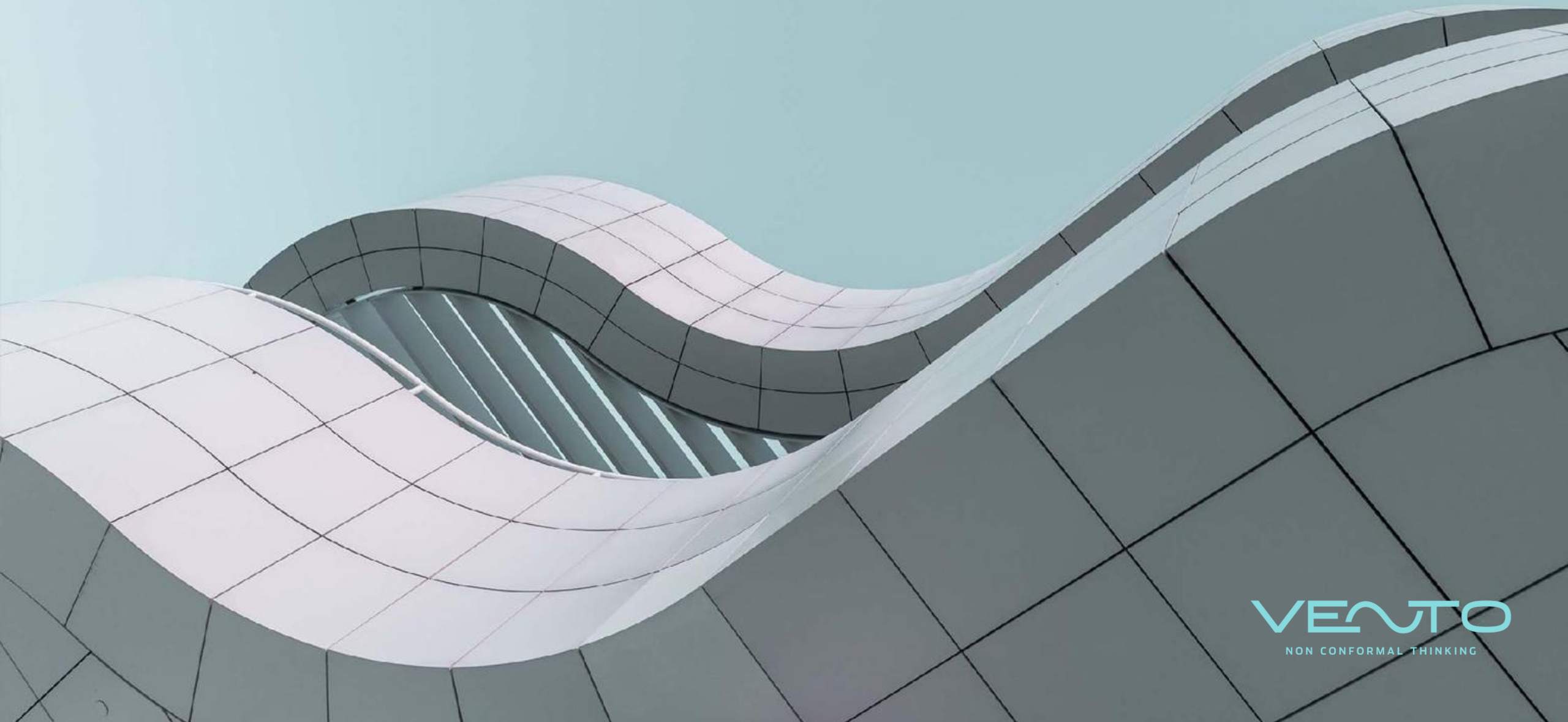


VENTO

NON CONFORMAL THINKING

Innovative CFD for the built environment

Company overview



Content

Company

Our values

Audience and needs

The power of our solution

Our offer

A selection of our top clients

Team

Company

Vision

Support the ever-growing awareness of sustainable design of environmentally friendly buildings and cities in Architecture and Engineering

Mission

Our Mission is to create and grow the CFD market in the AEC sector, and empower architects and engineers with a tool to obtain the desired outcomes effortlessly

Background

- born in December 2016
- funded by Galaxia in April 2023, a VC fund of CDP, a State-controlled National Development Bank
- HQ (R&D & Admin): Cagliari; Sales & Marketing: Milan
- more than 50 cumulative years of R&D experience in Computational Fluid Dynamics (CFD)
- owner of 100% of IP with a fully proprietary software

Our Values

“Non-conformal thinking ”: embracing the unconventional

- > Linked to our proprietary technology, the Non-Conformal Grid technology
- > It also means breaking free from conventional paradigms.
- > We want to dismantle barriers and democratize CFD analysis, making the most complex tasks seamless.

