

Construction of Weekly Cycles (Hammer Throwing)
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Improvement in sports performance is always conditioned on a certain system of training: its structure and the content of a specific macro, meso, or microcycle. In the present article we will discuss in detail the design of weekly training cycles. We will begin by setting forth the most important principles that must be considered when formulating such cycles.

Of primary importance is the need to periodically change weekly cycles after they have been used for a long period. Not only does the athlete's body become accustomed to fixed cycles (and to the same means and methods of training), but also there are different objectives facing the athlete in a specific period of training. For example, during a period when competitive preparedness is being developed, one normally employs the most effective means and methods, designed primarily to improve throwing technique and to develop the necessary specialized speed-strength. However, during a maintenance period one includes less effective means and methods, which differ significantly - both in form and in how strongly they affect the athlete's body. In both cases, though, it is imperative for athletes of every age and sports classification to improve their basic motor skill throughout the span of these periods.

During the maintenance period the volume of training may remain unchanged, or it may decline 25-50% relative to the volume employed during the developmental period.

For the sake of clarity, I will cite an example of my weekly training during the 1972 season. During the development-of-sports-form period (getting ready for competition):

Monday-Wednesday-Friday: AM: 30 hammer throws; PM: Weight training - 10 tons.

Tuesday-Thursday-Saturday: 150-200 weight throws; 100 jumps.

Sunday: Rest.

During one of the maintenance periods:

Monday-Wednesday: 25-30 hammer throws; weight training - 5 tons.

Tuesday-Thursday: 100 weight and shot throws; 50 jumps.

Friday: Rest.

Saturday: Weight training - 5 tons.

Sunday: Competition.

A change in training means and methods during the maintenance period not only allows one to maintain his acquired level of form, but also provides active rest, which is necessary when competing in tournaments.

One must correctly alternate the exercises in each workout when constructing weekly cycles. It is most effective to do important work immediately after a general and specialized warm-up, because this is the most favorable time to improve throwing technique and to develop special speed-strength. At this point one usually executes throws with light, standard, and heavy implements along with other special exercises which, in degree of effect on the athlete's neuromuscular apparatus, are not only identical to the basic motor skill, but which even exceed it in certain cases.

Work of maximum and near-maximum intensity is also best performed immediately after a special warm-up, followed by a switch to work of medium or light (or moderate) intensity.

Special attention should be given to alternating "throwing" workouts (throwing implements of different weights, and also all types of shots, dumbbells, medicine balls) and strength workouts (exercises with weights). Commonly, such workouts are conducted one after the other, whether workouts are done once or twice a day.

When deciding on the volume and intensity of general-development or specialized exercises one should particularly consider the sportsman's individual characteristics. In practice we commonly encounter situations in which the employment of highly effective means and methods is not accompanied by improved performance. Most often this occurs because the quantity and quality of the training loads clearly exceed the athlete's physiological capabilities. Naturally, in this case there are only destructive changes taking place in organs and tissues, and sometimes in entire systems of the sportsman's body, and increased performance is not achieved. It should be noted that these individual changes depend not so much on the character of the training means and methods as on their volume and intensity.

The weekly cycles of the lower-ranking athletes should differ radically from those for sportsmen of high qualification (Masters of Sport and Master of Sport candidates). Lower-ranking athletes improve their performance primarily by means of improving their basic motor skill (improving throwing technique and developing special motor qualities by means of throwing implements of different weight - light, standard, and heavy) and by increasing the level of their general fitness. Hence, in their case there is not a big difference between individual

workouts. For example, they throw the hammer, execute barbell exercises, and do standing jumps, etc., in one workout. The number of workouts per week ranges from three to five.

The weekly training cycle for lower-ranking athletes may be as follows:

Monday: Warm-up: 10-15 min. Special exercises with the hammer (intermediate swings, turns): 15-20 min, 15-20 hammer throws. Barbell exercises: 2-3 tons.

Tuesday: Warm-up: 10-15 min. Special exercises with the hammer (intermediate swings, turns): 15-20 min, 15-20 hammer throws. Throwing shots, dumbbells: 20-50 throws. Standing jumps: 50.

Wednesday, Friday, Sunday: Rest.

Thursday: Same as Monday.

Saturday: Same as Tuesday.

The following weekly cycle is also possible:

Monday: Warm-up: 10-15 min. Special exercises with the hammer (intermediate swings, turns): 15-20 min, 15-20 hammer throws. Throwing shots, dumbbells: 20-50 throws. Standing jumps: 50.

