

MAGICS / Composite

Dedicated Finite Element Analysis software for composite materials Weight optimization, eco-design, carbon label



Glass tank / liquid, pressure, depressure, wind, buckling and sismic analyses according NFT and EUROCODES rules

Technical specifications

Powerful facilities, dedicated to composite, easy to use. Library of common elementary meshes: cylinders, tori-spheres, nozzles, ... Library of composite components: fibers, resins, cores, mats, foams, adhesives, .. Definition of composites (multilayers, sandwiches, ..) layer by layer. Automatic meshing based on 4 sides elements. Outputs: stresses, strains, safety coefficients (TSAI, HILL, WU, PUCK) layer by layer, or by groups of layers. Unique database with integrated pre and post processing. Static, dynamic, sismic, buckling, fatigue analyses.



V10 version running on 32bits computers 2Gb memory

V11 version running on 64bits computers 8Gb memory, 10 to 20 times faster than V10





Carbon seat / static and dynamic analyses. Contours imported from CAD software



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Carbon naval race

vibration analyses

keel / static and

Support and pricing

Development and support by the same engineers team since 25 years

Easier to use than general FEA software. 2 to 3 days training sufficient

No yearly fee, but perpetual licence less expensive than general software

Maintenance (hot line and new releases)



GRP tank / pressure and buckling analyses, according BS rules

Ouality

- · theoritical validations and comparison with industrial tests
- quality assurance ISO 9001 2008
- · high level engineers team

References

Many references in aerospace, nuclear, chemical, transport industries and also in many Universities :

- Europe: France, UK, Germany, Italy,...
- · Asia: Japan, China, Singapore, Malaysia, Thailand, ...
- North Africa
- UAE

Presented every year at many composite shows :

- · Paris,
- · Singapore,
- Dusseldorf,
- Birmingham,
- Dubai. ...

We teach theoritical and practical composite FEA courses in Universities (french or english)

Simplified version ASK-MAGICS dedicated to the static design of sandwich panels, with carbon label evaluation.

Polyester composite vessel / depressure and buckling analysis