sjmTech

3D Technologies & Multimedia

www.sjmtech3d.com

- 3D Virtual Tour
- 3D Applications
- 3D Seriuos Game
- Web & Mobile

Established in 2005, **SJM-TECH** is focused on web design, innovation, and 3D applications.
Our mission is to experiment new visual communication formats and tools, making them available on smartphones, tablets, PC/Mac and any other media, as stand-a-lone or web applications.

Already selected by Bentley for The Extraordinary Infrastructure Projects of 2012 Be Inspired Awards, category “Innovation in mining and metals”.

Some of our international customers are: Microsoft, University of Bern, Desperado Restaurants, Mediaplanet.

We are involved in several partnership projects with: University of Cagliari (Faculties of Engineering, Architecture, Archaeology), University of Bern (Medical Science Faculty), CRS4 Research Center (I-CT-Information Society), architectural firm Politecnica (Florence), SPACE.

In the following pages some examples of our work portfolio.

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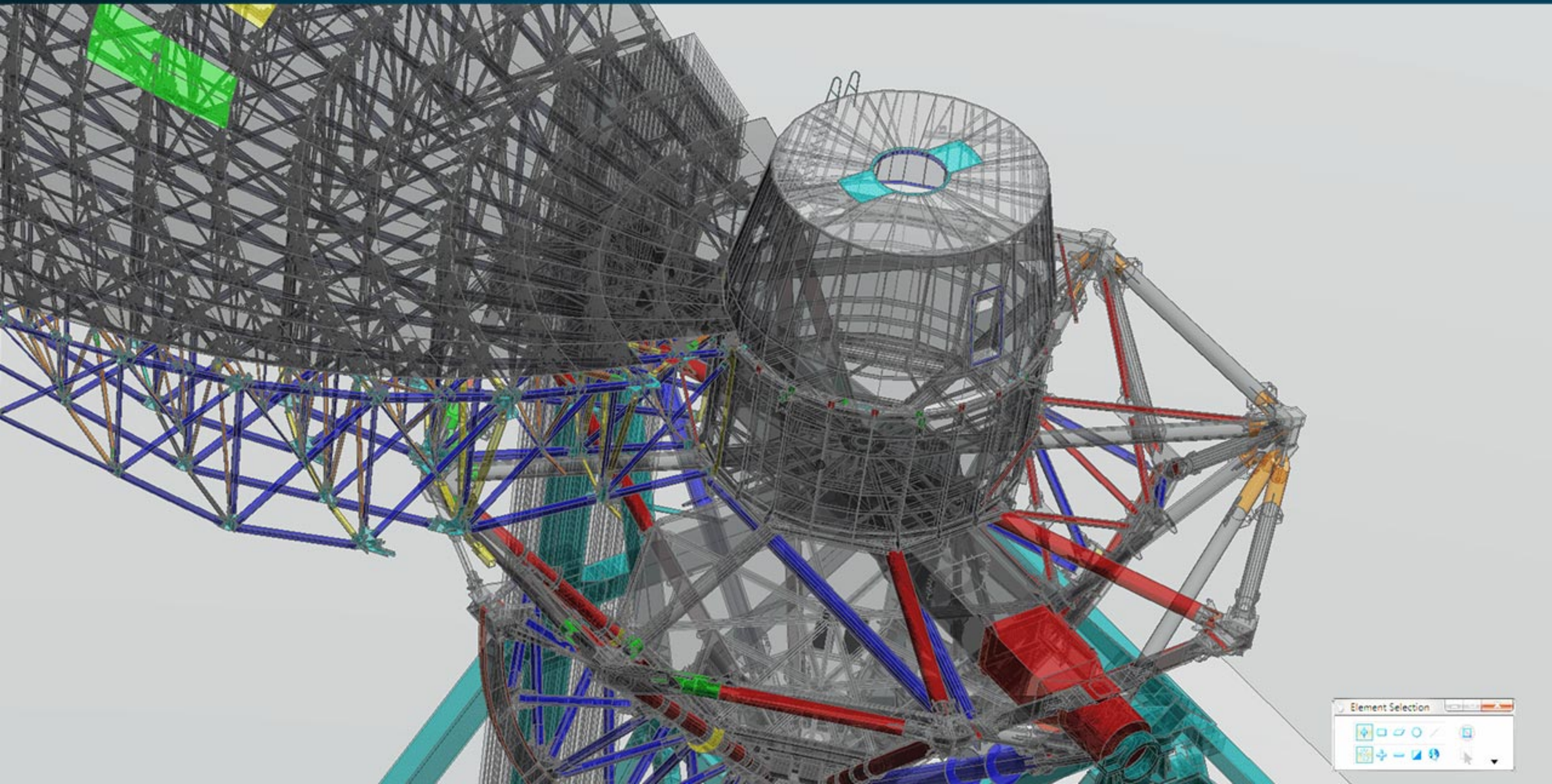
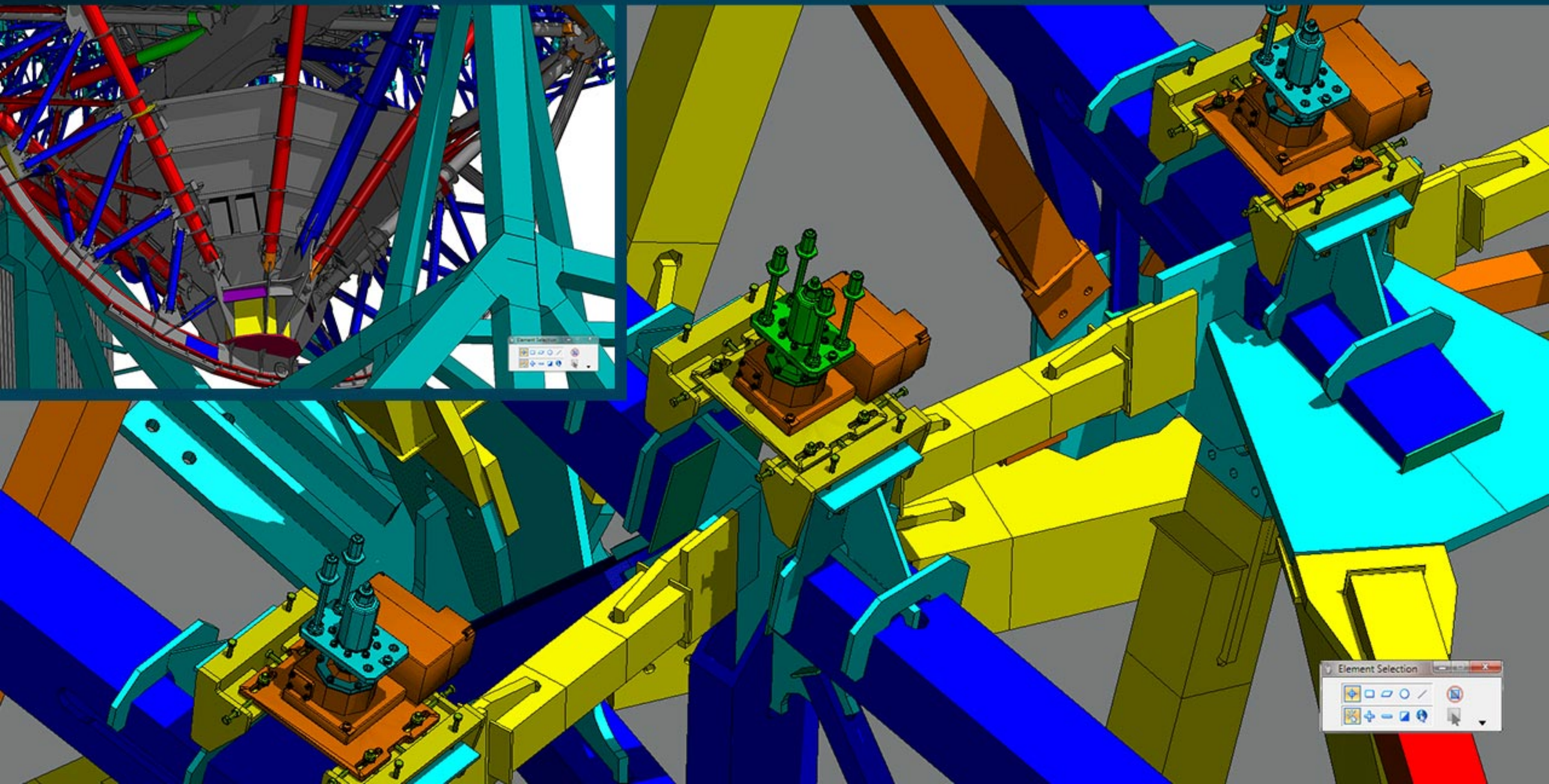
Sardinia Radio Telescope high detail wireframe view




