

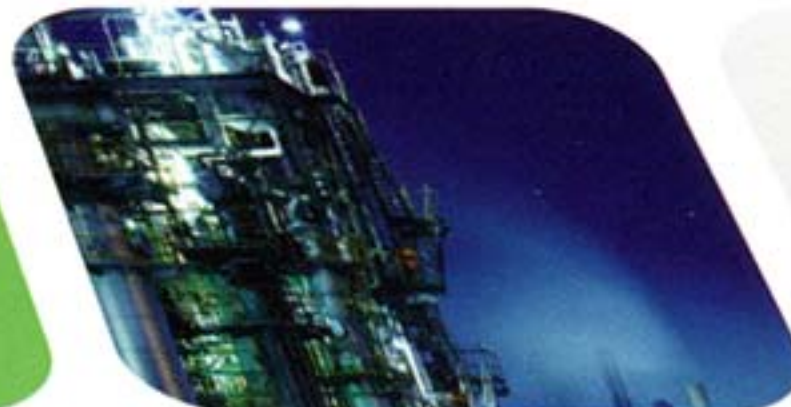
2012

The Year in **Infrastructure**

The Extraordinary Infrastructure Projects of the 2012 *Be Inspired Awards*



Bentley®
Sustaining Infrastructure



INNOVATION IN MINING AND METALS

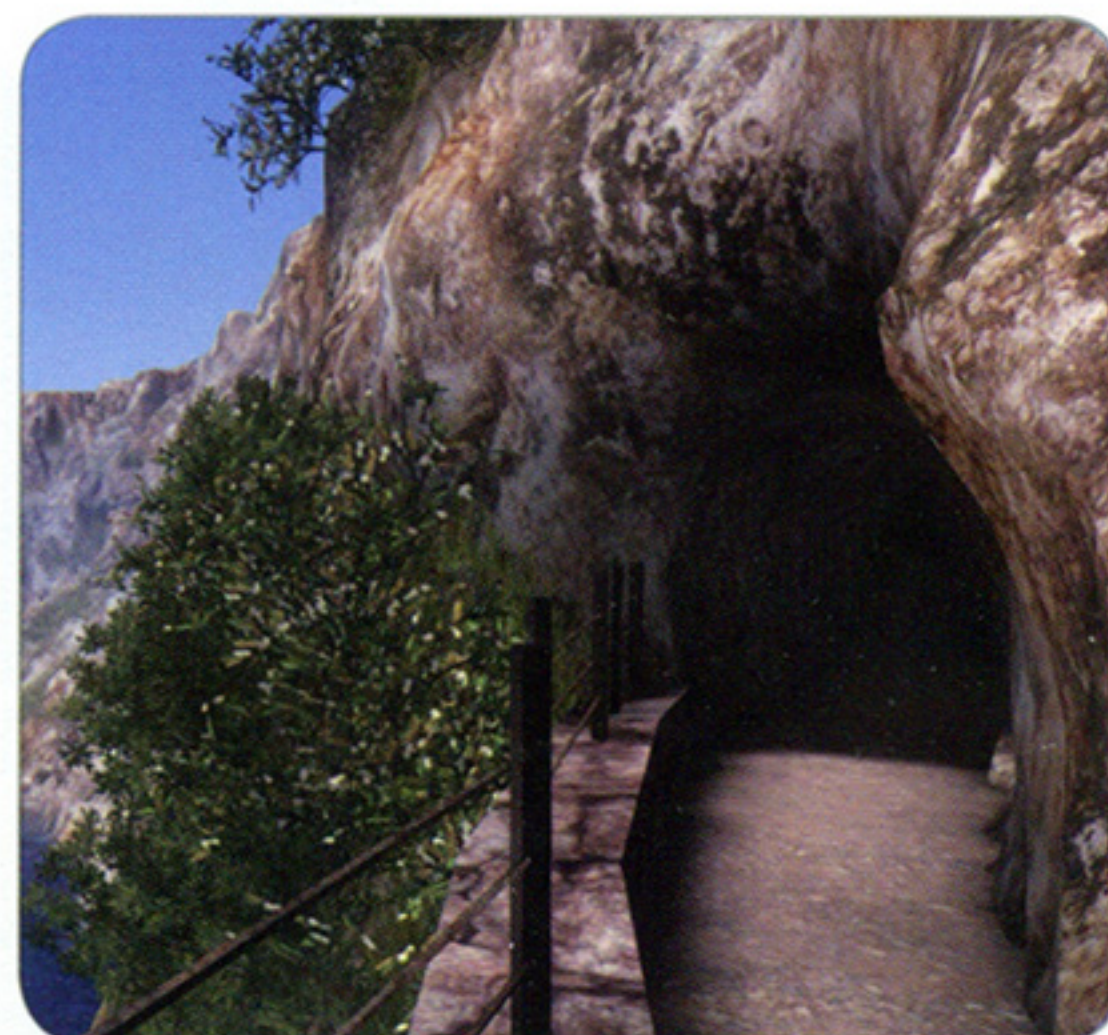
SJM Tech S.a.s.