Tuesday: Rest.

Wednesday: Warm-up: 10-15 min. Special exercises with the hammer (intermediate swings, turns): 15-20 min, 15-20 hammer throws. Barbell exercises: 2-3 tons.

Thursday, Saturday, Sunday: Rest.

Friday: Same as Monday.

Also, it is necessary to include slow running and elements of sports games every day.

The make-up of weekly cycles for high-ranking athletes is somewhat different. First, the number of workouts is significantly larger (in some cases it extends to 12). Naturally, the number of rest days is reduced sharply. Second, there is a certain standardization of the weekly cycle-both in the magnitude of the load and in the number of rest days. Throwing workouts are alternated with barbell workouts. This is an important stipulation, and its fulfillment increases one's sports performances and accelerates the flow of recovery processes. Third, the number of training modes is reduced significantly (only the most specific are

retained), and performance improvement is brought about primarily by means of specialized training.

Training work of medium and maximum intensity is primarily used in all workouts. Low-intensity work is employed, however, for the purpose of conducting special warm-ups and for stimulation of recovery processes.

While recommending the use of the weekly variants listed below, we would like to direct the reader's attention to the fact that the rotation of workouts is based on the positive training experience of many leading sportsmen, both domestic and foreign. The same can be said about training loads. Their magnitudes are illustrative. The upward and downward deviations, of course, may be quite significant. The indicated exercises and their rotation do not exclude the use of other training means and other rotations of workouts. But the suggested training means are essential for all hammer throwers.

Below is a sampling of the most typical variants of weekly training loads for high-ranking throwers:

A weekly training cycle containing four training days:

Variant 1.

Monday, Thursday: Hammer throws - 25-30 throws of differing intensity.

Tuesday: Weight training - 5-10 tons.

Friday: Throwing shots, dumbbells - 50-100 throws or more; all manner of standing jumps - 50 or more.

Wednesday, Saturday, Sunday: Rest.

Variant 2.

Monday, Thursday: 25-30 hammer throws of different intensity.

Tuesday: Throwing shots, dumbbells - 50-100 or more throws; all kinds of standing jumps - 50 or more.

Wednesday, Saturday, Sunday: Rest.

Friday: Weight training - 5 - 10 tons.

A weekly training cycle containing five training days:

Variant 1.

Monday, Wednesday, Friday: 25-30 hammer throws of different intensity.

Tuesday, Saturday: Weight training - 5-10 tons; throwing shots, dumbbells – 50-100 throws.

Thursday, Sunday: Rest.

Variant 2.

Monday, Wednesday, Friday. AM: 25-30 hammer throws of different intensity, PM: Weight training - 5-10 tons.

Tuesday, Saturday: Throwing shots, dumbbells – 50-100 or more throws; all types of standing jumps - 50 or more.
Thursday, Sunday: Rest.

Variant 3.

Monday, Friday: 25-30 hammer throws of different intensity.

Tuesday: Weight training – 5-10 tons.

Wednesday, Saturday: Throwing shots, dumbbells – 50-100 or more throws; all types of standing jumps - 50 or more.

A weekly training cycle containing 6 training days:

Variant 1.

Monday, Wednesday, Friday: 25-30 hammer throws of different intensity; throwing shots, dumbbells - 50-100 throws.

Tuesday, Thursday, Saturday: Weight training: 5-10 tons (wide grip or narrow grip snatches, cleans jerk pulls and snatch pulls, front and back squats and half squats, forward bends, “twisting” jumps, etc.)

Variant 2.

Monday, Wednesday, Friday: 25-30 hammer throws of different intensity; weight training -5 tons.

Tuesday, Thursday, Saturday: Throwing shots, dumbbells - 50-100 or more throws; all types of standing jumps - 50 or more.

Sunday: Rest.

Variant 3.

Monday, Wednesday, Friday: 25-30 hammer throws of different intensity.

Tuesday, Thursday, Saturday: Weight training - 5- 10 tons.

Sunday: Rest.

Variant 4.

Monday, Wednesday, Friday: AM: 25-30 hammer throws of different intensity; PM: Weight training - 5-10 tons.

Tuesday, Thursday, Saturday: AM: Throwing weight - 30-50 throws or throwing shots, dumbbells - 50-100 or more throws; standing jumps – 50 or more; PM: Weight training – 5-10 tons.

Sunday: Rest.