arches and square galvanized steel pillars, is optimized to offer high load capacity, resistance to major mechanical stresses (wind, snow, suspended loads), and full integration with automated climate systems.

#### Professional Single-Span High-Performance Greenhouse - Designed for High-Tech Protected Agriculture

ATLANTIC EVOLUZIONE is the nextgeneration modular greenhouse developed by Idromeccanica Lucchini to meet the demands of intensive horticultural and floricultural cultivation. Its design combines structural robustness, architectural flexibility, and advanced system integration, offering a high-performance growing environment in any climatic condition.

### High-Strength Structure and Functional Adaptability

Main supporting columns in hot-dip galvanized square tube (80x80 mm and 100x100 mm) paired with truss arches in  $\emptyset60$  mm round tube or 90x50 mm multi-section tubes with a gothic profile, featuring a structural tensioning system engineered to ensure high mechanical stability.

On request, this solution can be designed in accordance with European regulations EN 13031-1, EN 1990, EN 1991, and EN 1993, and verified for snow and wind loads as per Eurocode standards.

#### **Steel and Galvanization to European Standards**

All steel components are galvanized via the Sendzimir Z 275 process, in compliance with EN 10346, ensuring resistance to corrosion in humid or saline environments.

Hot-dip galvanization in accordance with UNI EN ISO 1461 is available upon request - ideal for installations in extreme environmental conditions.

#### **Advanced Climate Technology and Automation**

Cladding in long-lasting plastic film, available in single-layer or inflated double-film configurations, enabling up to 40% energy savings thanks to improved thermal insulation.

Roll-up side openings (single, double, or up-down) and ridge vents (single or double flap), available in manual or automatic versions.

Full integration with computerized climate control systems, automated ventilation management, and IoT digital sensors for monitoring temperature, humidity, CO<sup>2</sup>, and radiation.





#### **Customization and Additional Options**

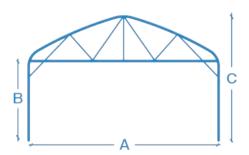
- · Long-lasting plastic film
- Twin-wall polycarbonate
- · Corrugated polycarbonate
- Sandwich panel for advanced insulation
- Sliding or hinged doors available, with optional certified emergency exit.

#### **Tailored Design and System Integration**

ATLANTIC EVOLUZIONE is optimized for integrating high-tech cultivation systems (hydroponics, NFT, Ebb & Flow), fertigation units, LED lighting with controlled spectrum, active climate control systems, and ventilation and cooling units.

Custom modules available to suit specific production layouts, agronomic needs, and local environmental conditions.

<b>A</b> width M	<b>B</b> tie-rod h. M	<b>C</b> total h. M
8,00	≤6,00	+2,00
9,60	≤6,00	+2,50/3,00
10,00	≤6,00	+2,50/3,00
12,00	≤6,00	+3,00
12,80	≤6,00	+3,00/3,40



#### **Certifications and Compliance**

All production processes are certified to:

- UNI EN ISO 9001 Quality management system
- UNI EN ISO 14001 Environmental management system







### **Atlantic TS**

Single-span greenhouse with straight sidewalls - Simplicity and versatility for intensive soil-based cultivation

ATLANTIC TS is a single-span greenhouse with straight sidewalls, designed to meet the needs of horticultural and floricultural crops that require a sturdy structure while also offering easy access and operational flexibility. Its semi-arched galvanized tube frame and straight lateral walls allow for easy passage of agricultural machinery and optimize space usage for vertical growing.



#### **Simplified Structure and Installation**

Structure made of  $\emptyset$  60 mm galvanized round tube, reinforced with tie rods and braces to ensure mechanical resistance (to wind and snow) and long-term durability.

Quick and easy installation without the need for concrete foundations: direct excavation into the soil helps reduce construction costs and installation time.

Structural flexibility: the lack of concrete foundations makes the structure easily adaptable even to uneven terrain.

All structural components are galvanized using the Sendzimir Z 275 process, in compliance with EN 10346.

The  $275 \text{ g/m}^2$  protective coating ensures high corrosion resistance, guaranteeing long greenhouse life even in humid or saline environments.

#### **Climate Control Technology**

Cladding with long-life plastic film, available in single or inflated double-film configurations to improve thermal insulation and reduce energy consumption.

Roll-up side openings with aluminum profiles or winding tubes with tensioners allow for natural ventilation and internal temperature control.