3D Mining Complex Virtual Tour

Buggerru, Italy

SJM Tech produced a 3D virtual tour of two historical mining facilities in Buggerru, Italy. The interactive visualization was created using more than 1 terabyte of survey data from more than 200 laser-scanner stations located at the Porto Flavia and Galleria Henry mines. Available for viewing on the web, the simulations provided a high-fidelity representation of the structures as well as audio-visual content strategically positioned along the visitor's path.

MicroStation provided the platform for combining the complex survey data in optimized 3D textured models. SJM Tech's work involved aerophotogrammetry and digital cartography, 3D digital terrain model optimization, 3D mesh data manipulation, laser scanner point-cloud visualization, and 3D modeling and texturization. The final DGN file was exported to the client's CAD application.



About the 2012 *Be Inspired Awards*

The annual *Be Inspired Awards* program brings together infrastructure professionals and members of academia from around the globe. Its goal is twofold: to advance innovation and best practices in design, engineering, construction, operations, and project delivery, and to promote the extraordinary work of the organizations that help sustain the world's infrastructure.

The *Be Inspired Awards* has recognized more than 2,000 of the world's most outstanding infrastructure projects since its inception in 2004. The projects nominated for the *Be Inspired Awards* are submitted by Bentley's global community of users. This year, five independent panels of jurors, comprising accomplished Bentley users and distinguished industry experts, selected the 58 finalists and the *Special Recognition Awards* candidates from nominations submitted by organizations in 39 countries.

At the 2012 *Be Inspired: Innovations in Infrastructure* event in Amsterdam, representatives of the *Be Inspired Awards* finalists presented their projects before the jurors – for their consideration in the final tally – as well as the members of the media and other industry executives in attendance. The winners were announced during the highly anticipated *Be Inspired Awards* ceremony, which was the culmination of the event.

Winners of the *Be Inspired Special Recognition Awards* also presented their projects and were recognized during the ceremony. The candidates for these awards were placed into nomination by the jurors for their uniquely innovative and visionary achievements embracing multiple *Be Inspired Awards* categories. The nominees were then reviewed by a panel of Bentley executives.

All of this year's nominated projects are presented in *The Year in Infrastructure 2012*. By showcasing the outstanding achievements in sustaining infrastructure across the globe, Bentley shares the innovation in best practices among the organizations and professionals who make these projects possible. Searchable digital versions of *Be Inspired Awards* publications are available online at www.bentley.com/yearininfrastructure, and Bentley's *Be Inspired* Project Portfolios are available at www.bentley.com/projects. In addition, the recorded presentations of the winning and finalist projects can be viewed on Bentley's *Be Connected* online video library. Using streaming media, *Be Connected* is a sustainable way to learn from the innovative best practices and application of technologies from today's infrastructure thought leaders. To view these presentations, go to www.bentley.com/beconnected.