Strenuous research

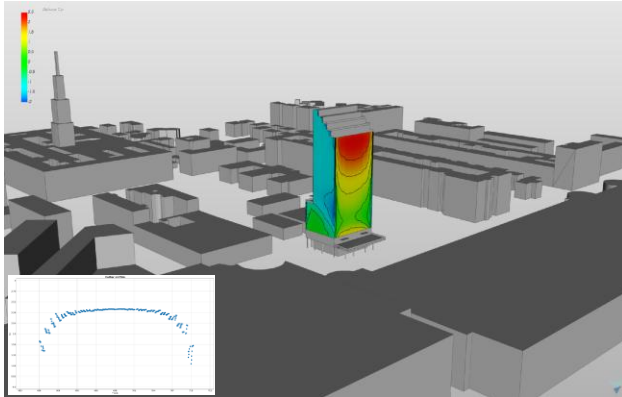
Over three decades of R&D and a combined expertise spanning 50 years in CFD

More than customer service

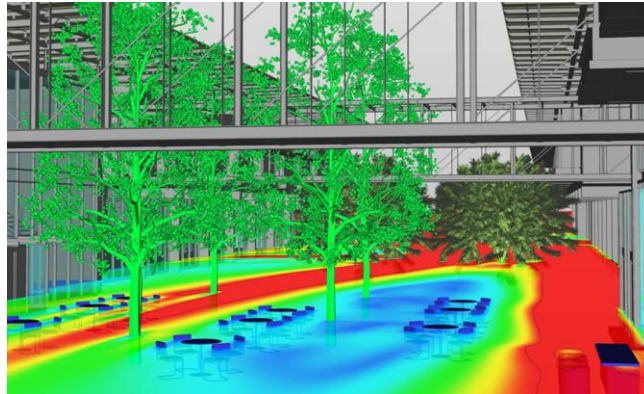
- > We actively listen to our customers. Our product gets continuously enhanced based on this ongoing dialogue
- > We aim at integrating our software into their working tools, streamlining processes, making their lives easier and adding tangible value to their work.