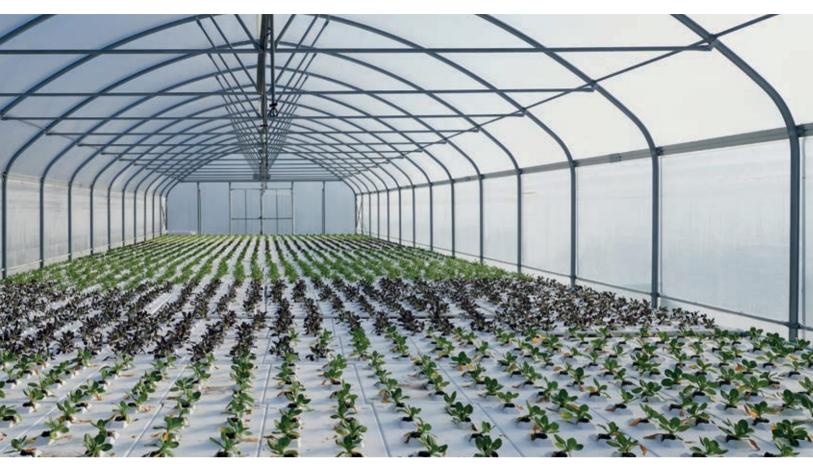
Option for automated motorized side openings, with climate management via temperature and humidity sensors to optimize energy efficiency and ensure ideal growing conditions.

#### **Customization and Additional Options**

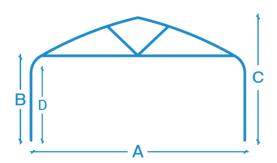
Customizable front walls in:

- · Plastic film
- Twin-wall polycarbonate
- Corrugated polycarbonate
- These provide a wide range of options in terms of light transmission, insulation, and resistance.
- The reinforced structure supports the installation of suspended mist irrigation systems, improving efficiency and uniform water distribution.
- Anchoring options: available with conventional foundations (concrete) or faster alternatives like base plates or screw-in anchors, offering greater adaptability to various ground conditions.





<b>A</b> width M	<b>B</b> tie-rod h. M	<b>D</b> side straight wall M	<b>C</b> total h. M
4,00	2,50/3,00	1,90	2,90
5,00	2,50/3,00	1,90	2,90
6,00	2,50/3,00	1,90	3,60
8,00	2,50/3,00	1,90	3,90



#### **Certifications and Compliance**

- UNI EN ISO 9001 Quality management system
- UNI EN ISO 14001 Environmental management system





### **Atlantic EX**

Reinforced greenhouse for extreme climatic conditions and year-round cultivation

ATLANTIC EX is a single-span reinforced greenhouse with vertical sidewalls, specifically designed to withstand particularly harsh weather conditions, including heavy snow loads and strong winds. It delivers optimal performance even in snowy or cold regions.

The reinforced structure, made with  $\emptyset$  60 mm galvanized round tubing and 2 mm thickness, ensures exceptional mechanical

resistance, while its accentuated gothic shape promotes snow shedding, reducing the risk of accumulation that could compromise structural integrity.

The straight sidewalls facilitate the passage of agricultural vehicles inside the greenhouse and support the growth of tall crops. Designed for long-lasting durability in challenging environments, it can be easily installed with ground excavation, screw anchors, or concrete foundations to enhance stability and performance.

#### **Robust and Durable Structure**

Ø 60 mm galvanized round tubing designed to withstand mechanical stress from heavy snow and wind loads.

Reinforced with special tie rods and bracing, specifically engineered for high-wind and heavy-snow areas to evenly distribute structural loads and minimize collapse risk.

Installation options: ground excavation with anchoring screws or concrete foundations to improve static performance and structural stability.

All components are made of galvanized steel using the Sendzimir Z 275 process, compliant with EN 10346, offering advanced corrosion protection in harsh (humid, saline, or snowy) environments.

#### **Advanced Climate Management Technology**

UV-stabilized plastic film cladding, available in single-layer or inflated double-film configurations, to maximize thermal insulation and reduce energy consumption in heated greenhouses.

Roll-up side openings with aluminum profiles ensure efficient and adjustable natural ventilation tailored to climatic needs.

Ridge openings available in single or double-flap versions for superior air exchange and better temperature regulation, even on the hottest days.

