TechViz

THE LEADER IN ADVANCED VISUALISATION SOFTWARE

TECHVIZ IS A SOFTWARE EDITOR
THE LEADER IN ADVANCED VISUALIZATION SOLUTIONS

Our core product TechViz XL is a software and acts like a driver to display your 3D models in real time, directly from your desktop 3D application into a virtual environment. **There is no data conversion** or limitation for resolution, size, shape or performance.

Our mission: improve the production cycles of our customers. Reduce the time to market of their products and to give them **better understanding of their 3D data.**

Compatible with a large range of 3D applications, the TechViz solution contributes to promoting business growth, its innovation capacities and productivity.

Easy to use and very **flexible.**

A unique technology: Our head office is located in Paris where cutting edge technology is developed by R&D experts in computer architecture, 3D rendering and cluster computing. We have achieved a **high international reputation** for our work.
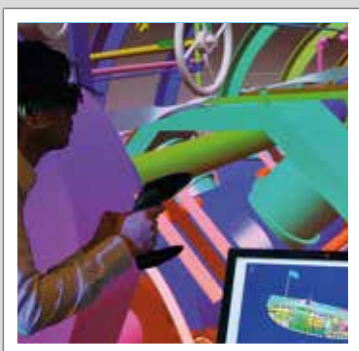
To market our solutions, we rely on a dedicated sales force and distributors across Europe, America, Asia and the Middle East. We always partner with the best integrators.
Our worldwide network is the reason for our fast-growing international presence, selling TechViz solutions to leading references.
Currently 85% of our turnover comes from export activities.

TechViz Paris showroom: bring your own data and visualize your 3D model in a **4 sided CAVE**, equipped with the most advanced technology.
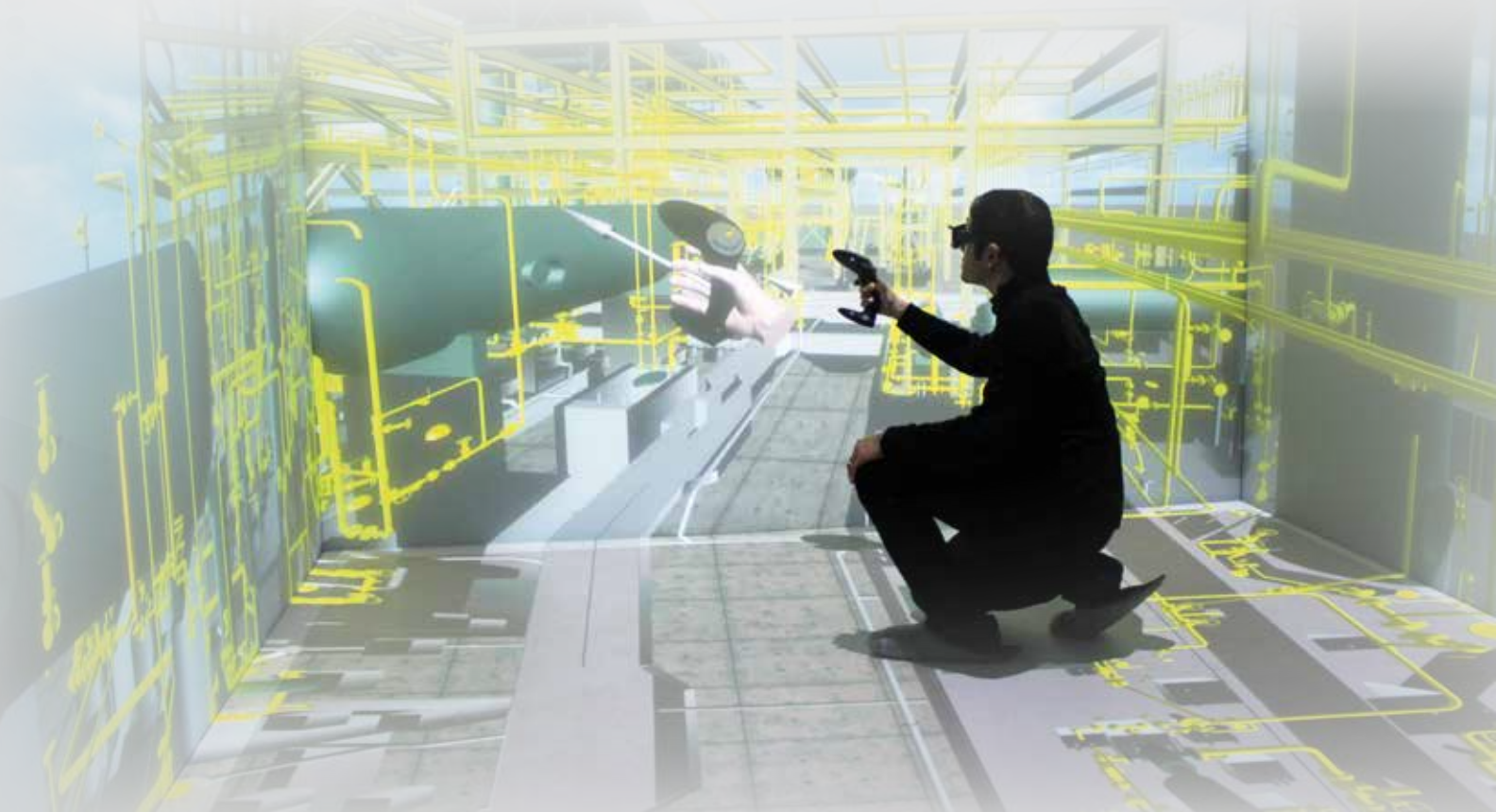Our demo center is ideal for product launches, press conferences, or to fasten your decision making process.

