

A man with grey hair and a blue patterned shirt is smiling and holding a bunch of ripe red cherry tomatoes. He is standing in a greenhouse, with many other tomato plants visible in the background. The plants are covered in green leaves and clusters of red and green tomatoes. The lighting is bright and even, highlighting the freshness of the produce.

**PHILIPS**

Horticulture  
LED Solutions

Case study  
Wim Peters  
Kwekerijen

Someren, the Netherlands



GreenPower LED interlighting High Output

# Consumers prefer **LED grown tomatoes**

We use LEDs because we want our products to be available year-round





“

It's no wonder we are getting more requests for our products. **Consistent quality, great taste.**  
**What more do you want?**

**Wim Peters,** Owner, Wim Peters Kwekerijen



### Background

Proprietor Wim Peters is the third generation of the Peters family to grow tomatoes, and he has overcome a disaster that literally wiped his business off the face of the earth. In 2016, a massive hailstorm completely destroyed all 16 hectares of his greenhouses on two sites in just a few short minutes. At that time, Peters was one of the largest and most successful high-wire growers of tomatoes in The Netherlands. In 2013 and 2014, he had invested heavily in LED lighting from Philips Lighting to improve growth and reduce the energy usage of his operations. Now he faced the difficult decision of closing his doors forever or rebuilding his business from the ground up.

### The challenge

After looking at several different options, Peters decided to build completely new greenhouses equipped with the most advanced technologies. Although family-run businesses often have strong traditions, Peters manages to combine a respect for experience gained in the past with a keen eye for present-day possibilities and opportunities. That was why he decided to install LED lighting in the first place as a

cost-effective way to produce fresh, high quality tomatoes in the winter months instead of importing lesser quality Spanish tomatoes. For his new greenhouses, he once again chose LED lighting from his longtime partner Philips Lighting. “The results we achieved in the last few years with LED were unbelievable. For us, there was absolutely no doubt in our minds to go with LED again,” says Peters. “Experience has taught us that Philips calculated production models are always accurate and achievable. So with the new GreenPower LED interlighting I’m convinced that we will achieve the yields they have forecasted.”

### The solution

In October 2017, Peters completed construction of two ultra modern new greenhouses to replace those destroyed and an additional greenhouse to expand operations. The new greenhouses are two meters higher, reaching seven meters in total. They are equipped with a sophisticated water purification system as well as a vertical ventilation system, allowing better climate control and CO<sub>2</sub> distribution and uptake.



Peters chose to double the LED lighting area to about 11 hectares with a new hybrid lighting installation that combines Philips GreenPower LED interlighting High Output with HPS toplighting. The new interlighting module produces a light level of 75  $\mu\text{mol}/\text{m}^2/\text{s}$  compared to 55  $\mu\text{mol}/\text{m}^2/\text{s}$  of the previous modules. Peters says, "There is a big advantage with the new High Output module. It produces more energy and uses less electricity. Plus, it has a simple plug and play connection. All in all it is a gigantic step forward." The entire lighting installation was installed by Philips Lighting's Horti LED partners CODEMA - B-E De Lier and Agrolux.

#### Benefits

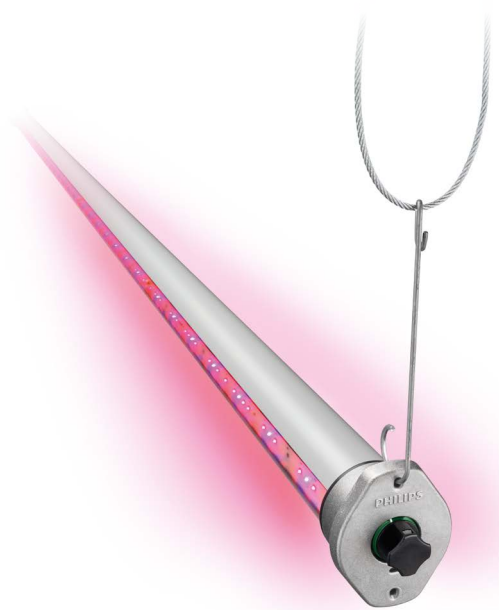
During the dark months of the year there is no great difference in the lighting period compared with colleagues who use conventional lighting. However, the LED modules enable Peters to deliver light to the parts of the plant that

are difficult to reach with natural daylight and HPS light. Peters: "If customers have a choice between tomatoes grown under LED lighting and tomatoes grown under HPS lighting, they choose the LED grown tomatoes. That's why I decided to equip the last four hectares of the greenhouse with LED lighting as well. It simply gives me an advantage in the market." In the new facilities, Peters grows plum, medium and cherry tomatoes on the vine to meet the increasing retailer demand.

Peters: "By using LED lighting the plant is much stronger and healthier and it stays healthy longer. That comes back in the kilograms per square meters and it comes back in the quality of our product. Our energy costs are lower and we can produce crops of a consistent quality and flavor all year round. With Philips LED I've made huge progress on all fronts.

“

Experience has taught us that the production models calculated by Philips Lighting are **always accurate and achievable.**



## Facts

#### Nurseries

Wim Peters Kwekerijen

#### Sector

Fruit and vegetables

#### Crop

Plum, medium and cherry tomatoes on the vine

#### Location

Someren, the Netherlands

#### Philips LED Horti partners

CODEMA - B-E De Lier

Agrolux

#### Solution

Philips GreenPower LED interlighting High Output

#### Benefits

On site production of more consistent, high quality tomatoes year-round. Higher yields and lower energy costs.





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