

NEMETSCHKE
GROUP

COMPETENCES & 2022
REFERENCES

SHAPE THE WORLD



SHAPE THE WORLD IN ALL DIMENSIONS



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SHAPE THE WORLD IN ALL DIMENSIONS

Our vision is to shape the world
in all its dimensions.

This involves our 13 brands developing digital solutions in four customer-oriented segments across the entire building lifecycle and the media industry. Our portfolio enables all players to design, construct and operate buildings and shape creative worlds.

SHAPE THE WORLD WITH DIGITAL TWINS

The complexity of buildings and infrastructure is ever increasing and the individual requirements of the parties involved are multiplying. The data-driven approach of Building Lifecycle Intelligence and the use of digital twins make possible better planning, greater sustainability, a reduction in costs and, above all, better decisions - throughout the entire lifecycle.

Digital twins support processes in every phase of a property, from planning to construction to operation. In combination with the Nemetschek Group's Building Lifecycle Intelligence approach based on open standards, all players in the construction industry, can manage building data as an unbroken chain of interconnected information across the entire lifecycle of buildings, thus increasing efficiency and sustainability. The focus is on connectivity and collaboration instead of silo thinking.

As early as the planning stage, better decisions can be made with a digital twin, as all stakeholders have access to all current data. In the construction phase, the current status can be continuously compared with the planned design. Errors and reversals are avoided. In the operational phase, digital twins ensure significantly greater efficiency and the optimization of energy consumption. In addition, structures can be redesigned more easily because all data is available centrally. The Nemetschek Group is significantly driving this technological progress. Together with all those involved in the building process, we are shaping the world – in all its dimensions.





SHAPE THE ENTERTAINMENT WORLD

Digitalization is at the heart of the media and entertainment industry. Consumer behavior has changed drastically in recent years. Internet video, streaming models, video games, e-sports and virtual reality have become commonplace. Artists and creatives also draw upon the potential of digital solutions to realize their ideas and visions.

The result – amazing visual effects for feature films, TV shows and commercials, as well as video games. But also the fields of medical illustration, architecture and industrial design benefit from visualizations and three-dimensional animations.

Digital solutions for creatives and artists play a crucial role in the emergence of the Metaverse too. The Metaverse represents an advancement of the Internet, consisting of lasting, shared, virtual 3D spaces. These spaces form a perceptible, in other words visible, virtual universe – a complementary world alongside reality, ideally based on common standards and interoperability. This can help break down barriers to create a seamless transition between different virtual applications and from the real world to virtual reality. The Metaverse Standards Forum brings companies and organizations together to accelerate the development and rollout of these Metaverse interoperability standards. The Nemetschek Group – represented by its Maxon brand, as a leading developer of professional 3D software solutions – is a founding member of the Metaverse Standards Forum. Together with creatives and artists, we shape the world in all its dimensions.

OUR MISSION

Our mission is to be the preferred and most trusted software provider and partner for the AEC/O and 3D animation industries.

We enable everyone involved in the building process, including architects, designers, engineers, construction managers, project owners, general contractors, and construction companies, as well as building owners, general managers, facility managers, and creatives, to shape the world. Our solutions enable them to make their ideas and visions reality: future-oriented, sustainable and safe cities, with top-quality buildings and infrastructure, like bridges, roads and tunnels, that improve people's quality of life in the long term.

The Segments and Brands of the Nemetschek Group

PLANNING + DESIGN

Precise, innovative, and open planning and design workflows

ALLPLAN

GRAPHISOFT

IRISA

SOLIBRI

VECTORWORKS

NEMETSCHKE ENGINEERING

FRILO



SCIA

BUILD + CONSTRUCT

Collaborative, efficient, and sustainable construction processes

BLUEBEAM

NEVARIS

MANAGE + OPERATE

Smart, intelligent and comprehensive building management

CREMSOLUTIONS



SPACEWELL

MEDIA + ENTERTAINMENT

Creative, intuitive, and powerful 3D animation



MAXON

DIGITAL TWIN Business Unit



dRofus

An aerial photograph of a city skyline featuring several modern high-rise buildings with glass facades. The sky is filled with soft, white clouds. The text 'Shape architecture & engineering' is overlaid on the upper left portion of the image.

Shape *architecture & engineering*

With the software solutions in the “Planning & Design” segment, architects and engineers can model, design and calculate more efficiently and precisely.



Sky Park Residence, Bratislava, Slovakia
Engineering office: PRODIS plus,
realized with SCIA Engineer from SCIA



THE PROJECT

Bern 131

Bern, Switzerland

Located in the center of a highway junction, the office building BERN 131 is shaped like an arched triangle with a partially covered roof terrace that invites visitors to enjoy the view of Bern and the Alps. The building is designed to produce more energy than it consumes through sustainable solutions such as timber construction and heating, ventilation, and air conditioning concepts.



PRODUCT:

Vectorworks Architect

WEBSITE: www.vectorworks.net

SOLIBRI

PRODUCTS:

Solibri Office, Solibri Site, Solibri Anywhere

WEBSITE: www.solibri.com

THE PROJCT

Puskás Aréna

Budapest, Hungary

An iconic building of Budapest was reborn with the geometric center of the Puskás Aréna exactly matching that of the old People's Stadium. The demolished concrete structures were crushed and reused in a resource-saving way to be later used as the foundations and walls of the new stadium.