Element Selection

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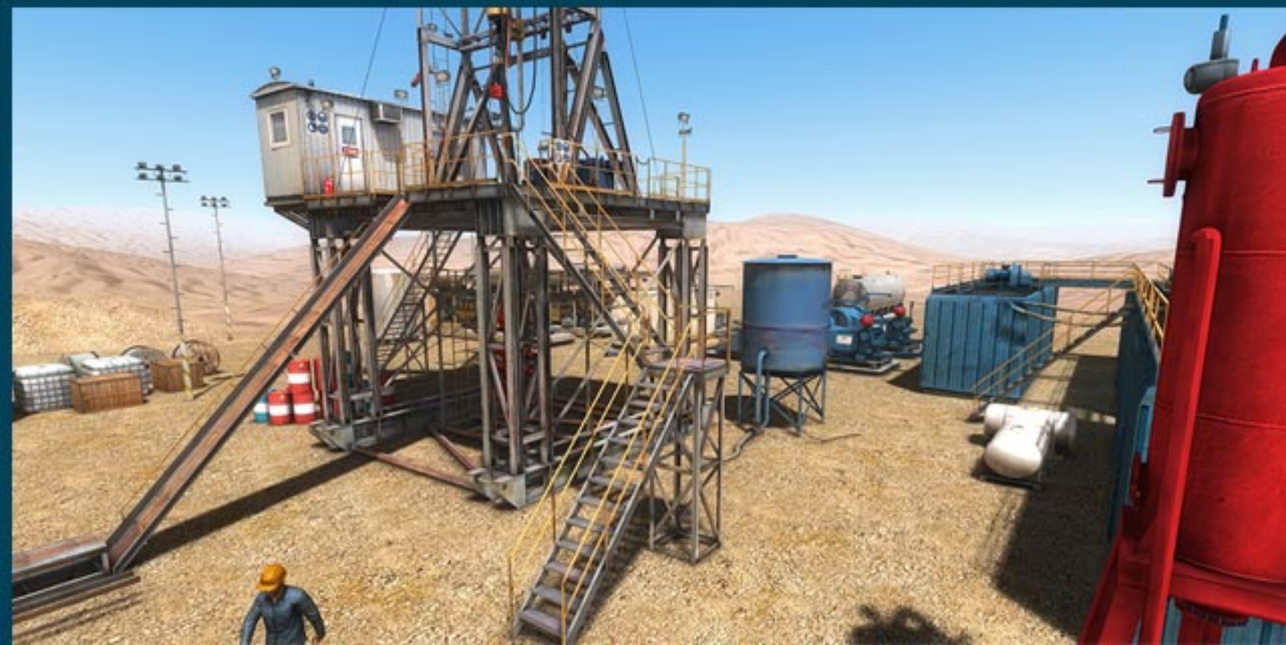
Oil Land Rig Interactive 3D Application



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Jack Up Drilling Rig Interactive 3D Application

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Sos Enattos Mine, Lula, Sardinia, Italy - Interactive 3D Application