Canada
USA
Columbia
Brazil
UK
Germany
Belgium
Switzerland
Italy
Spain
Turkey
EAU

France
• TechViz HQ

KSA
Russia
India
China
Japan
Korea
Singapore
Australia

RESELLERS AROUND THE WORLD...

MORE THAN 300 PRESTIGIOUS REFERENCES HAVE CHOSEN THE TECHVIZ SOLUTIONS

The TechViz solutions have applications in the following markets:

Our customers integrate TechViz into their PLM process for:

- **Architecture**

  for property developers to follow steps, for sales and marketing purposes with their client.

- **Construction**

  for project review, to reduce potential design errors

- **Oil & gas**

  for training sessions or to assess risk and safety during maintenance operations in remote or dangerous locations.

- **Research**

  for implementation and presentation of project result, for collaboration between research teams.

- **Automotive industry**

  to check esthetical car design, accidentology, studies on control systems of the vehicle dynamics, for design review.

- **Aeronautics**

  for technical review, to mitigate risks, for reassurance on the PLM process, to check safety requirements, for engineering project review and simulation.

- **Shipbuilding**

  to identify potential design errors, have a realistic understanding of the model data, for ergonomics, path planning, visibility, maintenance operations.

- **Manufacturing industry**

  for product review, to speed up the journey to market, to validate staff comfort and ergonomics.

CORE PRODUCT
TECHVIZ XL DRIVER TO VISUALIZATION

TechViz XL acts like a driver to a virtual reality system and is the tool to display your large 3D data or 3D virtual prototype directly from your native application, with a high frame rate, on any type of stereo 3D display.
Make changes in real time and interact with your model.
Display in 1:1 scale or greater, without data conversion.