Audience and needs

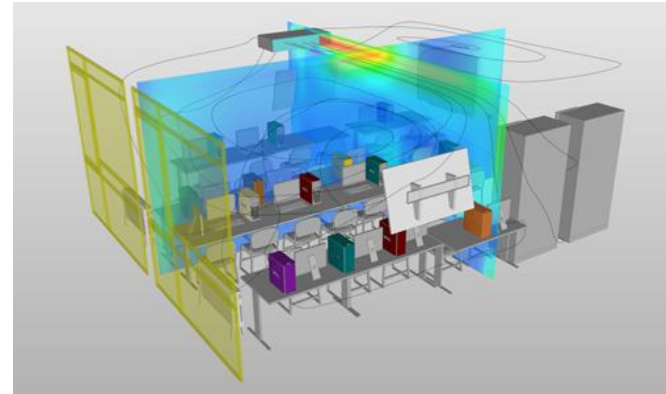
Structural
Engineers



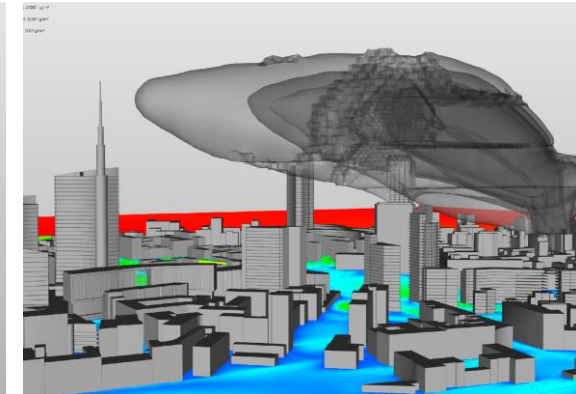
Urban Planners &
Landscape Architects



HVAC Designers &
Building Physicists



Architects &
Engineers



Assess the wind loads in buildings and infrastructures

Save in construction materials

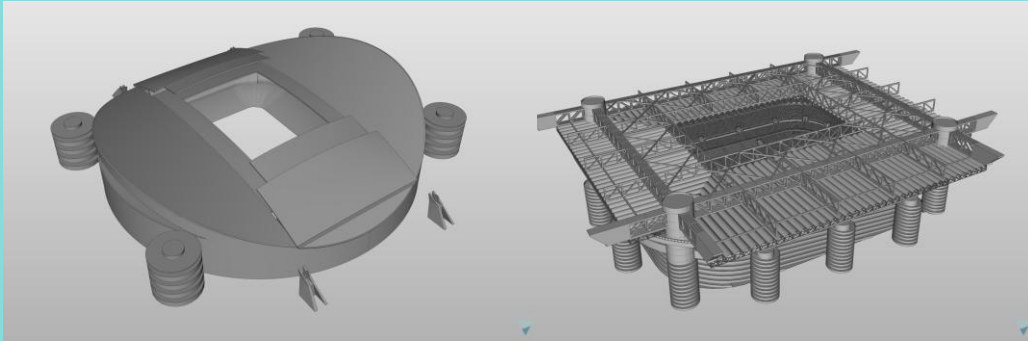
Design environmentally friendly buildings and cities ensuring comfort and wellness

Be compliant with local/regional regulations (London, Australia, Singapore and many more) in terms of comfort, energy saving and microclimate optimization

Comply with the appropriate safety rules in the building design for fire events and **Predict** the effects of possible accidents

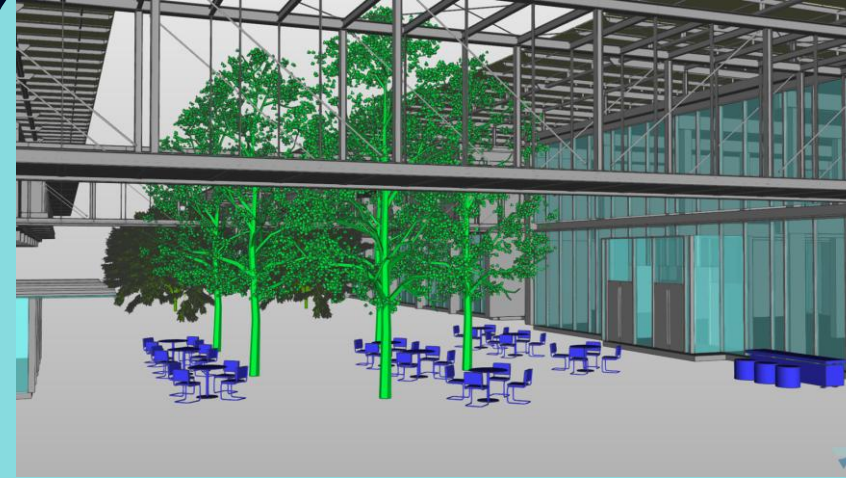
The Power of our Solution

CFD market leaders
must generate new and
simplified 3D models with CAD
Turnaround time: from setup to
solution in a week or 2



1-Unparalleled efficiency

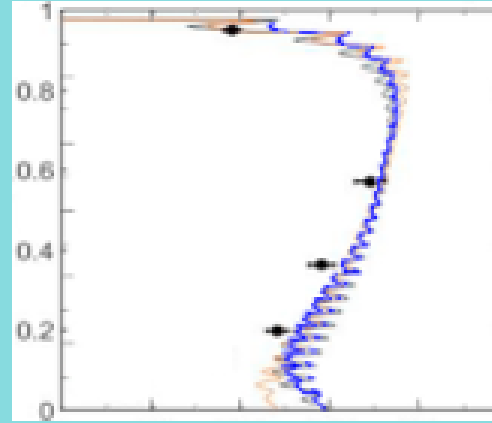
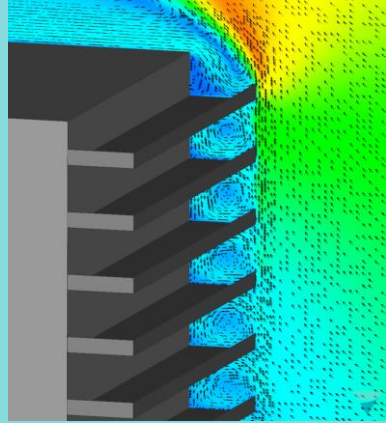
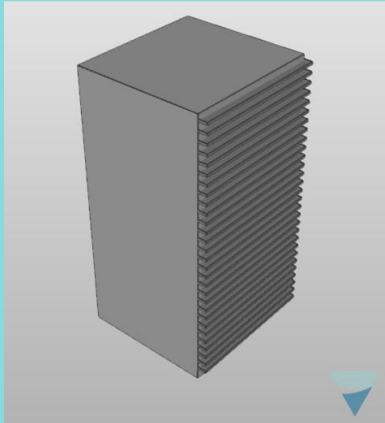
VENTO
can use directly the super
detailed architectural 3D models.
Turnaround time: from setup to
solution in less than a day



An example of Urban
environment 3D
model with detailed
Architectural model
(generated by Revit)
and realistic models
of trees.