Automated motorized ventilation management with computerized climate control systems enables automatic optimization of internal greenhouse conditions.

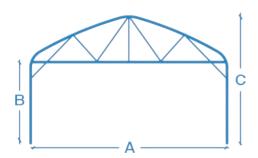
#### **Customization and Additional Options**

- · Customizable front walls available in:
  - Long-lasting plastic film
  - Twin-wall polycarbonate
  - Corrugated polycarbonate
- The reinforced structure supports suspended misting irrigation systems, improving water efficiency and uniform distribution.
- Ground anchoring options include conventional methods (concrete) or faster alternatives such as base plates or screw anchors, enhancing adaptability to varying soil conditions.





<b>A</b> width M	<b>B</b> tie-rod h. M	<b>C</b> total h. M
8,00	2,50	4,50
9,00	2,50/3,00	4,50/5,00
10,00	2,50/3,00	4,50/5,00



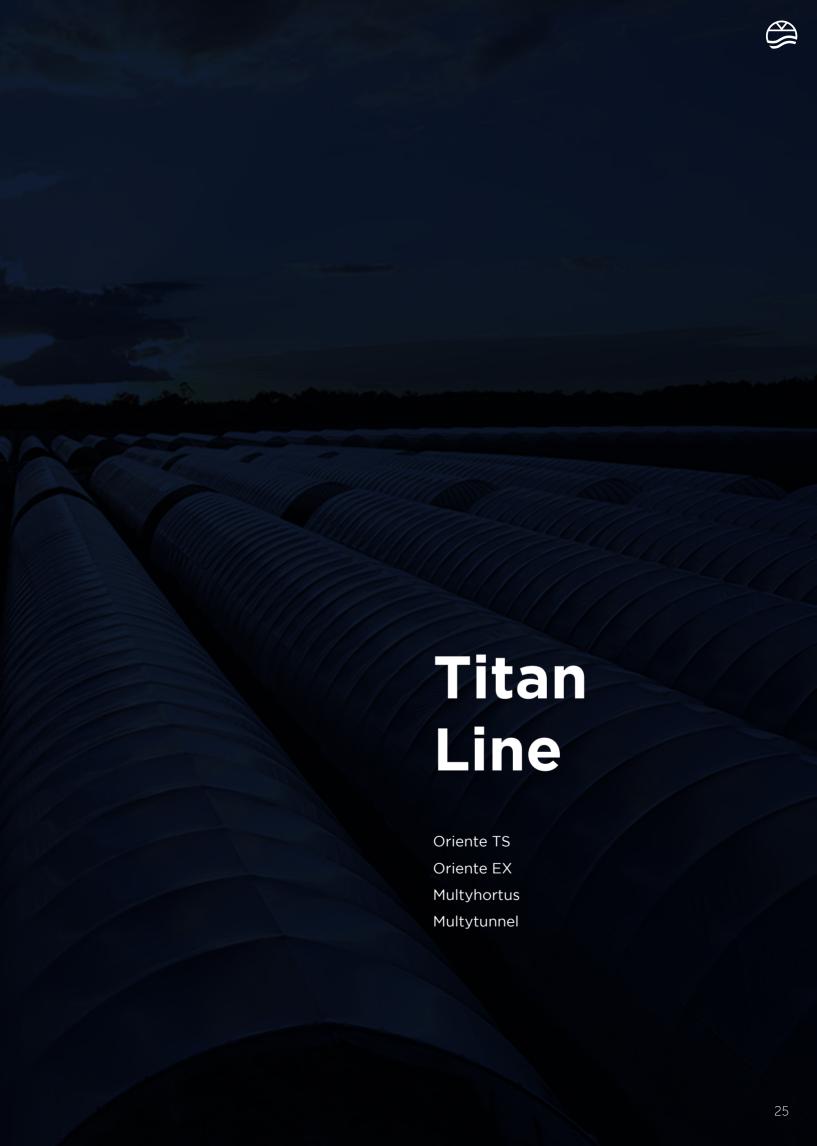
#### **Certifications and Compliance**

- UNI EN ISO 9001 Quality management system
- UNI EN ISO 14001 Environmental management system









### **Oriente TS**

#### High-Performance Tunnel Greenhouse

Oriente TS is an innovative tunnel system designed with galvanized round tube arches (Ø 60 mm), available in various widths and heights to meet the needs of growers and industry professionals. Its lightweight yet durable structure allows for quick and easy installation directly into the ground, eliminating the need for concrete foundations and significantly reducing both installation time and cost.

