



***07, Generation of 3D model of Square Shaft***

*Modris Dobelis, Zoja Veide, Veronika Strozheva.  
Riga Technical University*





***Intellectual Output:* 4 -** Construction of Machine Parts

***Exercise number:*** 07

***Title*:** Generation of 3D model of Square Shaft

**Description**: A working drawing and a 3D model of a machine part are given. Visualize clearly the purpose of part and it's way of functioning. Explore thoroughly the shape and clearances of the part, it’s external and internal features. Identify the shape and size of each geometric primitive of the part to define it's 3D model.

Construct:

3D model of the part using CAD software, e.g. SolidWorks, Solid Edge, Inventor, etc.

**Digital files:**

IO4-7-a.pdf: Working drawing of Square Shaft

IO4-7-b.stl: 3D model of Square Shaft

IO4-7-c.stl: 3D model of Square Shaft with cut out

***Result:***

3D model of Square Shaft

***Prior knowledge:*** Reading of mechanical drawings, basic knowledge of CAD software use

***Augmented reality content:*** 3D model with the solution of the exercise. 3D model of the part with cut out.

