# 1 Description of 3-matic software

Materialise's 3-matic is a software that combines CAD tools with pre-processing (meshing) capabilities. To do this, it works on triangulated (STL) files which makes it suitable for freeform 3D data, like the anatomical data coming from the segmentation of medical images (from Mimics). As such, 3-matic can be seen as a tool that allows Anatomical CAD or what Materialise has coined 'Engineering on Anatomy'. The software comes in two editions: Research and Medical. The Medical edition can be used for the design or manufacturing of medical devices. The Research edition is intended for research only.

3-matic may be used to import anatomical data and other 3D objects in STL format or in numerous CAD formats including: CATIA, IGES, STEP, etc. Once objects have been loaded, they can be used for many applications of 'Engineering on Anatomy' including measuring, designing, modeling and 3D printing.

The modules that can be obtained for 3-matic enable the users to do thorough 3D measurements and analyses, design an implant or surgical guide, or prepare the mesh for finite element modeling.

### 2 Indications for use

3-matic Research (hereafter '3-matic') is intended for use as a software for computer assisted design and engineering in the field of biomedical research.

# 3 Best-practice tips and precautions

Be advised that the quality and resolution of your triangle mesh can influence the result of design or analysis operations.

3-matic displays measurements with 4 digits behind the decimal point. Accuracy of measurements is limited by the data source.



## 4 Instructions for use

#### 4.1. Starting 3-matic

After installing the software on your PC, double click the 3-matic icon for the **Research** or **Medical** edition on your desktop. You may also click on the **Start Button** → **All Programs** → **Materialise** → **3-matic** to begin. Be sure to select the *Medical edition* for clinical applications.

Materialise software is protected by a key file. When you start 3-matic for the first time or when your key has expired, the Key Request Wizard will automatically start up to assist you with the registration process. Available options are explained in the **Reference Guide**. We recommend that you select 'instant activation' in the Key Request Wizard. This will automatically renew your license Key File when it expires as long as you have internet access\*.

#### 4.2. Minimum system requirements

Software	Hardware
Windows 7® SP1 – 64bit	Intel® Core™ 2 Duo / AMD Athlon™ X2 AM2 or equivalent
Internet Explorer® 10	4 GB RAM
PDF viewer	DirectX® 11.0 compliant graphics card with 1GB RAM
.NET framework 4.5.2 (or higher)	5 GB free hard disk space
	Resolution of 1280x1024

Note: Mac® users can install the MIS using Boot Camp® in combination with a supported Windows OS.

#### 4.3. Preferred system requirements

Software	Hardware
Windows® 7 SP1 – 64bit	Third generation Intel® Core™ i5/i7 or equivalent
Internet Explorer® 10	16 GB RAM
PDF viewer	DirectX® 11.0 compliant AMD Radeon/NVIDIA GeForce® card with 2GB RAM
.NET framework 4.5.2 (or higher)	20 GB free hard disk space
	Resolution of 1680x1050 or higher

<sup>\*</sup>Other qualifications may apply.

It is recommended to use our software within a hardware and/or network environment in which cyber security controls have been implemented including anti-virus and use of firewall.



## 5 Manufacturer contact details



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