These models are
impossible to use for
all competitors

2- Ability to manage super complex 3D models
(Digital Twin)



Results of the 4 approaches (Vento, ANSYS, ANSYS advanced and Wind Tunnel) are essentially superimposed for most of the height of the building. Near the ground, Vento's results (the blue line) correspond to Ansys advanced results.

N.B. Vento and ANSYS use comparable turbulence modelling. ANSYS advanced uses superior turbulence modelling.

3- Quality of the results

Our offer

The same Outcome, generated by the same software in 3 different modes

On-Premise

Runs on your own infrastructure

Consulting Services

Our engineers provide you with the outcomes

Cloud Services

Cloud available to meet strict deadlines

A selection of our top clients

Vento on-premise



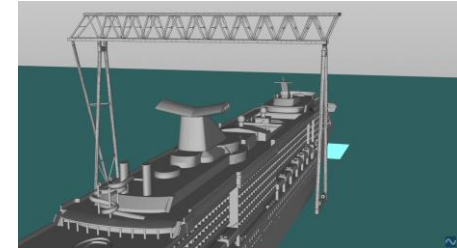
Vento services



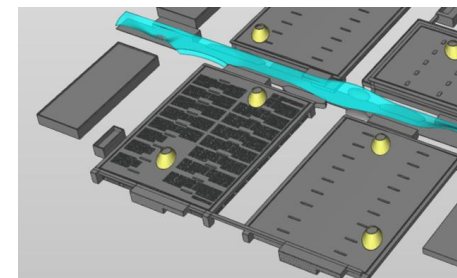
fire simulation in a
train-metro station



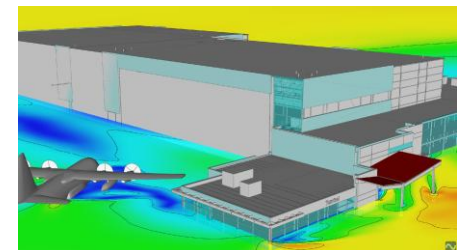
wind actions on a
huge port crane



wind load on the roof of a
70k m² pavilion of Milan
exhibition hall



Wind Safety Analysis at Air
Inuit Terminal of YUL Trudeau
Montreal Airport



Team

Vento's team stands out for its great experience in the sector. Marco Mulas and Marco Rossi grew up as CFD professionals in an international environment and witnessed the early days and the growth of the CFD industry since the early 90s. The three founders combine diverse and complementary skills in all aspects of software development and with top-level experience in the world's No. 1 CFD company ANSYS.

Marco Rossi

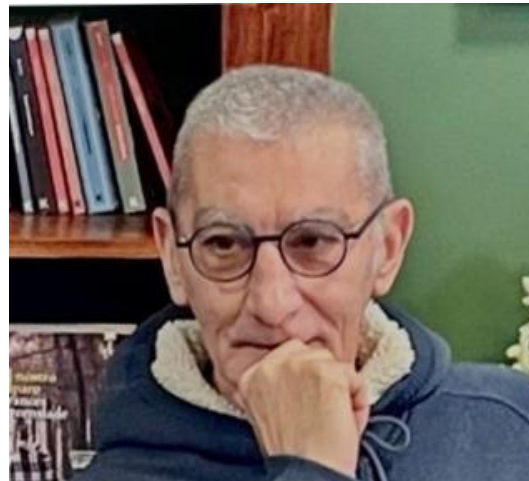
Board Member & VP Sales



Mechanical engineer
15 years @Fluent/ANSYS
GM of Fluent/ANSYS Italia

Marco Mulas

CEO & CTO



Mechanical engineer
MSc Stanford University
MSc Von Karman Institute
PhD Vrije Universiteit Brussel
30+ years of CFD code
development

Rossano Zucca

Head of Software Development



Computer scientist
15+ years SW development:
Front-end and back-end developer
C, C++, Fortran95, Python...
Graphical UI (desktop & web) for scientific
and technical applications



NON CONFORMAL THINKING

Thanks!

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Website



LinkedIn