ORIENTE TS is especially valued for its versatility and high performance in horticulture and floriculture, areas in which Idromeccanica Lucchini is a recognized leader both in Italy and internationally.



#### **Arched Structure**

Constructed using two half-arches in  $\emptyset$  60 mm galvanized round tube, the structure can be customized with or without tie rods, depending on the need to support suspended loads or resist snow loads typical of certain regions.

The entire structure is galvanized with the Sendzimir Z 275 process, ensuring superior corrosion resistance and long-lasting durability, even in harsh environments.

#### **Natural Climate Management**

Natural ventilation: Side roll-up openings (manual or automated) provide excellent natural airflow, reducing the need for artificial cooling systems and optimizing growing conditions.

Cladding: The long-lasting plastic film cladding, available in single or inflated double-film configurations, ensures improved thermal insulation and energy efficiency—especially beneficial for intensive farming operations..

#### **Customization and Additional Options**

 End tie rods, ridge bracing, and cross reinforcements are available to ensure maximum stability and strength depending on local climate conditions.

- Motorized side openings and automated ventilation management help optimize the internal microclimate while minimizing energy usage.
- Customizable front walls in:
  - Long-life plastic film
  - Twin-wall polycarbonate
  - Corrugated polycarbonate
    Tailored to the customer's specific needs.

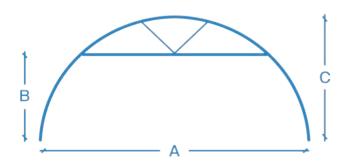
#### **Certifications and Compliance**

- UNI EN ISO 9001 Quality management system
- UNI EN ISO 14001 Environmental management system





<b>A</b> width M	<b>B</b> tie-rod h. M	<b>C</b> total h. M
4,20	2,20/2,40	3,10
5,00	2,20/2,50	2,90
6,00	2,20	2,90
7,80	2,20/2,70	3,40/4,00
8,00	2,20/2,70	3,40/3,90
9,00	2,20/3,00	3,40/3,90
10,00	2,40/3,00	3,60/4,20







### **Oriente EX**

#### Reinforced Tunnel Greenhouse for Extreme Climates

Oriente EX is a tunnel model with gothic-shaped, multi-section arches made of Ø 60 mm galvanized round tubing, designed to withstand extreme weather conditions such as strong winds and snow. Available in various widths and heights, this model is ideal for environments that require a solid, durable structure while maintaining ease of installation.

Installation does not require concrete foundations, thanks to the possibility of ground excavation or anchoring with auger screws, making the greenhouse highly versatile and suitable for a wide range of applications.



#### **Robust and Resistant Structure**

 $\varnothing$  60 mm galvanized round tubing ensures mechanical resistance to heavy snow and wind loads.

Special tie rods and reinforcements are designed specifically for high-wind and snow-prone areas, ensuring uniform load distribution and minimizing the risk of structural failure.

Installation: via soil excavation with auger anchoring or concrete foundations, enhancing structural stability and static performance.

All components are made of galvanized steel using the Sendzimir Z 275 process, compliant with EN 10346, providing advanced corrosion protection in challenging environments (humid, saline, or snowy).

#### **Advanced Climate Management Technology**

UV-stabilized plastic film cladding, available in single or inflated double-film configurations, to maximize thermal insulation and reduce energy consumption in heated greenhouses.

Roll-up side openings with aluminum profiles allow for effective and adjustable natural ventilation based on climatic needs.

Ridge vents available in single or double-flap versions for superior airflow and improved temperature regulation, even on hot days.

Automated motorization for opening systems, with computerized climate control to automatically optimize internal greenhouse conditions.

#### **Customization and Additional Options**

- · Customizable front walls in:
  - Long-life plastic film
  - Twin-wall polycarbonate
  - Corrugated polycarbonate Offering a wide range of options in terms of light transmission, insulation, and mechanical strength.
- The reinforced structure supports the installation of suspended misting irrigation systems, improving water efficiency and distribution.
- Ground anchoring options include conventional methods (concrete) or faster alternatives such as base plates or auger screws, providing excellent adaptability to various terrain conditions.





