

LED Lighting For The Amazing Spider-Man 2



The Making Of *The Amazing Spider-Man 2*

Credits:

Director:	Mark Webb
Cinematographer:	Dan Mindel
Production Designer:	Mark Friedberg
Art Director:	Kim Jennings
Gaffer:	Chris Prampin
LED Set Electrics:	Steve Greenberg

Working on *The Amazing Spider-Man 2* was one of the most challenging and interesting projects that City Theatrical has ever been involved with. The story of our involvement has been documented by PLSN Magazine, and you can read that article [here](#).

CTI was called in by Production Designer Mark Friedberg to give help and advice on LED lighting. Mark's assistant, Michael Fails, first suggested to Mark that CTI would be a good resource to consult on the lighting. Mark's vision of the movie included several important scenes that would be most effectively accomplished using LED tape. Most importantly, the climactic scene of the film took place in a large outdoor power plant and lighting would play a pivotal role in that scene.

Mark asked CTI to make up some test pieces to investigate how LED tape could be integrated into the set. We started by making simple mockups around 55 gallon oil drums, and experimenting with different tapes, and wiring and control schemes. The first simple proof of concept looked like this in the CTI shop:



We improved that a bit with some custom cut and soldered LED tape pieces.



Next, we made some foam core rings to surround the drum, and experimented with changing colors and dimming.



We did a quick cell phone YouTube video to share with Mark and his team.



[\(click here\)](#)

Mark Friedberg and his team were of course in the middle of designing one of the largest motion pictures ever made, with a budget of over \$250 million. They were extremely busy every day shooting all over the New York City area, and on location in other areas. Meanwhile, the scenery for the power plant scene was starting to be constructed at a studio on Long Island.

Like our original proof of concept, the actual towers for the power plant scenes were made from 55 gallon oil drums, welded end to end, about 20' tall.



Meanwhile, even though no one knew exactly how they were going to be covered in LED tape, hundreds of oil drums were being welded into towers at the studio on Long Island.



Eventually, Mark and his team decided on a design that utilized horizontal bands around the towers, and vertical channels up the sides of the towers. Later, those towers would be expanded via computer graphics to grow the field much larger on screen.

In the CTI shop, our crew was beginning to create custom LED wire harnesses for the towers, and to cut and solder over 300 rolls of LED tape of various types. At the studio, Local 52's Steve Greenberg supervised the LED set electrics crew that installed and tested the LED tape and wire harnesses.

LED Lighting in The Amazing Spider-Man 2



On the studio lot, a green screen canyon about the size of a football field was created and the power plant scenery installed into it. The canyon was constructed from cargo shipping containers stacked five high and two deep.







CTI played only a small part in this vast film. We truly enjoyed helping Mark Friedberg achieve his creative vision.

Here are some images of the completed visual effects.

