

# **UV CURING ON MOBILE PHONE**

### The Client

The client is a multinational company, with net sales of over EUR 700 million in 2012, employs more than 12,000 people worldwide, provides services and technology solutions from design and concepts to manufacturing, final assembly and testing for the telecommunications and electronics industries.

### The Process

Mobile phones is one of the products that the client manufacturers and is involved in molding, coating, curing and assembly of the mobile phones. They use UV curing to cure the scratch resistance UV coating that is sprayed on the handheld mobile phones case. A captan with several mobile phone cases is rotated in front of the UV lamps for a few seconds to cure the coating.

# The Objective

Client was currently curing 24 mobile phones placed on a single capstan in 27 seconds. They requested our assistance to decrease this cycle time, thus effectively increasing their production.

### **Our Solution**

We studied their current UV system configuration and also took several trials at our own lab. We found out that the bulb position of the UV systems was not aligned in the best curing position. Separately, it was also noted that they were bringing the parts in the UV chamber and only after that they were turning ON the UV light, losing valuable seconds during the TURN ON cycle. We worked with them on the design where the capstan would come rotated into the UV chamber with the UV light always TURNED ON and also configured the UV systems such that the bulb position was perpendicular to the motion of the parts.

## The Results

This design change enabled the end user to decrease their cycle time from 27 seconds to 9 seconds, thus effectively increasing their production three times.

### Contact us to know more

**Ankit Singhal** 

Mobile: +919650840033

Email: Ankit.singhal@simcogroup.in