#### **Certifications and Compliance**

- UNI EN ISO 9001 Quality management system
- UNI EN ISO 14001 Environmental management system





### Multyhortus

Economical and Versatile Greenhouse for Large Areas

MULTYHORTUS greenhouses are designed to offer a cost-effective yet robust and high-quality solution for covering large surface areas. Ideal for a variety of crops, these greenhouses are known for their simple installation, customizable ventilation systems, and adaptability to different cultivation needs.

The structure features a flexible design, allowing it to be adapted to any plot of land, even with irregular boundaries. Strength and durability are ensured through the use of high-quality materials, such as galvanized round tubing, and a sturdy galvanized gutter supporting the cladding system.



#### **Linear Structure**

Constructed with multi-section arches in  $\varnothing$  60 mm galvanized round tubing, equipped with tie rods and reinforcements for enhanced strength and stability.

Galvanization: the entire structure is galvanized using the Sendzimir Z 275 process, while the supporting pillars are hot-dip galvanized to ensure high corrosion resistance.

Anchoring: pillars are anchored using augers or base plates to ensure optimal stability.

Cladding: designed for long-life plastic film coverings, fixed either with profiles or with a stretching system.

Ventilation: side roll-up openings with fastening on profiles or tension tubes allow for optimal natural airflow.

#### **Customization and Additional Optionsve**

- Ridge openings: optional ridge vents can be installed to further improve internal climate control.
- Automation: optional motorized opening system with automated management for efficient control of ventilation and microclimate.
- Front walls: may be equipped with roll-up film openings or, upon request, filled with plastic film, twin-wall polycarbonate, or corrugated polycarbonate—depending on thermal or light protection needs.

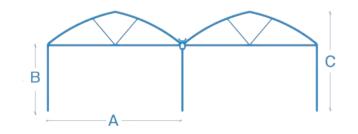
#### **Certifications and Compliance**

- UNI EN ISO 9001 Quality management system
- UNI EN ISO 14001 Environmental management system





wid	<b>A</b> Ith M	<b>B</b> tie-rod h. M	<b>C</b> total h. M
8,	00	≤3,50	+2,00
9,	00 ≤3	3,00/ ≤3,50	+2,00
10	,00 ≤3	3,00/ ≤3,50	+2,30/2,00







### Multytunnel

#### Efficiency and Simplicity for Large-Scale Cultivation

MULTYTUNNEL is designed to meet the needs of horticulturists working on large areas, offering an ideal balance between efficiency, strength, and ease of installation. Featuring a simplified yet highly durable structure, this greenhouse allows for optimal use of available space and improved accessibility for agricultural machinery. Its straight lateral bending enables efficient crop management and easy movement for farming operations.



#### **Modular and Hybrid Structure**

Strong and durable framework: The greenhouse arches are built using multi-section  $\varnothing$  60 mm galvanized round steel tubes, providing high mechanical strength and long-lasting durability.

Galvanization via the Sendzimir Z 275 process ensures corrosion protection, even in humid or aggressive environments.

Straight lateral bending: The structure's design with straight side bends optimizes space usage, increases the cultivable area, and facilitates access for large agricultural equipment such as tractors and cabbed machines—an excellent structural compromise between a basic tunnel and a multi-span greenhouse.

Secure fastening system: The arches are connected with robust fittings, and the entire structure is anchored to the ground using steel pins, eliminating the need for bulky concrete foundations. This anchoring method enables quick installation and greater versatility on varying terrain types.

Cladding: Designed for long-life plastic film coverings, fixed either with aluminum profiles or a stretching system.

#### **Customization and Additional Options**

The greenhouse can be reinforced with horizontal tie rods to meet specific load or crop requirements.

It can be equipped with integrated irrigation systems (both sprinkler and drip), as well as front entry windows (manual or automatic roll-up), to enhance climate control and logistical access.

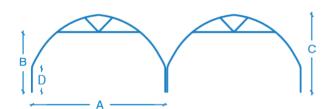
#### **Certifications and Compliance**

- UNI EN ISO 9001 Quality management system
- UNI EN ISO 14001 Environmental management system





<b>A</b> width M	<b>B</b> tie-rod h. M	<b>D</b> gutter h. M	<b>C</b> total h. M
8,00	3,10/3,60	1,50/1,80	4,20/4,60
10,00	3,20	1,80	5,30











# Cover Line

Agricultural Tunnel Greenhouse
Ombrae Line
Anti-Hail Structure
Logistics Solution













### Agricultural Tunnel Greenhouse

#### Protection for Agricultural Businesses

Idromeccanica Lucchini developed the Agricultural Tunnel Greenhouse in collaboration with its clients to meet the specific needs of the agricultural sector.

