

## Surface Mapping

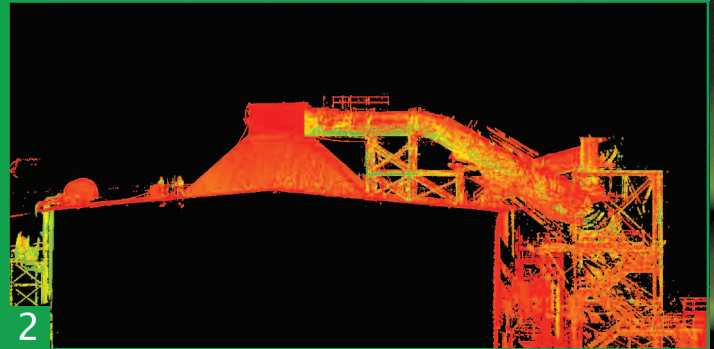
**L**aser scanning is one of the newest surveying technologies available. This technology allows Falk PLI to surpass the limits of traditional surveying. The Laser Scanner measures individual points at a high rate of speed then joins all these points together into Point Clouds. Each Point Cloud contains millions of points, with each point in the cloud having 3D (X,Y,Z) coordinates with an accuracy of  $\pm \frac{1}{8}$ ". Measurements are taken on objects with little or no physical contact, promoting an efficient and safe work environment.

Falk-PLI used Laser Scanning technology to assist our client with the design of a new structure to be placed on top of an existing roof. The laser scan point cloud data was used to generate a 3D model of existing conditions. The 3D model was then used for the basis of the design work. By using this methodology, the designer was able to detect a 4' elevation error in the design prior to beginning construction, saving time and money on the job site.

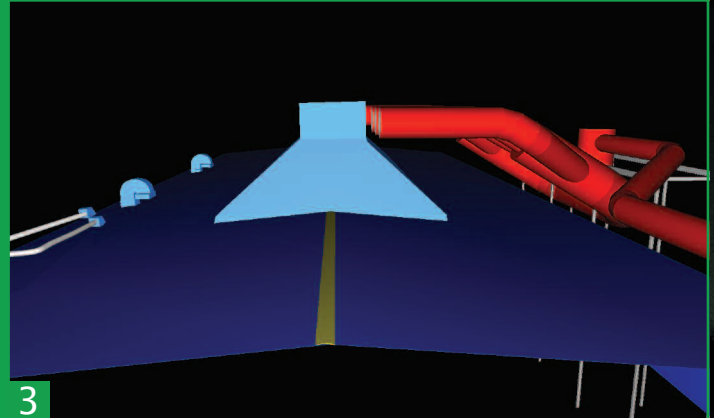
Civil and structural applications include aid in construction and design, as-built verification, and structure settlement or deterioration for bridges, roadways, commercial properties, historical renovation, and industrial piping.



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2



3

- 1 **Photo of roof line structure**
- 2 **Point Cloud Model**
- 3 **Computer generated 3D model to aid in design**

## FALK PLI

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