Materialise 3-matic allows you to create 3D printable internal and external structures that add extra strength, provide cushioning, increase porosity, or simply reduce the weight of your design. It is compatible with data preparation softwares Materialise Magics and Materialise Build Processor, which means that the limitations and issues related to computation of complex structures are completely bypassed.

The Lightweight Structures Module Allows You to:

**Choose from a Wide Variety of Creative Designs**
- Uniform structures
- Randomized structures
- Triangulated structures
- Quad-based structures
- Conformal structures

**Add or Design Unit Structures**
- Use unit structures from the internal library
- Design your own structures in CAD and import them to Materialise 3-matic to grow your own library

**Optimize Designs Based on Analysis**
- Analyze the strength of the design with FEA and reinforce the structure density where needed
- Control the thickness of your model according to design requirements

**Ensure Build Ability**
- Perform analysis to test if the design is 3D printable
- Process complex designs via the slice-based technology of the Materialise Build Processor

“Using Materialise 3-matic software, I can design complex structures that are impossible to generate in conventional CAD software. In addition, I am able to apply textures to each STL while staying in control of the desired output.”

Dries Vandecruys, Design Engineer, Materialise, Belgium

software.materialise.com
Workflow to Create Lightweight Structures with Materialise 3-matic

- MODEL
- DESIGN SPACE
- COMFORMAL STRUCTURE
- FEA
- GRADIENT THICKNESS
- PREPARE BUILD
- SLICE PREVIEW
- AM MACHINE

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For more information about Materialise 3-matic, contact us at: software@materialise.be or visit our website software.materialise.com