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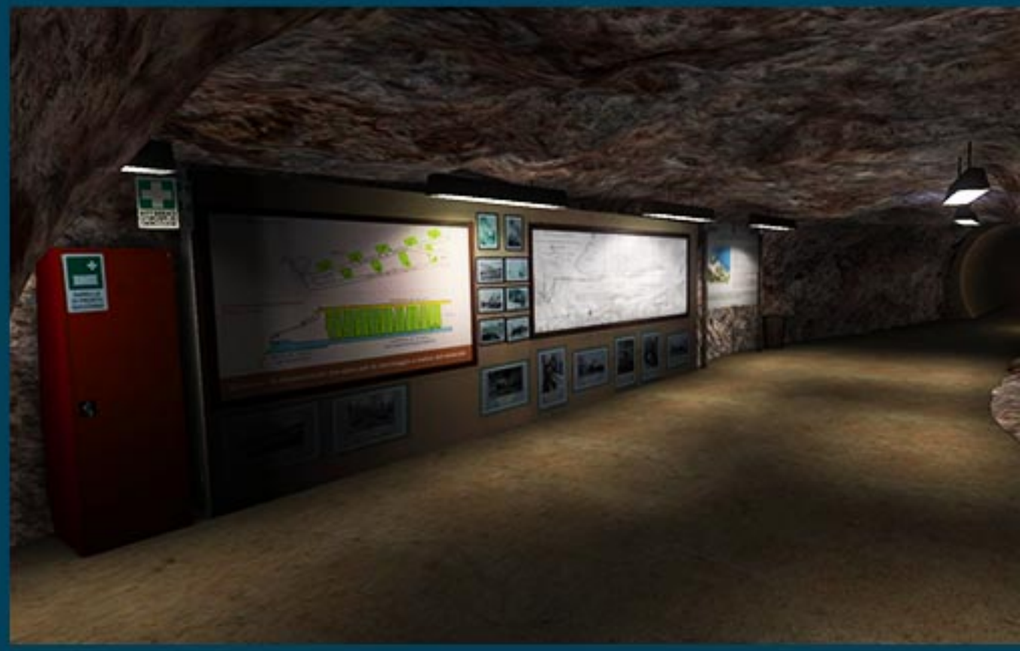
Porto Flavia mine facility, Masua, Sardinia, Italy - Interactive 3D Application



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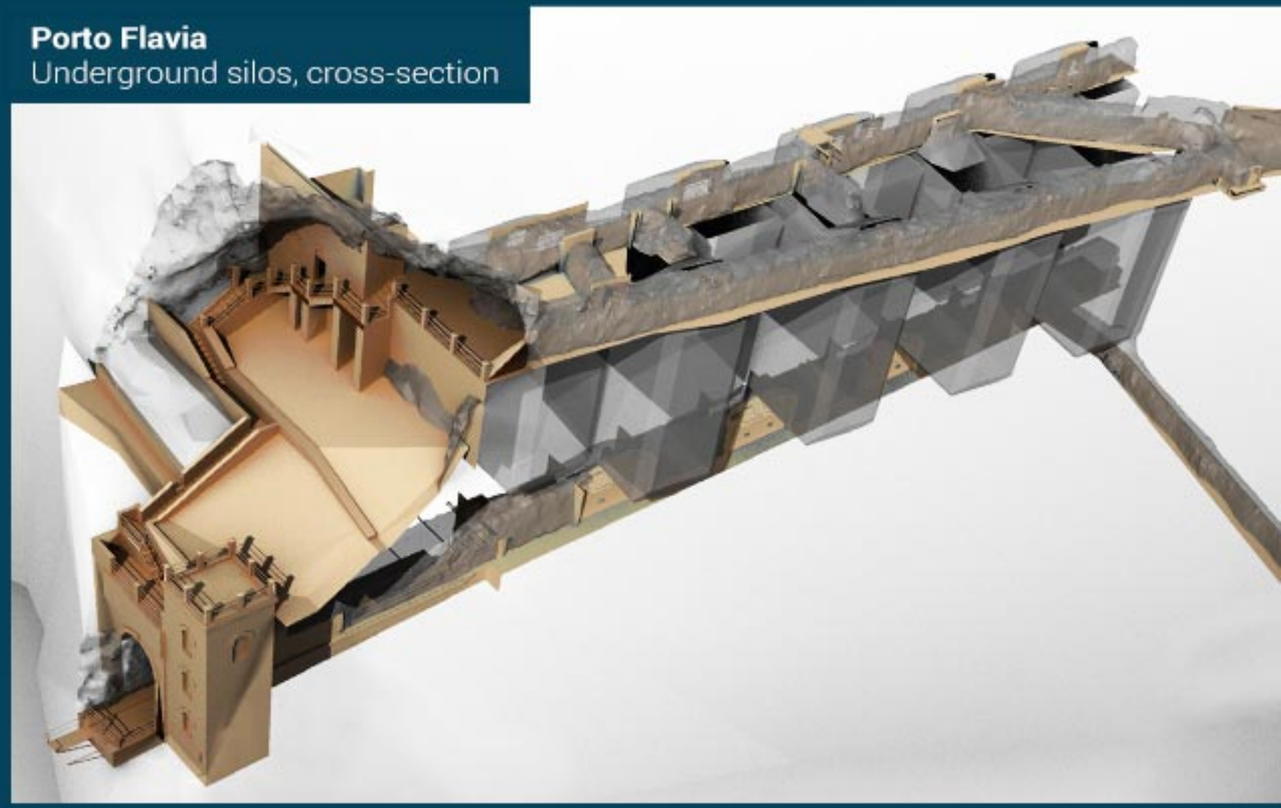
Galleria Henry and Porto Flavia - Interactive 3D Application

