



Revolutionize your 🍓 strawberry 🍓 farm with  
GrowPro Greenhouses, delivering up to 3  
pounds square feet in sustainable, year-round  
yields for maximum profit.

# GrowPro Greenhouses

## THE FUTURE OF STRAWBERRY PRODUCTION

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Strawberry consumption in the United States keeps growing as retailers and consumers expect fresh, flavorful berries every week of the year. At the same time, growers face a new reality: rising labor costs, unpredictable weather, land constraints near markets, and mounting sustainability requirements. DutchGreenhouses answers that challenge with the GrowPro line—advanced greenhouses engineered to maximize yield per square foot, reduce inputs, and deliver consistent quality in every season. With decades of European engineering experience and turnkey delivery worldwide, DutchGreenhouses combines robust structures, energy-smart climate systems, and data-driven cultivation design to help American producers scale profitably, sustainably, and fast.

## Two Models for Every Growth Strategy

The GrowPro platform comes in two carefully engineered configurations so you can match investment level and production goals:

- **GrowPro Basic** – A cost-effective entry model using fixed cultivation gutters on posts, precision drip irrigation, and optional LED lighting for season extension. It's a robust, low-complexity pathway into protected strawberry production with excellent fruit quality and predictable output.
- **GrowPro Expert** – A high-density, fully integrated system with suspended or moveable gutters, advanced climate control, CO<sub>2</sub> enrichment (800–1000 ppm for optimal photosynthesis), and supplemental LEDs at 200  $\mu\text{mol}/\text{m}^2/\text{s}$ —adding up to approximately 9 mol of light per day in darker months for stable, year-round yields and premium winter pricing.





## Why GrowPro for Strawberries?

Modern strawberry cultivation demands precision. Plant density, root-zone moisture, EC, canopy temperature, humidity, airflow, and CO<sub>2</sub> must be steered in concert for uniform clusters, size, and flavor. GrowPro greenhouses provide that control with:

- Precision drip irrigation and fertigation to cut water use by up to 50% while keeping EC and pH steady (optimal pH 5.5–6.5).
- High-efficiency climate systems integrating heating, cooling, dehumidification, and screening for an optimal day/night balance.
- Configurable layouts—up to 12 plants per m<sup>2</sup> in Expert—so you can target the right output and labor profile for your market.
- Energy-efficient lighting to safeguard winter production, fruit set, and Brix in low-light conditions (target DLI 15–25 mol/m<sup>2</sup>/day).
- Recommended substrates like rockwool or coconut coir for superior water retention and root health.

### Key Benefits

- Up to 30 lbs/m<sup>2</sup> (14 kg/m<sup>2</sup>) annually
- 200 µmol LEDs = +9 mol/day
- 50% water savings
- 15–20% labor hour reduction

### GrowPro Basic: Smart Entry into Protected Production

GrowPro Basic is ideal for growers transitioning from open field or tunnels to stable, protected production. Fixed gutters on posts simplify installation and maintenance while creating clean working lines for harvesting and crop care. Automated drip lines deliver frequent, small irrigations to maintain substrate moisture and oxygen balance, improving root vigor and fruit uniformity. With optional LEDs, Basic extends your season by leveraging fall and early-spring light, capturing strong shoulder-season pricing without the complexity of year-round operation. The result: higher yields, better quality, and a faster learning curve with a modest initial investment.

### GrowPro Expert: High-Tech Precision for Maximum Output

GrowPro Expert represents the next level of efficiency, density, and labor savings. Suspended or hoistable gutters narrow row spacing, improve airflow, and bring the crop to ergonomic working height for faster picking and fewer injuries. Integrated climate control holds temperature and humidity in the sweet spot (below 95% to prevent diseases like Botrytis) while CO<sub>2</sub> enrichment accelerates photosynthesis for steady truss development. Critically, Expert integrates supplemental LEDs at 200  $\mu\text{mol}/\text{m}^2/\text{s}$ , providing ~9 mol/day extra light in short-day periods. That stabilizes Daily Light Integral in the 15–25 mol/m<sup>2</sup>/day target band, protecting winter yield and quality. The platform is automation-ready—compatible with mobile platforms and future robotic harvest solutions—so your labor cost per pound trends down as volume scales up.



## Seasonal vs. Year-Round Production

GrowPro lets you choose the path that fits your market and energy profile.

- **Seasonal Model (Basic)** – Produce for 8–9 months with lower energy inputs and strong premium over open field. Ideal for regional chains and direct-to-retail programs.
- **Year-Round Model (Expert)** – Maintain a 12-month supply using LEDs, climate control, and CO<sub>2</sub> to secure the shelf when competitors are off the market. Consistency earns better contracts, improves logistics planning, and strengthens brand position with buyers.

## Economics and ROI

Moving strawberries into a GrowPro greenhouse reshapes your cost and revenue curves:

1. **Higher Yields:** Under optimized conditions, annualized production can reach 28–30 lbs per m<sup>2</sup> (up to 14 kg/m<sup>2</sup>), supported by consistent set and uniformity.
2. **Faster Payback:** Lower water, reduced shrink, tighter labor hours, and premium winter pricing compress payback timelines.
3. **Scalable by Design:** Start with a single block and add capacity in phased steps without disrupting existing operations.
4. **Better Contracts:** Reliable off-season supply improves negotiating power and long-term buyer relationships. In many scenarios, payback occurs in 5–7 years depending on local energy, labor rates, and market price structure.



## Labor Efficiency and Workflow

Labor remains one of the largest cost drivers in berries. GrowPro streamlines picking and cultural work through:

- Ergonomic gutter heights that shorten picking cycles and reduce fatigue.
- Clear, mechanization-friendly row layouts that speed trolleys and platforms.
- Automation hooks (Expert) for crop transport and future robotic picking. Together, these improvements commonly reduce labor hours 15–20%, with further upside as automation matures.



## Sustainability by Design

GrowPro aligns with retailer expectations and incentive programs focused on resource efficiency.

- Up to 50% water savings via targeted drip and recycling strategies.
- Energy-saving screens and optimized climate strategies to lower kWh per pound.
- Integrated pest management (IPM) with biological agents and beneficials to cut chemical inputs, focusing on common issues like aphids and grey mold.
- Optional solar integration and low-carbon heating concepts to shrink footprint. Sustainability isn't a bolt-on—it's built into the structure, climate logic, and irrigation architecture from day one.

### Practical Example: Transitioning from Field to Greenhouse

Consider a grower operating 20 acres of open field who converts 4 acres to a GrowPro Expert block. That shift halves water use on those acres, trims labor hours by ~20% through ergonomic harvesting, and delivers 2–3× the yield per square foot compared with field production—now available 12 months a year. The greenhouse block anchors supply in winter and stabilizes cash flow, while the field acreage serves spring/summer volume and local promotions. Together, they create a diversified, resilient strawberry program with stronger retailer relationships.



### Partner with DutchGreenhouses

Whether your strategy is a smart seasonal step with GrowPro Basic or a full 12-month program with GrowPro Expert, DutchGreenhouses delivers a turnkey path to higher yield, lower risk, and durable profitability. Our team supports layout, climate strategy, lighting design at 200  $\mu\text{mol}/\text{m}^2/\text{s}$ , irrigation logic, and commissioning—so you start strong and scale with confidence. Let's design the strawberry operation that fits your market, your energy landscape, and your brand ambitions.

"Consistent winter supply secures shelf space and strengthens your brand with buyers."

**Partner with DutchGreenhouses — Design your GrowPro strawberry greenhouse today.**

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