

DETERMINATION AND SIMULATION IN SOFTWARE FEM OF ADHESION AND ABRASION WEAR COEFFICIENT OF ANTI FRICTION ALLOYS COPPER BASED

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Abstract

The modeling of the tribological coefficients obtained in the laboratory materials science, through finite element software such as ANSYS version 14.5, brass, copper and bronze, commonly used in the production sector and specifically in the metalworking industry, make need to have well defined characteristics for various applications in manufacturing various pieces of equipment, such as, bushings, or rings, bearings, and others. The engineers design of manufactured products and systems necessary for its manufacturing process, the products require materials of this type, must have knowledge of the internal structure, properties and behavior thereof, among other tribological coefficients, such as wear, they are able to bear, when subjected to repeated cyclic stresses, so that you select the right one for each application, and develop the best methods of manufacturing the components and process equipment.

Keywords: Specific wear coefficient, Adhesive, Abrasive, Hardness, Friction Torque, Coefficient Friction.