A fully immersive experience using a full 3D integrated system.
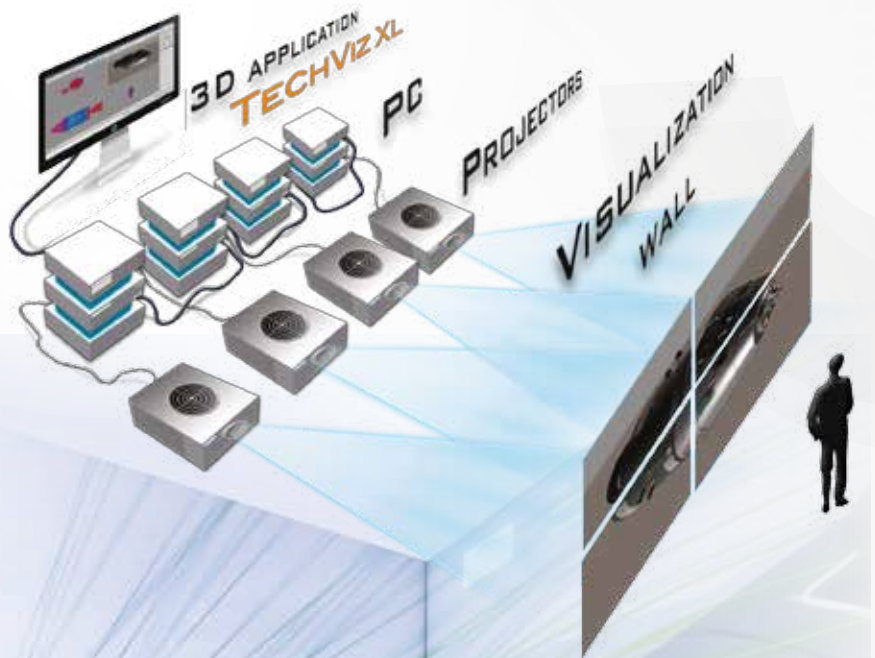Easy, user-friendly and ideal for project review or team collaboration.

- Turn your 3D model into a virtual prototype
- Immerse yourself
- High performance
- No data conversion
- Real time visualization

MORE
TECHVIZ OPTIONS AVAILABLE

Digital review

Mesure the distance between any two points. Hide and show parts to have a better understanding of the model. Stick virtual flags on the model with Annotations to point out specific issues seen during the review. Clip planes to check different layers and navigate intuitively with Building Explorer.

Video recording

Record a presentation and user actions as an animation, AVI or 3D movie. Helpful for product review, training and documentation.

Virtual Assembly

Enable to move parts of the model, see collisions and record a path to be reloaded for further studies. Ideal for project review, maintenance and training sessions. It is also possible to have full rigid body realistic physics simulation and force-feedback with Haption IPSI and Virtuose 6D.

Body and finger tracking

Using a full body and hand motion tracking system, display a 3D avatar of the user's fingers and body in the virtual scene. Carry out accurate reach analysis, enhance presence or validate ergonomics.

Collaborative

Visualize a common 3D model from separate sites and on heterogeneous stereo display systems. Enable teamwork between departments based in different locations and real time collaboration.

Fusion

Merge 3D scenes of different applications into a single unified scene and merge into a single prototype. Make changes in real time in each of the application without data conversion. Ideal for cross domain review.

TVZLib API

Combine your existing 3D OpenGL application with TechViz TVZLib to develop tailored interactive functionalities.

VIRTUAL PROTOTYPING

Gives engineering, manufacturing and conceptual design departments the ability to virtually explore a complete product before it is actually produced.
To produce a total immersion, combine TechViz with an immersive display system and a tracking system to display your model.

THEY TRUST US

TechViz in the manufacturing industry

Markus Halbritter is Senior Project Manager/Virtual Reality and 3D Visualisation at BSH Hausgeräte GmbH in Munich, Germany. The largest **manufacturer of home appliances** in Europe and one of the leading companies in the sector worldwide is pioneering innovation in its industry with numerous renowned design awards.

To speed up the development process of a product and design more variants, the company fully integrates virtual reality and TechViz XL **into their PLM process**.

BSH's engineering, marketing and industrial design teams use virtual reality rooms in Munich, Berlin and Traunreut to **develop virtual designs, review projects** and to improve on communication or decision making processes. «Key factors are **time, quality and cost**. Virtual reality helps **prevent failure analysis** in a product design for a guaranty of quality. We carry out **virtual photorealistic design reviews in real time** to save time. Virtual prototypes are now replacing physical prototypes to reduce costs, and to improve on efficiency with faster delivery of digital prototypes to required locations».

TechViz in the automotive industry

A European car maker, worldwide leader in the automotive market, uses TechViz Fusion for **validation of their vehicle design** and properties within a simulation environment: to check design toward safety requirements. A windshield might meet esthetical requirements, but it is essential to ensure the driver has the necessary visibility clearance to drive safely.