Originally designed to provide sheltered storage for round hay bales, this tunnel has evolved to also accommodate agricultural machinery and other farming equipment.

Today, the Agricultural Tunnel Greenhouse offers ideal protection thanks to its robust, cost-effective structure with generous internal volume and easy assembly.



#### **Features**

The Agricultural Tunnel Greenhouse is a shelter structure built with gothic-shaped arches made of galvanized round tube, Ø60 mm or Ø76 mm. The structure is reinforced with a tie rod at the top of each arch and longitudinal bracing.

Installation is done by excavating into the soil or by securing base plates to reinforced concrete walls.

Its height allows for sheltering even large and bulky farming machinery.

Thanks to its simple design and cost-efficient production technologies, it offers a significant price advantage over traditional concrete sheds, making it an appealing solution for farmers.

#### **Technical Specifications**

- Metal structure with round tube arches:
  - Ø60 mm tube for 6.00 m wide greenhouses
  - Ø76 mm tube for 8.00, 10.00, and 12.00 m widths
- Galvanization: hot-dip Sendzimir Z275 process
- Ridge bracing: leg-type spacers between arches
- Horizontal tie rod: Ø32 mm on all models
- Covering: PVC sheet in various colors (also available in Class II flame-retardant material)
- Front options: customizable with cladding and access door systems



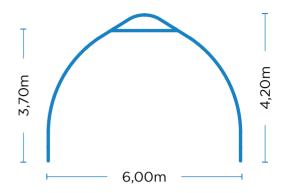
#### Width 6,00m

#### **features**

- Arches in galvanized pipe Ø60
- ✓ Tie rod in galvanized pipe Ø32
- N° 7 spacers in galvanized pipe Ø28

#### dimensions

- High at the tie rod: 3,70m
- ✓ High at the ridge: 4,20m



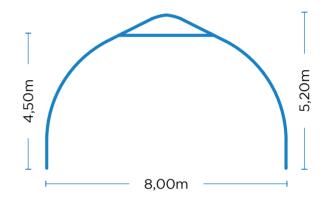
#### Width 8,00m

#### **features**

- ✓ Arches in galvanized pipe Ø76mm
- ✓ Tie rod in galvanized pipe Ø32mm

#### dimensioni

- ✓ Width: 8,00m
- High at the tie rod: 4,50m
- ✓ High at the ridge: 5,20m.



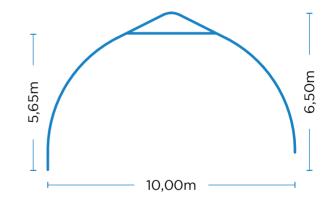
#### Width 10,00m

#### **features**

- Arches in galvanized pipe Ø76mm
- ✓ Tie rod in galvanized pipe Ø32mm
- N° 9 spacers in galvanized pipe Ø28mm

#### dimensions

- Width: 10,00m
- ✓ High at the tie rod: 5,65m
- ✓ High at the ridge: 6,50m



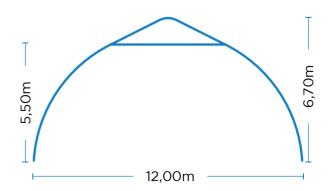
#### Width 12,00m

#### features

- Arches in galvanized pipe Ø76mm
- ✓ Tie rod in galvanized pipe Ø32mm
- N° 9/13 spacers in galvanized pipe Ø28mm

#### dimensions

- Width: 12,00m
- ✓ High at the tie rod: 5,50m
- High at the ridge: 6,70m















### Ombrae Line

The Ombrae Line combines the structural elements of our greenhouses (whether single-span, multispan, tunnel, or straight-wall types) with the benefits of shading covers such as nets or screens.

Once the crop type, climatic conditions, and cultivation cycle requirements are established, Ombrae allows for maximum climate and light control. It provides plants with the protection they strictly need—without compromising the advantages of "open field" cultivation.

#### **Features**

Lightweight and streamlined structures designed to maximize the "open field" effect.

Easy installation, even with systems that do not require reinforced concrete (R.C.)\* foundations.

Cover fastening systems available for both fixed and temporary installations, with great attention to long-term material durability.

