

Abstract

A name of a diploma work: Modern means of development of maximum speed

A student: František Hoffmann

A supervisor of a diploma work: PhDr. Aleš Kaplan, Ph.D.

Goals of a diploma work:

Observing of changes of chosen quantities depending on each other on supramaximal sprint (a frequency and a length of a step) in a comparison to zero-level sprint of maximum speed (a frequency and a length of a step).

A Method of a work:

Experimental reaching of over-maximum speed by means of The Speedy System and evaluating of reached facts by a time analysis in the service workplace CASRI, keeping balance of the experiment (inner validity) and final evaluating through: a middle value, authoritative divergence, setting of a regress equation of maximum and over-maximum sprint and a comparison of relation of zero-levels and dependent quantities of single sprints, an equilibration of the ABBA experiment.

Results:

In the experiment was noticed a change of zero level in the comparison to independent quantities about 7,5 % in increasing of maximum speed up to over-maximum speed of all sprints.

As regards the comparison of zero level to dependent quantities there was noticed increasing or decreasing of the step frequency about 1,6 % in dependence on shortening or extension of a step length, witch proportion on supramaximal speed 6%.

Key words:

Supramaximal speed, The Speedy System, maximum speed, dependent/independent quantities, zero levels, experiment.