

Solutions for Industrial Facilities

3Units was founded by a group of passionate and enthusiastic professionals who believe that their various different skills in the IT and three-dimensional plant design sectors can contribute to the creation of software solutions which stand out because of their quality, skill and innovation.

3Units is a sales and management company located in Canton Ticino (Switzerland), can develop projects with the major softwares on the market, while the laser scanning department also works with the new mobile laser scanner technology which allows to obtain high performance combined with a reduction in time compared to traditional technology.



Software

Hexagon is a global leader in digital reality solutions realized through the combination of sensors, software and autonomous technologies. Our solutions allow to take advantage of rapidly increasing amounts of data, using it to increase efficiency, productivity, quality and safety in industrial applications.

The Asset Lifecycle Intelligence division enables customers to design, build and manage more profitable, safe and sustainable industrial facilities. We empower customers to accelerate industrial design modernization and digital maturity, increase productivity, and tip the sustainability scales.

Our skills are mainly focused on: SMART® 3D next-generation solution for the management of large projects; CADWorx® PLANT complete solution for plant design and automation in dwg environment; CADWorx® ANALYSIS complete solution for analysis engineering activities; HxGN EAM industry-leading asset management solution to extend asset lifecycle and improve productivity, complete with BIM integration for generating IFC format for asset import.



SOFTWARE



3D MODELING



ASSET MANAGEMENT



3D MODELING

Engineering 3D

3Units is based in Chiasso, in Canton Ticino (Switzerland), our engineering department carries out projects with the most significant software on the market and deals with structural and civil, mechanical, electro-instrumental, digital twin, etc. 3D/BIM plant design. We are able to satisfy requests in the petrochemical, iron and steel, energy, water treatment, skids for various uses, and healthcare sectors.



ENGINEERING 3D AND ANALYSIS

From the design, procurement and construction to the technical supervision of projects and on-site services, 3UNITS stands alongside the Client to ensure the success of their project with innovative software to advance the world's infrastructure, supporting both the global economy and the environment.

3UNITS is also an IEES (Intergraph Environment Engineering Services) partner for the development of plant engineering with SMART® 3D, a next-generation solution for the management of large projects.



DIGITAL TWIN

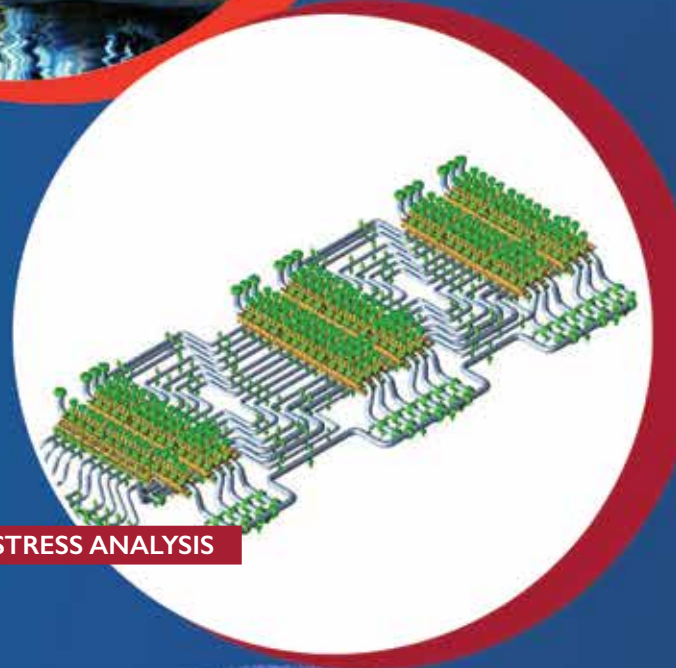


Engineering Analysis

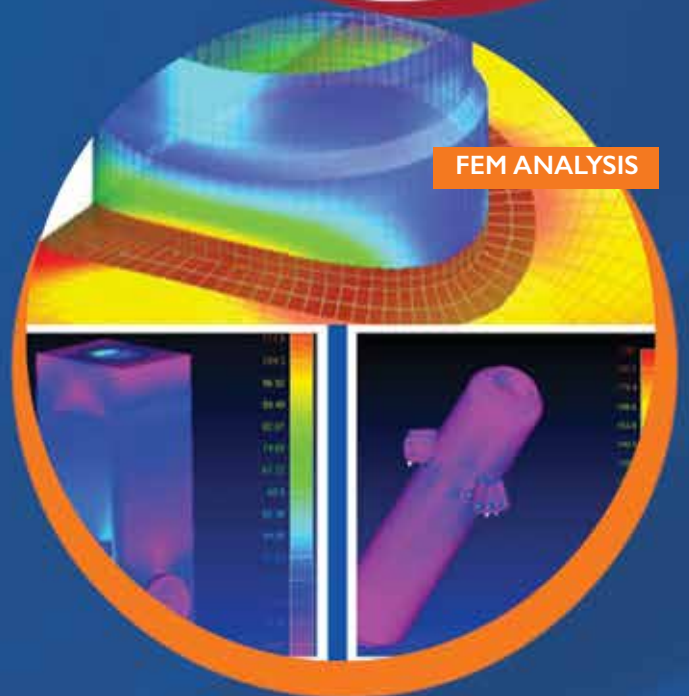
3Units is based in Chiasso, in Canton Ticino (Switzerland), our analysis engineering department carries out stress analysis projects mainly with CAESAR II® and is able to develop all other activities in the analysis field generally with the Hexagon software of the category such as: PV ELITE, TANK, GT STRU-DL and PIPESTRESS for nuclear power.

The main activities that our department carries out are:

- stress analysis,
- support design,
- finite element analysis (FEM),
- structural checks,
- sizing of pressure vessels,
- computational fluid dynamics “CFD”,
- piping classes design for ASME, EN, GOST and JIS standards.



STRESS ANALYSIS



FEM ANALYSIS



Laser Scanner

3Units is based in Chiasso, in Canton Ticino (Switzerland), our laser scanner department uses mobile scan technology to date the most innovative, rapid and extremely precise system to carry out surveys of objects and surfaces of any complexity and size even in the industrial sector: digitization of industrial plants, tanks, hydrocarbon storage tanks, equipment, etc. with the aim of producing centimetre calibration tables, deformation analysis, verticality analysis, etc.

The single scans, reconnected to each other in space by means of distinctive points in common among each of them, allow to obtain a digital model made up of millions of 3D points, corresponding to reality and having millimetre precision.