Porto Flavia
Underground silos, cross-section



Galleria Henry
Tunnel system and digital terrain model

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Capodimonte Virtual Museum, Naples, Italy - Interactive 3D Application

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Città Regie Museum, City Historical 3D reconstruction, Cagliari XVIII sec.

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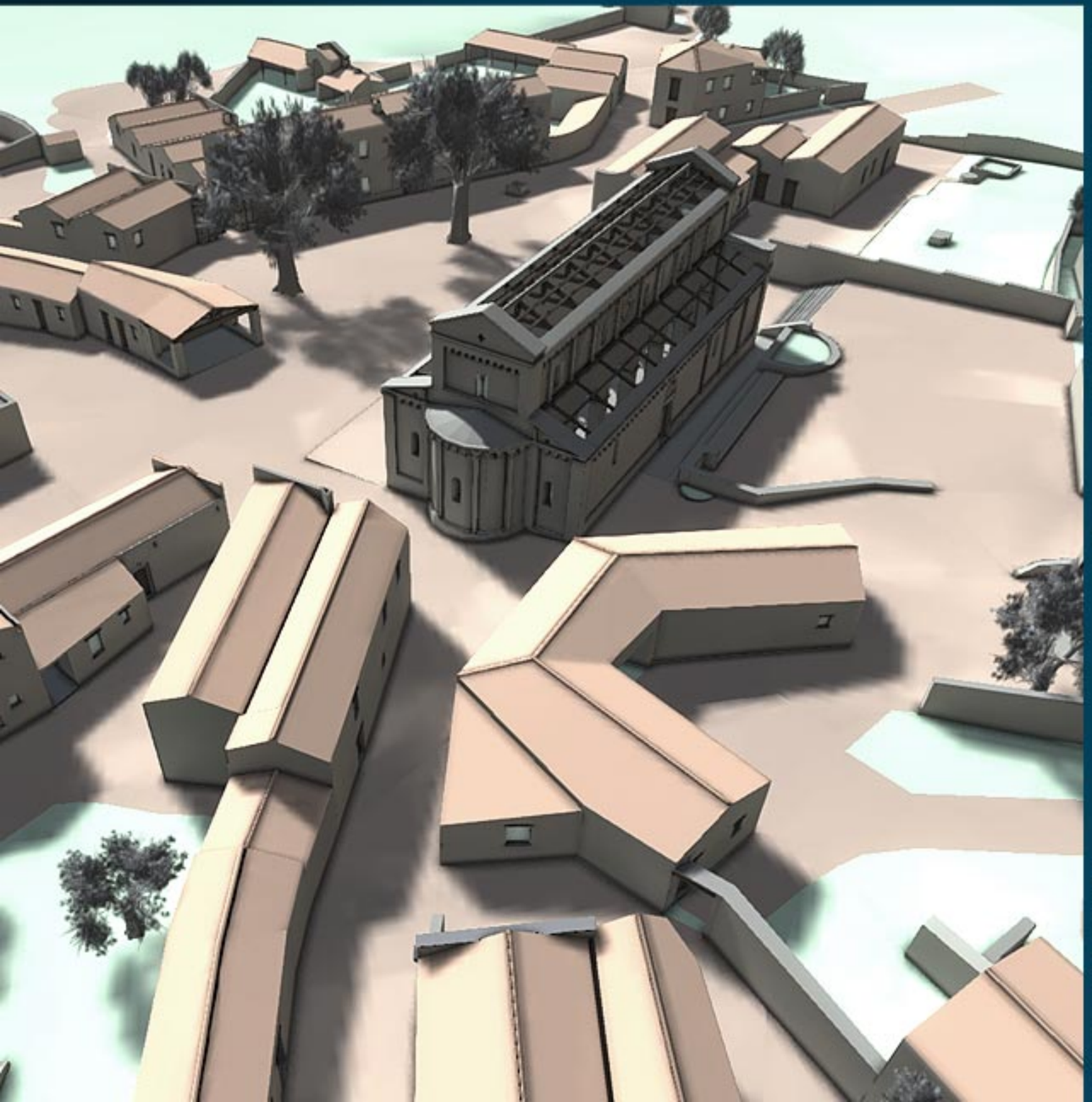
Nuragic village ruins (Sardinia) - Interactive 3D Application