ALLPLAN

PRODUCTS:

Allplan Bridge, Allplan Engineering

WEBSITE: www.allplan.com

THE PROJCT

Mantes-la-Jolie Viaduct

Paris, France

The viaduct was engineering office COGECI's first large-scale use of Allplan Bridge and Allplan Engineering, and it was a thorough success. The added value of the 3D visualizations provided much better insight than 2D drawings, thus enabling an optimal approach to coordinating with other disciplines.





GRAPHISOFT®

PRODUCTS:

ARCHICAD, BIMx

WEBSITE: www.graphisoft.com

THE PROJECT

Inteli Educational Complex

São Paulo, Brazil

This university building in São Paulo was designed by Pitá, a leading interior design firm in Brazil. The project comprises a 105,486 sq ft complex, with 3 buildings and a large outdoor area. The use of different visualization techniques and Graphisoft BIMx helped them deliver customer value by precisely communicating their design intent in the early design phases.

THE PROJECT

Orange County Museum of Art

Newport Beach, USA

The Orange County Museum of Art's new home is a 53,000 sq ft building featuring exhibition galleries, educational programming, and areas for public gathering. It is an integral part of the larger campus of the Segerstrom Center for the Arts. Surrounding a large, multi-story glass atrium, it consists of a concrete and steel structure that is exposed in some parts of the building for visual effects.



PRODUCT:

RISA-3D

WEBSITE: www.risa.com





THE PROJECT

Headquarters Tojo

Schorndorf, Germany

Tojo Möbel is responding to its growth with the construction of a warehouse that also includes a show room and offices. The engineers from SCHATZ projectplan GmbH, who were responsible for the architecture, technical building equipment and structural design of the building, carried out all static calculations using FRILO software.



PRODUCTS:

More than 140 analysis programs
(including GEO Building Model)

WEBSITE: www.frilo.eu

THE PROJECT

Eurovea II

Bratislava, Slovakia

The Eurovea project comprises not only one building but a whole city quarter with shopping, housing, offices, and other facilities. Several floors of the shopping mall connected to the previous stage form the backbone of the project. An exceptional part of the design process was handling the demand that the roof should be assembled without any permanent scaffolding.



PRODUCT:

SCIA Engineer

WEBSITE: www.scia.net



Bus Station, Merthyr Tydfil, Great Britain
General contractor: Morgan Sindall,
realized with Revu from Bluebeam





Shape *construction*

The digital solutions from the
“Build & Construct” segment
ensure a perfectly coordinated
workflow on the building site.



THE PROJECT

Black Forest Medical Group

Freiburg, Germany

The Futuristic world of neurosurgery: Organic architecture, interdisciplinary work islands in the office area and a production area oriented towards Lean – the new building planned and executed by the general planner Vollack Group using BIM optimally reflects the spirit of the client from the medical technology sector.



PRODUCTS:

NEVARIS Build, NEVARIS Finance

WEBSITE: www.nevaris.com



PRODUCT:

dRofus

WEBSITE: www.drofus.com

THE PROJECT

Baptist Health

Jacksonville, USA

Baptist Health consists of five hospitals with 1,190 beds in multiple locations and medical centers. This required a solution for sharing documentation across the design and construction teams, which was found in dRofus' room templates.



PRODUCT:

Revu

WEBSITE: www.bluebeam.com

THE PROJECT

Bus Station

Merthyr Tydfil, Great Britain

Social value and sustainability are the focus of this iconic 14-bay bus station. The first piece of the puzzle in a strategic master plan for the city center, it won three national awards in 2021. Thanks to Bluebeam, the quantity and cost-estimating processes were accelerated by at least 80%.



An aerial photograph of a city waterfront at sunset. The sky is a mix of orange, pink, and blue. The city is densely packed with buildings, mostly with dark roofs. A large body of water, likely a river or harbor, occupies the foreground and middle ground. Several boats are visible: a large ferry with a green and white striped canopy in the bottom left, a smaller boat with a green roof in the center, and a speedboat leaving a white wake. A long, straight pier extends from the right side into the water. A bridge with a white metal truss structure is visible in the bottom right corner. The overall scene is a vibrant and detailed representation of an urban waterfront.

Shape *operation of buildings*

Today, buildings are managed efficiently and in a resource-saving way with software solutions from the “Operate & Manage” segment.



Headquarters booking.com, Amsterdam, the Netherlands
Building management: booking.com,
realized with IWMS from Spacewell



THE PROJECT

Headquarters booking.com

Amsterdam, the Netherlands

booking.com is one of the largest online travel agencies. It is currently implementing Spacewell Workplace Management software (IWMS) at its new campus in Amsterdam. This is a first project, part of a phased approach to subsequently activating the software at other locations as well and running their buildings in a resource-saving way.



SPACEWELL

PRODUCT:

Integrated Workplace Management System (IWMS)

WEBSITE: www.spacewell.com

THE PROJECT

Kö-Bogen II

Dusseldorf, Germany

At the entrance to one of the most popular shopping streets, the B&L Group, as the administrator, has built a spectacular property with green terraces and roof areas. For its combination of ecology, economy, innovation and sustainability, the building was awarded the highest possible DGNB Platinum certification.

CREMSOLUTIONS

PRODUCT:

iX-Haus

WEBSITE: www.crem-solutions.de



Shape *virtual reality*

Virtual reality is only one of the countless possibilities in which the software from the “Media & Entertainment” segment can be used.





Moon Village
Visualization: Slashcube,
realized with Cinema 4D from MAXON



THE PROJECT

Moon Village

Space

The design of a scientific and commercial settlement that could one day allow humans to live permanently on the moon. It was developed in collaboration with the European Space Agency and MIT.



PRODUCT:

Maxon ONE

WEBSITE: www.maxon.net

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