



PROJECT

PROJECT DATE:

October 2008

DESCRIPTION:

Fessenheim nuclear power plant
Bugey nuclear power plant
Turbine halls
Replacement of heaters

RESOURCES:

2 engineers
1 Trimble FX scanner

CONDITIONS:

2 days / 2 nuclear power plants
6 heaters
Qualified personnel

RESULT:

Cloud of points (6 billion)
51 scanner stations
Overall accuracy to 10 mm
1 week of post-processing

3D LASER SURVEY OF TURBINE HALL

The 30th anniversary of the Fessenheim nuclear power plant is a reflection of French expertise in the industrial sector.

The 19 French nuclear sites operated by EDF are constantly in need of maintenance which is more reliable, faster and more cost-effective. In October 2008, OLLEAN Luxembourg, specialists in industrial maintenance, appointed Urbica to survey the environment of heaters in the Fessenheim and Bugey power plants, in preparation for their replacement. Eight hours on each site were sufficient to plot the kinematics of the 3D movements of the 6 heaters, from dismantling to their site of storage, with a high degree of precision (objects up to 10 mm of diameter)

The 3D model, reconstructed in Solidworks, supports the analyses conducted by engineers for the anticipation of major maintenance works, which are often timed to coincide with the shutdown of the unit. The exhaustive 3D surveys generated by 3D scanning will eliminate any omission or errors of measurement on site.

Within days of the completion of surveys in the nuclear power plants, OLLEAN Luxembourg already had a 3D model of the turbine halls. This file was a basis for the start of analyses for the replacement of equipment, with the assistance of an Urbica engineer in their offices over a period of two days.

For further information, please consult the Urbica team.

