

# UV LED Curing Technology

A coating curing technology saving customers money with a positive impact in the environment.

**+12%**

Global fiber optic cable market grows by an average of 12% every year.

Start of development with partners

2014

Developed and commercialized in

2017

Updated and improved in

2019

## Disadvantages Mercury lamp UV curing



Mercury is harmful to the environment



High Energy Consumption



Excessive Noise

## Challenges

**1** Formulate coating resins to optimize the UV LED curing characteristics

**2** Adapt and support ever increasing draw tower speeds

## The Innovation

Covestro coatings for optical fibers took the lead and explored uncharted territories – and has developed an innovative new coating that can be LED cured.

Covestro coating formulations optimized for LED cure



+



UV light sources were developed to provide the required light wavelength.



LED light system is optimized to obtain required intensity on fiber.

## The Benefits

**-80%**

Saving Energy cost

by replacing mercury lamps with LED lights.

No warm up period and instant on/off

Creates a better workplace:

**By reducing noise**

**By reducing heat** as LED lights run at 60°C and microwave lamps run at 250°C

Reducing the carbon footprint

Cut down cost of maintenance

## The optical fiber cable

The Covestro cable coating solution is designed to protect the optical glass fibers within the optical fiber to secure the reliability and durability of the network. Fiber optic cables are used for many applications like 5G networks.