Seasonal cladding options available for summer cultivation cycles in regions with snow presence.

Automation options for managing shading or anti-hail covers, as well as ventilation openings, to optimize the quality of the crops grown underneath.

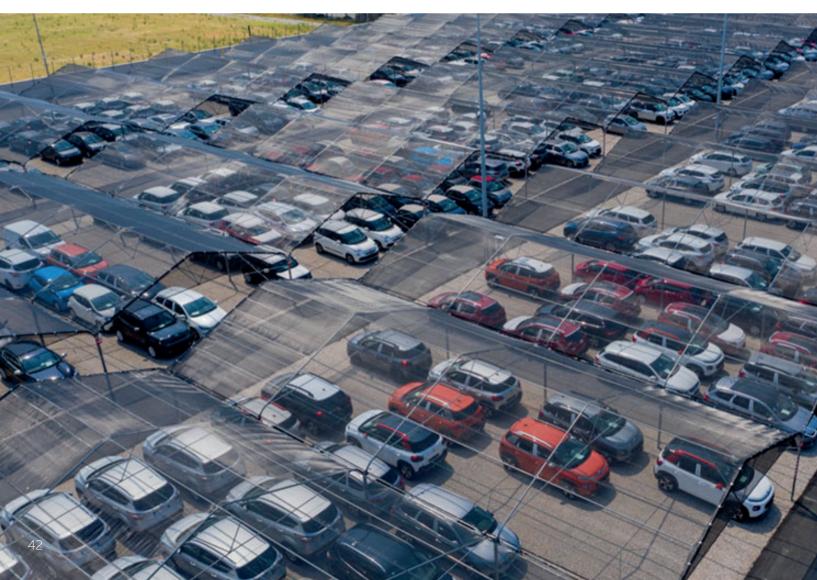
Possibility of creating hybrid systems using accessories from the Defendo Line (e.g., insect netting systems).

\*Subject to local government regulations and restrictions.

#### **Technical Specifications**

- Galvanized steel structure available in flat-roof or arched-frame models.
- Covering: Shading/anti-hail netting in white, green, or black, with various shading levels available.
- Mounting/unmounting systems for nets using clips, aluminum profiles, and roll-up tubes.
- Structure customization available based on specific customer requirements.











## Anti-Hail Structure

Designed for automotive professionals who need to protect parked vehicles in storage areas from hail, this structure is also ideal for end users.

The main feature of this simple, cost-effective multispan greenhouse is the ability to use the lateral space to park even tall vehicles, such as cabbed trucks or vans.

The "Roll-Up Roof" system allows the protective netting to be manually rolled up along the ridge of each truss, saving money on dismantling operations at the end of the season.

#### **Features**

Arches are made of structural-grade galvanized steel, using  $\emptyset$  60 mm round tubing with 2 mm thickness.

The wide inter-arch spacing of 4.50 to 5.00 meters, engineered for wind resistance, allows for large obstacle-free areas.

The cover consists of durable, UV-treated anti-hail/shading nets, mounted with a roll-up system.

In addition to the roof, the sides and front ends can also be covered with netting, featuring manual or motorized roll-up systems, providing full protection for vehicles parked around the perimeter.

Fast assembly thanks to strong fittings that link arches together.

Can be installed on agricultural land, compacted yards, concrete slabs, or asphalt lots.

#### **Technical Specifications**

- Galvanized structure with Ø 60 mm round tube arches.
- UV-treated, long-life anti-hail/shading netting for the cover.
- Manual cover-uncover roll-up system on the roof.
- Manual or motorized roll-up openings available for side and front walls.













## **Logistics Solution**

Developed from the concept of Multyatlantic Evoluzione Greenhouse, these solutions are adapted for different purposes through the use of the most suitable covering and cladding systems.

Each structure is designed based on the wind/snow loads of the intended installation area and the type of cladding requested.\*

(\*Design standards applied: EN13031-1 (Tr. B5/B10) or NTC 2018)

#### **Features**

These structures are characterized by their straightforward construction and high degree of customization, particularly in terms of access types and ventilation options.

#### **Technical Specifications**

- Galvanized structure, available in single-span or multi-span versions.
- Covering options include:
  - Long-life PVC sheet in various colors (also available in fire-retardant versions).
  - Sandwich panels or rigid plastic sheets.
- Access doors: manual or automatic, available in custom dimensions.
- Possibility of passive and/or automatic ventilation along the sidewalls and/or at the ridge.

