

Materials List for:

Oscillation and Reaction Board Techniques for Estimating Inertial Properties of a Below-knee Prosthesis

Jeremy D. Smith¹, Abbie E. Ferris¹, Gary D. Heise¹, Richard N. Hinrichs², Philip E. Martin³

¹School of Sport & Exercise Science, University of Northern Colorado

²Kinesiology Program, Arizona State University

³Department of Kinesiology, Iowa State University

Correspondence to: Jeremy D. Smith at jeremy.smith@unco.edu

URL: <http://www.jove.com/video/50977>

DOI: [doi:10.3791/50977](https://doi.org/10.3791/50977)

Materials

Name	Company	Catalog Number	Comments
Oscillation Rack & Reaction Board	Custom Built		Outer cage made from 80/20 aluminum, inner cage from various thicknesses of solid of aluminum.
Laboratory scale			
NI LabView	National Instruments		Software for recording TTL pulses from infrared photocell.
BNC-1050	National Instruments		BNC Breakout box with direct pin connections to the data acquisition card.
MATLAB	Mathworks Inc.		Software for processing oscillation and reaction board data to predict inertial properties of prosthesis.