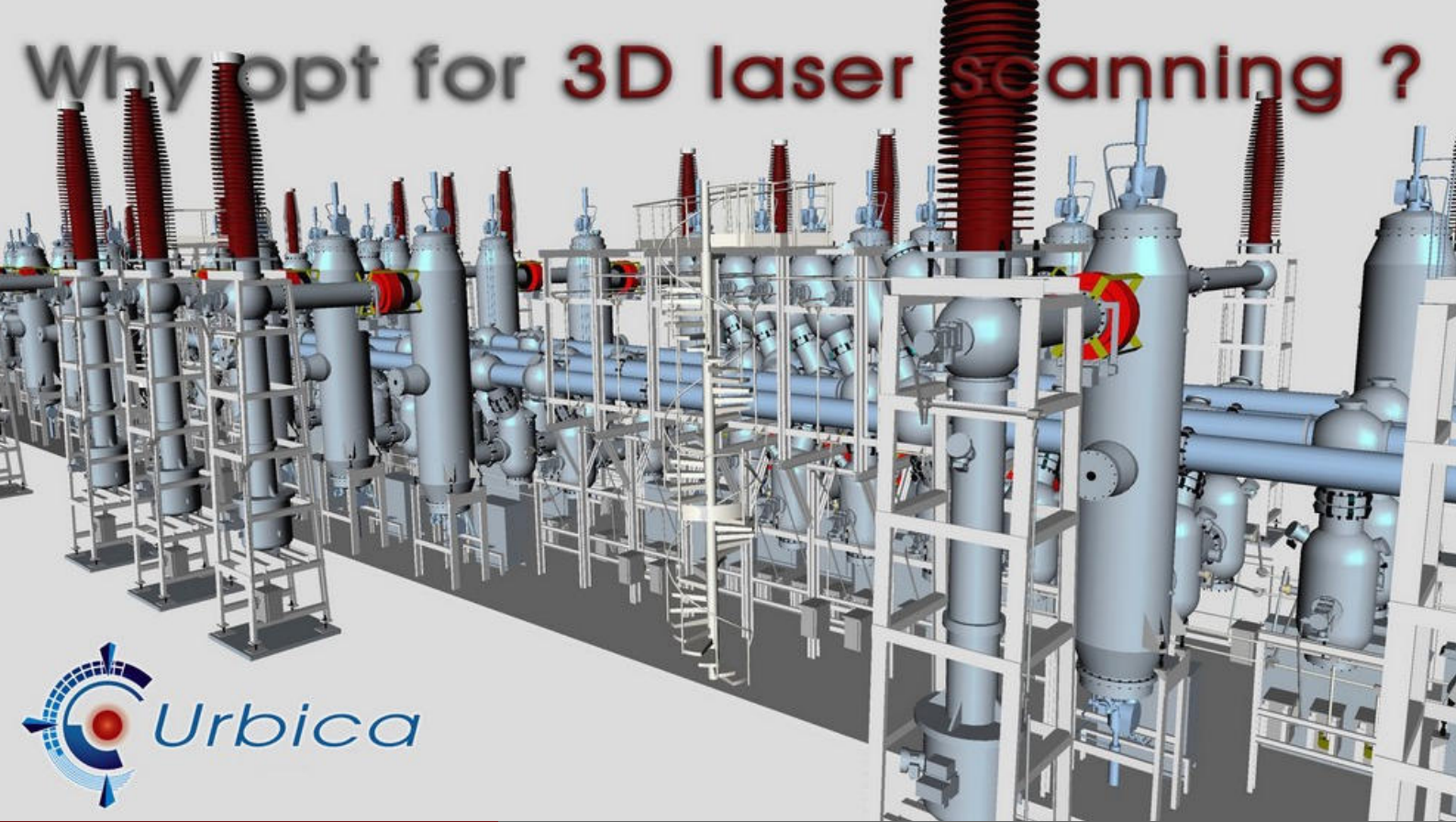


Why opt for 3D laser scanning ?



EVERYONE'S TALKING ABOUT IT...

This page is aimed at industrial companies who have already exploited the limits of conventional CAD to the full.

As industrial designers, project managers or engineers, you will be responsible for the maintenance or revamping of complex installations. You feel that 3D laser scanning might be the solution to the multiple interactions involved in your project. However, you are still reluctant to switch over to a working method which would involve the services of an entire team, a department or even a company!

In practice, this issue cannot be restricted to your own department; you will need to consider the impact of this change in consultation with the entire chain of operators involved in the project, both vertically and horizontally. You may be surprised by the number of persons in your entourage who are already familiar with 3D scanning in a private context...

Your role will be to convince doubters (regarding cost, complexity and stability) of the dynamic impact of 3D scanning upon your company. Drawing on its experience and the contacts forged with software publishers, Urbica can support you in the decision-making process.

You can rely on Urbica as a partner in your development.

TAKING THE FIRST STEP

3D scanning right away?

Take stock of the projects currently in progress in your business and ask the question: could analyses in progress be undertaken by 3D laser scanning? What are the benefits and the drawbacks? Do we have sufficient equipment and human resources to accommodate this change? Which players would be affected by this switchover?

Genuine advantages?

The transition from theoretical 3D CAD to 3D "as-built" scanning will involve a degree of preparation: upgrading of hardware, the training of personnel and the procurement of licences. However, it is likely that you already have the necessary tools to hand, just waiting to be used.

Once in service, 3D laser scanning will deliver the following:

- A complete "as-built" working base
- Clash detection between plans and the actual situation.
- Better understanding of installations
- Enhancement of your analyses
- Rapid generation of a 3D model
- Accurate dimensional measurements
- A global vision of the project: reduction of errors, losses of information and omissions.

Choosing a software

The majority of conventional CAD software publishers have developed a suite for the integration of 3D point clouds. Autodesk, Bentley, Intergraph, AVEVA and Dassault Systems have tools which are compatible with conventional CAD tools. In many cases, other less familiar (plug-in) tools will be more ergonomic and more cost-effective (ask us for details).



How to get started

The majority of companies who embark upon 3D scanning do not abandon their existing working method altogether. These companies start with a pilot project, which provides the opportunity to test this new process and to rectify any possible complications.

Once the pilot project has been defined, we will take you through the step-by-step stages which will ultimately lead to the integration of "as-built" plans in your project.

You can read Urbica's success stories at www.urbica.net.