

How to successfully cope with ever-changing industrial demands.

## Industrial Fabrics

### Under a perfect shade.

With over 40,000 square meters (430,556 square feet) of shade structure products, Egypt-based shade specialist, FTH-Industries, delivers standalone shade structures to schools for playground areas, sun covers, shade canopies for car parks and industrial shading structures.

FTH-Industries uses heavy-duty materials—HDPE fabrics as well as PVC tarpaulins—in their shade structures. Until recently, the traditional sewing application for large and heavy items, like tarpaulins, consisted of using rings to connect ends.

However, a problem often recurred when connecting more than one fabric roll to produce larger spans: To achieve reliable connections, the staff at FTH-Industries needed at least two sewing passes, which regularly resulted in lower outputs due to this time consuming procedure.

Another problem lay within the thickness of the PVC tarpaulins: For larger spans, 750 to 900 gram (22 - 26.5 ounce) material and higher were used. Now, imagine the difficulty of moving this weight through a sewing machine! Use of thick UV-treated threads did not make the job easier.

Facing an increasing demand for PVC tarpaulins FTH-Industries decided to renew their processes to cope with industrial needs.



A typical standalone car park shade structure.

© Copyright Yasser Aly, FTH-Industries

First, FTH-Industries searched for an economic and reliable solution and compared materials and technologies such as high frequency welding and hot air welding technologies.

Finally, FTH-Industries determined that hot air welding was a good solution for their needs and contacted Cairo-based Leister Distributor, Saad Hanna Sons, for a live demo. Saad Hanna Sons knew that the best tool to use for this application was the Leister UNIPLAN E.

In the beginning there were quite a few challenges to master, like the optimum combination of speed, air flow and welding temperature, which all have an important impact on the quality and aesthetics of the welding seam.

For shade structure products, the connection between the shade material and the steel structure is very important since steel wires (or steel grids) must be embedded in the fabric with their curved paths. The UNIPLAN E mastered those curved areas with elegance.

Saad Hanna Sons supported FTH-Industries until the desired results were achieved. The production team also used a TRIAC AT hot air hand tool for cut-offs and smaller areas which could not be reached by the UNIPLAN E.

### Conclusion

Having the UNIPLAN E on board made long distance welding fast and easy, thus saving lots of time as it delivered consistent, reliable results. Due to the vast range of possibilities that the UNIPLAN E offers in the production process, FTH-Industries is able to offer new and innovative solutions to their customers and benefit from new business opportunities.

### Leister Sales and Service Center:

Saad Hanna Sons, Cairo [www.shsco.net](http://www.shsco.net)

### Customer:

FTH-Industries, Cairo  
[www.facebook.com/fthindustries](https://www.facebook.com/fthindustries)

### Welding Materials:

HDPE and PVC, steel wire, steel grid

### Leister Products:

UNIPLAN E [www.leister.com/UNIPLAN\\_E](http://www.leister.com/UNIPLAN_E)

TRIAC AT [www.leister.com/TRIAC\\_AT](http://www.leister.com/TRIAC_AT)

### Text / Fotos

Leister AG / FTH-Industries