

[DOWNLOAD](#)

Biomechanical Models of Hand Coupling

By Seo, Na Jin

Condition: New. Publisher/Verlag: AV Akademikerverlag | For Axial Torque and Push Exertions - Effects of Torque Direction, Hand-handle Friction, and Handle Size on Axial Torque and Push Exertions for Cylindrical Handles | Revision with unchanged content. Sufficient axial torque and push must be applied with the hands to perform many activities of work, daily living and recreation. Slippage between the hands and work object can result in failure to complete the task and hand injuries. Also, repeated forceful exertions can result in fatigue, damage to the body, and cumulative trauma disorders. This dissertation aims to develop and evaluate biomechanical models that describe axial torque and push on a cylindrical handle in relation to contact force distribution, hand-handle friction, handle size, and the force application direction. In addition, a simple method for measuring hand static friction coefficients proposed in this dissertation can be easily used in the field in a timely manner by ergonomics practitioners or product designers to design more efficient and safer work objects. These findings in this dissertation can be implemented into the design of work objects to reduce required muscle activities for tasks that involve axial torque and push exertion, and thus reduce injuries from hand slippage...



[READ ONLINE](#)
[2.42 MB]

Reviews

The ideal book i possibly read. It is among the most remarkable pdf i have go through. I am easily could get a enjoyment of reading through a created ebook.

-- **Elise Wehner**

This ebook may be worth purchasing. it absolutely was writtern extremely completely and useful. You will not truly feel monotony at whenever you want of your respective time (that's what catalogs are for relating to when you ask me).

-- **Idella Halvorson**