TechViz Fusion merges 3D scenes of different applications into a single unified scene. The merging takes into account the depth of the model to produce a realistic effect. Engineers can thus verify **comfort and ergonomics, accidentology, control system** of the vehicle dynamics. The mock up is edited in the native CAD directly **without import** which would take extra time.

CATIA vehicle model supplied by Renault

TechViz in research and academics

Carolina Cruz-Neira does cutting edge work in virtual reality and is known for her work in developing the **CAVE automatic virtual environment**. She now leads the Emerging Analytics Center (EAC) at the University of Arkansas at Little Rock. EAC is a research center featuring advanced data visualization systems and a unique, campus-wide cross-discipline approach, to bring together corporate collaborators, faculty researchers and students to the world of big data through visual analytics, immersive visualization, modeling and simulation.

EAC has recently acquired TechViz XL to support its research activities. The EAC's immersive data visualization system, the flexible CAVE, is now fully operational with TechViz XL.

«We wanted our collaborators and partners to be able to use their standard visualization tools across our systems» says Ms Cruz-Neira. «Techviz offers the solution needed at EAC, providing a software tool that enables the display of **any 3D visualization application** in a **virtual reality system**».
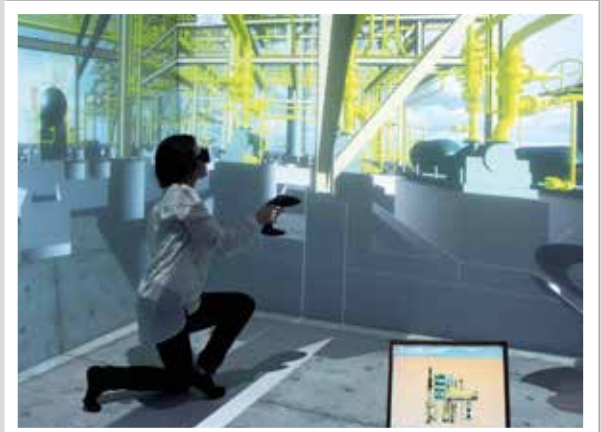

TechViz in the oil and gas industry

Angello Padilla Maradiegue is Lead of Integrate Design & Engineering Area, Mining Division at Grana and Montero Ingenieros Consultores (GMI).

The peruvian consultancy company executes complex projects in sectors like **Mining, Oil and Gas, Industrial Processes, Hydrocarbon, Transportation, Construction, Energy, Water Supply, Infrastructure.**

GMI has acquired a full 3D visualization system from TechViz.

«Visualizing our 3D designs of the plants at various stages of the production prevents inter-discipline **compatibility errors**, **accessibility problems** and **ergonomic issues** in the projects, or interference at the time of construction». «The TechViz technology allows us to display our models in our 3D set up from various applications: **Cadwork/Revit** for BIM construction projects; **Aveva PDMS/Tribon** or **Intergraph SPR** to design complex mining/oil and gas projects. **No data conversion** is needed, our customer can ask for changes on the fly and they are displayed straight away in the 3D environment».

OVER 200 CERTIFIED 3D APPLICATIONS

PER EDITOR

Dassault Systemes	Autodesk	PTC	Siemens PLM
3DVia Composer	3ds Max	Creo Elements Pro	JT2GO
3DVia Composer Player	Alias	Creo Elements View	SolidEdge
Icem Surf	Showcase	Creo Parametrics	NX
Abaqus	Design Review	CoCreate	Jack
CATIA V5	Image Studio	Product View	Tecnomatix emplant
CATIA V6	Inventor	Productview Lite	Tecnomatix empower
Enovia DMU	Maya	Productview Express	TeamCenter (VisMockup)
Delmia	Moldflow Communicator	Pro/Engineer	RobCAD
Dymola	MoldFlow Synergy	Division 2000i2	Plant Simulation
IGRIP	MotionBuilder		
Seemage	Navisworks		
SolidWorks	Opticore		
eDrawings Viewer	Revit Architecture		
Virtools	VRED		
Icem Viewer			
SolidWorks Composer			

