Industry Standard UV Resistant
polycarbonte with hard-coat

The Hard-Coat Difference

Raw, injection molded plastic begins to degrade immediately when exposed to the environment. Whelen's hard-coating increases the visual life of the light to 7-10 years, providing UV and scratch resistance from sand, salt, sun, and road chemicals.

Industry Standard UV Resistant
polycarbonte without hard-coat

WHELEN®
TRUSTED TO PERFORM™

About Whelen Engineering

Whelen designs and manufactures reliable and powerful warning lights, White illumination lighting, sirens, controllers, and high-powered warning systems for Automotive, Aviation, and Mass Notification industries worldwide. Every part of every Whelen product is proudly designed and manufactured in America and is tested on-site to meet the toughest industry certifications. On the road, in the air, and around the world, Whelen is trusted to be seen, trusted to be heard, trusted to perform.

⚠ **WARNING:** These products may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit whelen.com/regulatory.

www.whelen.com
51 Winthrop Road • Chester, CT USA 06412

13171C - 10/03/2019

WHELEN®
TRUSTED TO PERFORM™

Hard-Coated Lenses

At Whelen, we utilize an industry-first innovative process to counteract the effects of environmental and chemical damages to our lenses and domes.

We hard-coat as many as 35,000 lenses every 24 hours in our New Hampshire facility. It takes just 15 minutes for a lens to make it through the entire process.

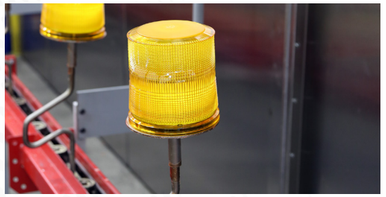
Whelen's Hard-Coating Process

Step 1

The raw lenses and domes, composed of UV resistant polycarbonate, are placed onto custom fixtures in the loading area.

Step 2

In the cleaning station, lenses are washed with isopropyl alcohol to clean the surface and remove any debris.



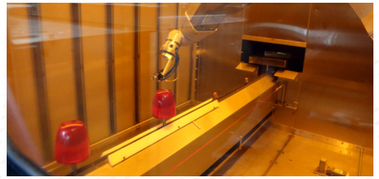
Step 3

The spray off area dries the lighthead surface, removing any static charge.

⚠ **WARNING:** These products may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit whelen.com/regulatory.

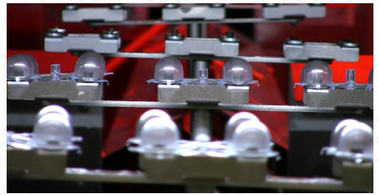
Step 4

The six axis robot sprays the lenses with the hard-coat with an atomizing spray gun in a clean, stainless steel environment free from outside contaminants.



Step 5

The infrared heating oven heats the lenses to 160°F, breaking the chemical bond and infusing the hard-coat into the lens.



Step 6

The UV lamp oven utilizes 20 high intensity UV lamps that solidify the hard-coat.

Step 7

In the unloading area, a spectrometer measures thickness of the hard-coat, and lenses are 100% inspected and sorted.

⚠ **WARNING:** These products may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit whelen.com/regulatory.

Whelen products feature UV resistant polycarbonate lenses, but we hard-coat for added durability and reliability.