Latitude
40°29'11.54" N
Longitude
8°46'10.97" E
Elevation
361 m



Fields of application

SJM-TEC is able to tailor solutions for different application's fields, adapting its technology and approach to match the Client's need.The main ambits are:

Industrial

Oil rigs (land and sea), refineries, ships (Tankers, LNG Carriers, Supply Vessels, etc...), power plants (solar, nuclear, coal, wind farms, gas), mining sites, factories, machinery, vehicles.

Applications:

- Plant familiarization for new personnel.
- Specific training for routine procedures, operating machinery, maintenance.
- HSE Training: Procedures, incident reports and analysis, scenario building.
- Logistic management: Virtual Assistant, Virtual Assembly, Virtual Catalogue, multiplayer remote visualisation of spare parts and maintenance assistance

Museum & Exhibits

Applications:

- Partial or complete virtual 3D reconstruction of museums and exhibits, including displayed items.
- Customised virtual tours configuration: allowing users to enjoy a complete or partial visit, detailing extra information on authors and items, creating thematic paths based on users interests and so on.
- Serious Gaming with educational or entertainment purpose.
- Lighting simulation software.

Medical

Neurology, anatomy, orthopaedics, dentistry, surgical.

Applications:

- Serious game with score attribution in order to improve the cognitive rehabilitation for Alzheimer or stroke patients.
- Human body exploration, ability to isolate muscles from bones, nervous system, circulatory system, respiratory system.
- Simulation of musculoskeletal movements, functioning of the circulatory, respiratory, nervous systems.
- Visualisation of diseases and malformations.
- Serious game to divulgate and improve good health habits, to train operators on CPR and first aid procedures.

Historical & Archaeological

Archaeological sites, monuments, former mining sites, industrial archaeology, historical city centres or old infrastructures. Reconstructions based on technical drawings, archive research or various surveys: laser scanner, topographical, photogrammetric, UAV (Unmanned Aerial Vehicle).

Applications:

- Virtual exploration serious game, with the possibility to show the site in its original form.
- 3D City reconstruction in different ages to highlight evolution over time.
- Mobile applications to manipulate and explore 3D models of selected arte facts or monuments

Urban Environment & Architectural

Cities, towns, real estate developments, resorts, city blocks and single buildings, roads, parks, landscaping

Applications:

- Reconstructions of areas affected by large urban redevelopment plans, with insertion of models of one or more proposed projects (roads, buildings, parks, squares, etc.).
- 3D reconstructions of complex buildings: interiors, exteriors, ability to generate cutaway, sections, display systems, (e.g. electricity, water, sewage, etc.); ability to view data collected by sensors or inserted in database. Facades' photographic surveys, laser scans.
- 3D reconstructions of whole cities or blocks, with associated information (from a database) related to every aspect useful in the context of the project, for example: land registry data, volume, building condition (structural and systems, taken from sensors or database).
- Serious Game made available to schools on good habits to keep in urban environments, like road safety and so on.
- 3D configuration software for building's interior and exterior.
- Lighting simulation software.

USER INTERFACE

View mode: Immersive /strategic.
Interaction: 3D model interaction programming; simple or complex interaction as needed by the project.
Multiplayer: Multi user interaction over the same model or inside the same 3D scenario.
Controllers and navigation: conventional: mouse, keyboard and touch; Non-conventional: touchless (Kinect, Leap Motion).
Devices: Web, smartphone, stand-alone PC (Win, MAC), interactive windows, multimedia installations.
Visualisation: screen, virtual reality goggles.