Ansys	Paradigm	Landmark	Aveva
Ansys CFD Viewer	VoxelGeo	Geoprobe	Marine
Ansys CFD Post Standalone	3D Canvas	SeisWorks	PDMS
Ansys CFX	GoCAD	StratWorks	Review
Ansys CFX Pre Standalone	GeoDepth	OpenVision	Tribon
Ansys Fluent	GeoLog	AssetView	
Ansys Workbench Mechanical			

ESRI	Schlumberger	Altair	Adobe
ArcGIS	Gigaviz	Altair Hypermesh	Acrobat
ArcGlobe	Petrel	Altair Hyperview Player	Acrobat Reader
ArcReader	Eclipse	Altair Hyperworks	Adobe 3D Reviewer
ArcScene			
CityEngine			

Intergraph	AGI	Right Hemisphere	RTT
Smart Plant	AGI STK	Deep View	RTT DeltaGen
Smart Plant Review	AGI STK Viewer	Deep Exploration	RTT DeltaView
SmartPlant 3D			

CEI	Google		
Ensight	Google Earth		
EnLiten	Google Sketchup		

PER APPLICATION FIELD

CFD/FE/MB Simulation	VR/Simulation	Animation/Modeling	Scientific
CD-Adapco Starview	BSContact	AC3D	AVS
Ceetron	Ciros	Blender	Avizo
COMSOL Multiphysics	Corys T.E.S.S.	Lumiscaphe Patchwork 3D	Celestia
FieldView	Cosmo Player	Lumiscaphe Portfolio 3D	Digital Surf MountainsMap
GNS Animator	DiSTI GL Studio	Luxology modo	K3DSurf
I-DEAS	Dolphinity Racer	MAXXON Cinema 4D	Matlab
LMS Virtual.Lab	Eon Studio	N-Sided Argile	MeVisLab
LS-Dyna	FlightGear	Rhino 3D	MineSet
MentorGraphics FloVIZ	Forum8	Sidefx Houdini	Paraview
Moldex3D	Octaga Player		VisIt
MSC Adams	Oktal SCANeR		Vizlab Drishti
PowerVIZ	Presagis Thea Lite		MeshLab
RecurDyn	Presagis Vega Prime		Cortona 3D viewer
Tass MADYMO	Unity		Smart 3D Capture
VCollab	Virtual BattleSpace		
Flexstructure IPS	Walkinside		
	WorldViz		

PDM/Ergonomics	Architecture	Point Cloud	3D Toolkits
FlexSim	ArchiCAD	Bentley Pointools	CERV AReVi
Haption IFC	CET Furniture Design	Cloud Compare	C-Motion Visual 3D
KineoCam Path Planner	Solibri IFC Viewer	Faro Scene	Coin3D
Perspectix Px5	EliteCAD	Fledermaus	Java3D
RAMSIS	Ikea Home Planner	Innovmetric PolyWorks	JoGL
Synchro	Nemetschek Allplan	Rapidform	OGRE
VisTABLE	Nemetschek IFC Viewer	Steinbichler CometInspect	OpenSceneGraph
DMWorks	Tekla BIMsight	Leica Cyclone	SGI Open GL Performer
ISG Virtuo	EveBIM		VSG OpenInventor
			VTK
			XJ3D
			Open TK

Molecular	CAD	Oil&Gas	2D/Video
Accelrys Discovery Studio	Bentley Microstation 8.1	Geovel	Internet Explorer
Cambridgesoft Chem3D	Cadenas 3D	Opendtect	Firefox
Material Studio	Kompas 3D	Roxar RMS	Microsoft Office
MED-SuMo	Lattice XVL Player	Roxar Tempest	Mplayer
PyMol	Lattice XVL Studio	SIM Reservoir	VLC (Videolan)
VMD	Nupas Cadmatic	SMT VuPak	Stereoscopic Player
Schrodinger Maestro	Sener Foran	Tecplot RS	OpenOffice ActiveView

Entertainment	GIS	Medical	Mining
Doom 3	3DNature	Amira	SGeMS
Far Cry	Biosphere 3D	Bone Labs	CAE Mining
Quake 4	Erdas Imagine VirtualGIS	Brain Explorer	
Seconde Life	Skyline TerraExplorer	Mito Ditcom	

TechViz

web

TVZ 048-01/15