



# CASE STUDY POLELED

## RELIABLE PARTNER FOR LED, LENSES AND TECHNOLOGY

PoleLed supplies lighting for flagpoles. From snow regions to the desert. LED lighting that must therefore perform under extreme conditions. After Chinese LED lamps failed, PoleLed opted for Thal Technologies. A choice that served them very well.



## RADIANTLY VISIBLE

Flags and banners are particularly powerful attention grabbers for businesses and shops. Waving proudly, they show you the way and welcome you. Scientific research proves that movement in combination with light gives the highest visual attention value. This visibility - and therefore also findability - is extended by about 45% per day.

Based in Gelderland the company delivers all over the world. So no matter how the wind blows, no matter how high or low the temperature is, their lighting must be able to take a beating. And of course meet the highest demands in terms of energy consumption and efficiency.

## FIXED

Thal's 'know-how' of heat conduction has been applied by PoleLed in a new, third-generation lighting model made of aluminum. 'The heat problem caused by the electronics has been solved in one go', says Dennis van de Peppel, partner at PoleLed. 'Moreover, Thal advised us on condensation solutions. The light beam is covered with a glass plate, which is sealed with a special sealant. However, due to temperature differences, condensation can still cause problems; one drop of moisture in it and the light goes out. Thal Technologies has therefore recommended a special filter for all outdoor fixtures, so that moisture cannot get in but can get out. Now this filter is standard in all fixtures. We've never had a problem with damp again.'



*"Our model at the time was too small for that. Thal Technologies then partnered with us."*

**Dennis van de Peppel**

Head of Marketing & Sales



DE POLELED EXTENDED.  
LED FROM THAL TECHNOLOGIES

## GURU

The demand for a new model arose when PoleLed received an order from IKEA to illuminate all flags at their Dutch stores. 'Our former model was too small for that. Thal Technologies then partnered with us. Owner Ad Musters is one of the led-leaders of the Netherlands. With the fixture on the table, he then starts drawing and calculating in his notebook.'

## HIGH DEMANDS

'We place the lighting fixture close to the ground, around the flagpole or halfway up the pole, just below the flag. This is how we create optimal visibility. The challenge is to get a beam of light that is powerful enough to radiate upwards and horizontally. In the beginning we spent a long time finding the right optics (point of view) and lenses with which we could achieve the desired result.'

## LEAKING LAMPS

Initially, PoleLed had 500 LED lamps made in China for this purpose. 'That didn't go very well. Not with the communication, but also because those 500 lamps were not glued properly. In addition, we had our doubts about the durability and quality of the drivers.'

## PRODUCE MORE EFFICIENTLY

PoleLed opts for production closer to home and asks Thal tech to develop and produce the LED modules and lenses. 'That was also easier for the assembly at PoleLed, because our lamp consists of twelve LEDs that were then screwed in one by one and soldered. Thal Technologies has now devised a method for us that makes assembly easier and faster. Thal has developed an LED module that can be installed quickly and easily in the fixtures. Before that we made forty lamps in a week, now 100 in a day if necessary.'



# THIS IS THAL TECHNOLOGIES

Thal Technologies in Almere has been advising, designing, assembling and manufacturing for 20 years in the field of thermal management and LED lighting.

We supply heat-conducting materials for use in electronics. This makes Thal Technologies a specialist in solving heat problems. Cooling the hardware extends its life, prevents overheating and increases performance.



Thal Technologies also develops and produces customized industrial LED solutions. These high-quality LED modules can be found in horticulture, aviation, offshore and onshore wind turbines. Thal Technologies stands for quality. We guarantee this with our ISO certifications and with certifications that suit the various industries in which Thal Technologies is active. But also with extensive traceability of components and raw materials.



**CHALLENGE US WITH YOUR PROJECT!**

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INCREASE YOUR VISIBILITY

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