

HOME ABOUT LOG IN REGISTER SEARCH CURRENT  
ARCHIVES ANNOUNCEMENTS

TABLE OF CONTENTS




## Reading Tools

### Jump ergometer in...

Zemková, Hamar

Review policy  
About the author  
How to cite item  
Indexing metadata  
Print version  
Notify colleague\*  
Finding References

Home > Vol 35, No 1 (2005) > Zemková

Font Size:   

# Jump ergometer in sport performance testing

Erika Zemková, Dušan Hamar

## Abstract

The papers deals with the application of the jump ergometer in the evaluation of neuromuscular performance. Altogether 288 athletes of different sport specializations (mean age  $18.9 \pm 6.4$  years, height  $172.2 \pm 4.3$  cm, and weight  $62.4 \pm 4.9$  kg) underwent various tests on the jump ergometer, such as 10-, 60-, and 90-second repeated jumps, squat and countermovement jumps without and with an additional load, and drop jumps from different heights with and without bending the knees. The diagnostic system FITRO Jumper consisting of a special contact switch mattress connected by means of an interface to a computer was used. Jump parameters (power in the active phase of take off and height of the jump) were calculated from the flight and contact times. Results showed that the system may be applied for the assessment of explosive power of the lower extremities, strength endurance of the lower extremities, utilization of the stretch shortening cycle, distribution of fast twitch fibers, optimal drop jump height for plyometric training, and training effects, namely in sports such as basketball, volleyball, soccer, tennis, gymnastics, rock and roll, figure skating, track and field, ski jumping, weight lifting, etc.

Full Text: [PDF](#)

## SEARCH JOURNAL

CLOSE

\* Requires [registration](#)