#### **Dimensions**

#### WIDTH

From 6,00m to 14,00m each bay

Possibility of single or multiple span structures

#### **HEAD ROD**

Variable up to a height of 6.00m

#### HEIGHT RIDGE

Variable according to width













## Modulo Fix & Modulo R

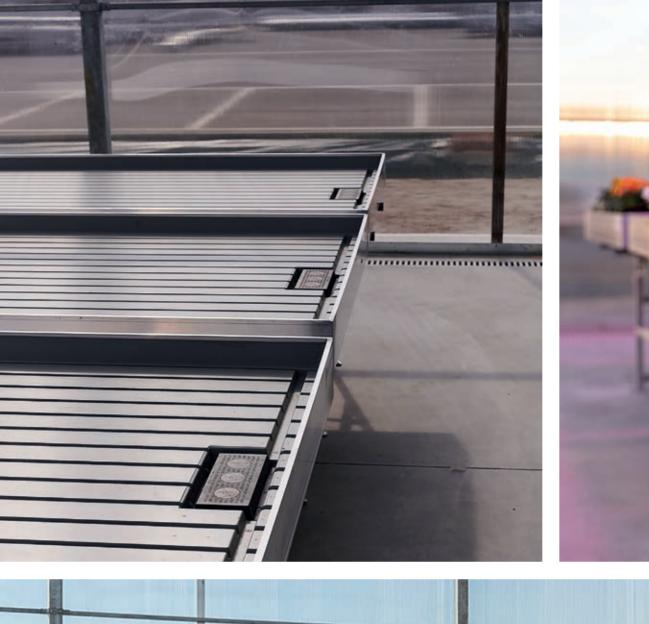
The Modulo Fix and Modulo R benches are engineered to provide durability, practicality, and long service life, perfectly meeting the operational efficiency needs of nurseries and horticultural professionals.

- Sturdy Structure: Both models feature a galvanized steel square-tube base frame and galvanized hardware. The main structure is built with aluminum alloy, ensuring lightweight performance and corrosion resistance for longlasting use.
- Polystyrene Tray: The UV-treated tray is molded with drainage grooves, enabling ebb-and-flow irrigation and optimal water distribution. Includes a removable filter to prevent debris buildup and a compatible drain valve.
- Irrigation Options: Supports both closed-circuit ebb-and-flow or open-circuit mist irrigation.
   Optional base trays are made from hot-dip galvanized welded mesh.

#### Differences Between Models:

- Modulo Fix: Equipped with fixed, height-adjustable legs (up to 7 cm), ideal for uneven floors.
- Modulo R: Features swivel caster wheels with locking brakes for easy movement without sacrificing stability.

All units are pre-assembled and installation-free.













### **Modulo Go**

The Modulo Go benches are designed for floriculture, horticulture, and nursery applications, offering advanced mobility and space optimization.

- Sliding Tray System: Trays slide on guides, maximizing space efficiency and accessibility.
- Adjustable Height: Allows precise leveling of trays for consistent irrigation performance.
- Frame & Tray: Hot-dip galvanized steel frame, aluminum alloy structure, UV-treated polystyrene tray with ebb-and-flow grooves and drainage valve.
- Customizable Dimensions: Tailor-made based on client specifications.

#### **Optional Features:**

- Substrate heating via polyethylene coils or HOT BOX heating panels.
- Galvanized mesh shelf.
- Multiple height options: 750 / 550 / 350 mm.
- Fully modular and easy to assemble/disassemble.













# Modulo Wagon

The Modulo Wagon is a smart mobility solution for greenhouse operations, offering the ideal balance between mobility and stability.

- Innovative Structure: Aluminum alloy and galvanized steel construction ensures strength and corrosion resistance.
- Free-Moving Tray with Fixed Base: The movable tray allows easy reconfiguration within the greenhouse while the base remains stationary, optimizing workflow and space.
- Weatherproof Hardware: Treated bolts and fittings guarantee long-term outdoor use.
- Customizable Layout: Modular design supports integration of drip or sprinkler irrigation, and optional roll-up side windows for climate control.

Professional Support: Idromeccanica Lucchini offers expert post-sales support to ensure each system is tailored to your crop and environmental conditions.





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Our Greenhouses: the Perfect Ecosystems for your Growth

