

# Siliconizing of industrial fuses using UV curing

## The Client

The client is a multinational company with revenues of \$5.4 billion in 2011 that brings to India leading fuse technology, making more than 75000 different types of fuses, that deliver critical circuit protection, power management and electrical safety.

## The Process

UV curing is the one of the process step for fuse manufacturing. The process required placement of UV silicone over the fuse element after which they are shown UV light for fast curing of silicone.

## The Objective

Client was in the expansion phase and their current UV curing process was in a batch cycle which was taking them more than 180 seconds to cure a single tray of fuses. Since batch UV curing was becoming the bottleneck in their production, the client contacted SIMCO to help them increase their production by switching from batch process to continuous UV curing setup.

## Our Solution

We conducted thorough trials in our application lab using our UV curing system. We designed and developed a continuous process using Heraeus Noblelight Fusion UV's F300, 300 w/inch uv curing systems. The reason for using Fusion F300 was due to its higher energy compared to any other UV system in comparison, bulb life of over 8000 hours and consistent energy and spectrum throughout the life of the bulb.

## The Results

The continuous process that we developed was able to reduced UV curing time from 180 seconds to 12 seconds. This meant an increase in production by 15 times. This also meant that using a single continuous UV curing system they were able to replace 15 batch units, which was a huge saving in real estate. An added advantage of using our system was decrease in rejection and better quality of products due consistent and reliable UV energy source supplied by us.

## Contact us to know more

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