



Device for wear assessment of prosthetic hip joints

IDEA > LABORATORY > PROTOTYPE > SCALE-UP > MARKET

> **Description** This affordable device is designed to perform wear tests on prosthetic hip joints. These tests provide additional information to guide health professionals and companies in the procurement of materials with suitable quality to meet requirements.

> **Problem** Brazil lacks regulations for the durability and wear resistance of prosthetic hip joints that are available on the domestic market. A common complication for patients is their early return to surgery for the replacement of prosthetic hip joints due to excessive wear of the acetabular component.

> **Benefits** This invention consists of an affordable and easily assembled device for testing the wear of prosthetic hip joints. The device is based on a simple mechanical technology that contributes to its technical and financial feasibility. The use of this device can facilitate and expand access to wear testing, classifying the prosthesis with respect to its quality and thereby benefiting patients, avoiding the inconvenience of repeated surgery due to the premature wear of the acetabular component.