

# 3D MODELING OF A LUMBAR SPINE UNIT

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**KEYWORDS:** CAD software, 3D modeling, lumbar spine unit, finite element analysis

**ABSTRACT:** The paper presents a study of modeling and analysis of a human lumbar spine unit. The 3D anatomical model consists of three vertebra and two intervertebral discs, next following to endure tensions through a finite element analysis. The modeling of the lumbar unit is performed in several phases, from a rough shaped design to a proper functional model. The working environments used are Solid Works 2007 for modeling and AnSYS 11.0 for FEM analysis.

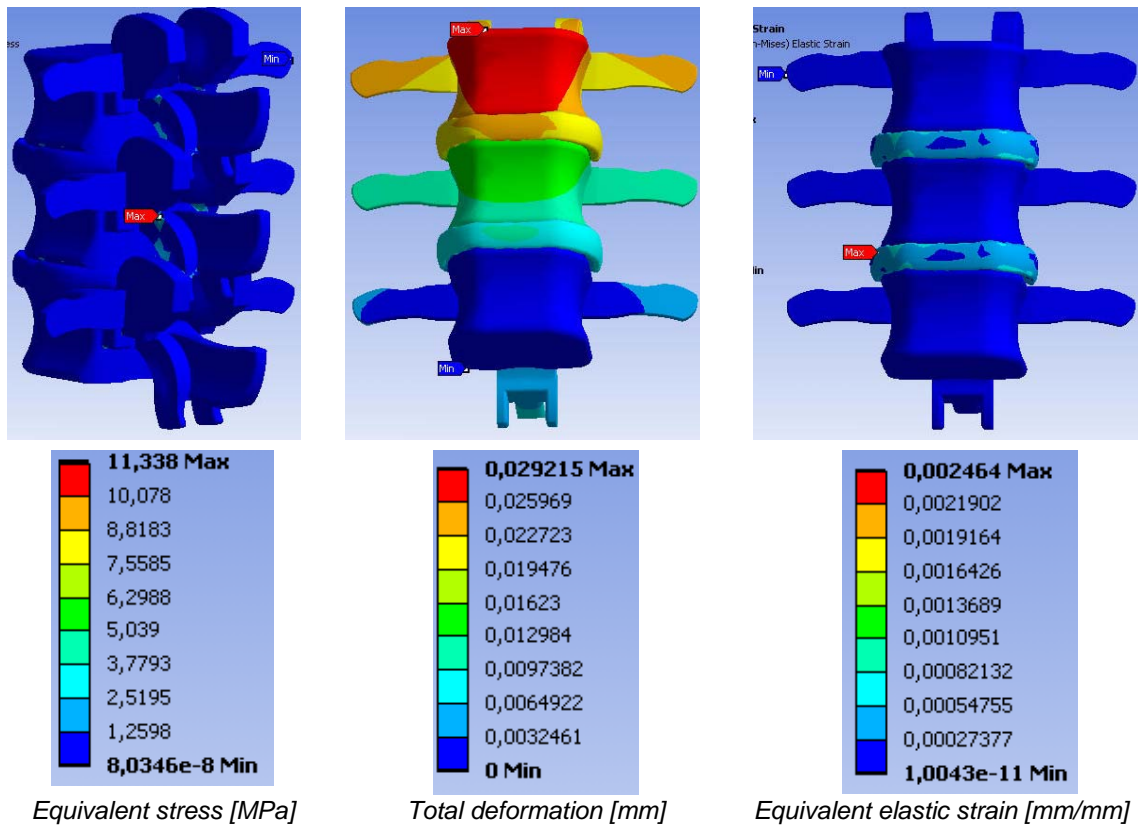


Figure 9 - Results

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