

HADU·FORCE
P R O F E S S I O N A L 1.0

**User manual
Hydraulic exercise
machines**

www.hadu-force.com

Hadu-Force hydraulic exercise machines are a unique product that has no world equal. The design of Hadu-Force is patented in Ukraine, the European Union and the USA. These exercise machines are produced in Ukraine and are sold under registered trademark Hadu-Force.

Please read the instructions carefully before using the exercise machines.

If you need further assistance or have any questions, please contact the product seller or dealer.

Advantages

Ease of fastening.

These exercise machines are suitable for fastening to the wall. Each exercise machine requires not more than 2 linear meters of the wall.

Convenience of placement.

If exercise machines are placed outside the perimeter of the room, the middle of the hall can be used for regular group training programs.

Maximum occupancy of fitness studio.

There are 8 exercise machines in the fitness studio, a group of 8 people using exercise machines while 8 can rest. The duration of one group training is up to 30 minutes.

Zero vibration and noise.

These exercise machines do not produce noise and vibration, so they can be installed in residential premises, offices, as well as in medical and educational institutions. If it is not possible to allocate a separate room, exercise machines can be installed in the corridors.

Light weight.

A set of 8 exercise machines weighs not more than 180 kg. This allows installing exercise machines in fitness studio with limited weight bearing.

Rehabilitation.

These exercise machines are ideal for rehabilitation of musculoskeletal system. This applies to post-traumatic and anti-aging rehabilitation.

Safety.

Operating these exercise machines requires just the basic physical education of the trainer. The exercises are similar to those typical for a regular gym. In addition, the product design itself makes accidental injuries impossible.

The critical situation it is enough to simply stop moving. Nothing will fall and there will be no injury.

Large range of lever movement.

The angle of movement is around 300°. This allows working out all the joints with full movement amplitude. It is important that the load changes automatically at any time during the exercise as needed. This particular characteristic is extremely valuable for rehabilitation activities.

Harmonizing your body.

Each exercise machine allows for simultaneous working out of agonist and antagonist muscle groups. If the forward and reverse movement is performed at the same speed, flexor and extensor muscles are developed uniformly. All this results in the harmonization of musculoskeletal system.

Body symmetry.

Regular exercise brings the balancing of left and right sides of the body.

Efficiency.

In order to fully work out the muscle in each exercise, just one approach lasting up to 1 minute is needed. The break between exercises is also up to 1 minute. Thus, a complete workout to train all the muscles takes less than 30 minutes. All this results in a positive effect of training with less time spent compared to other types of physical exercise.

Ease of maintenance.

There are very few moving parts in these exercise machines. The product demonstrates a huge safety margin.

Multifunctional performance.

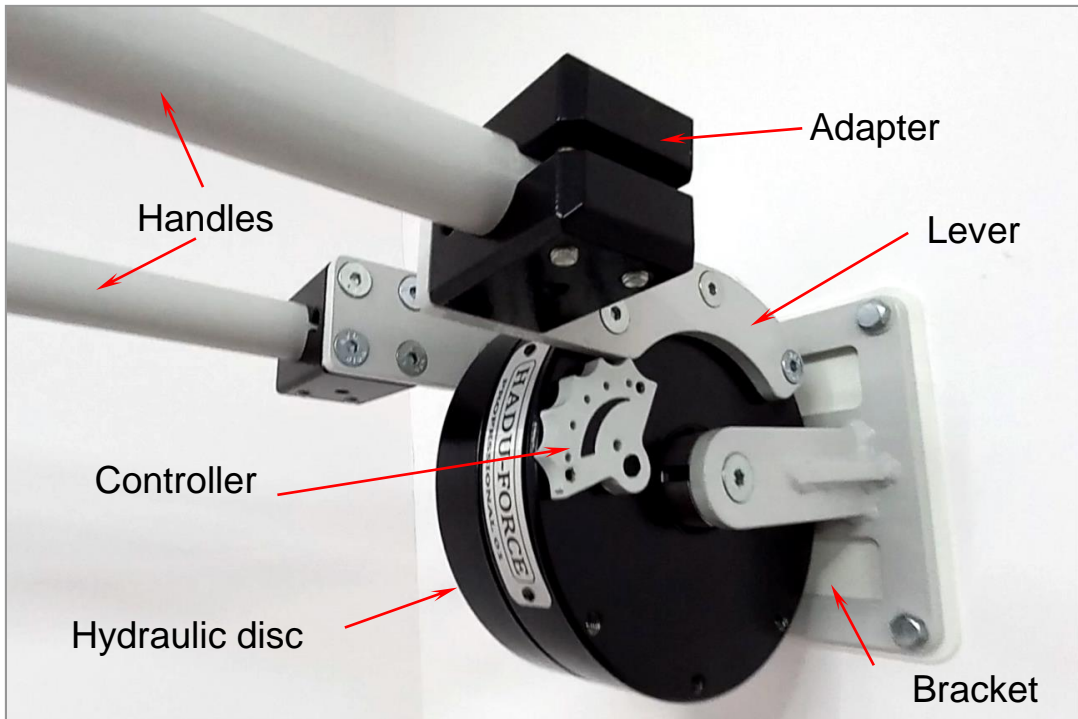
Each exercise machine can replace at least two regular or free weight fitness machines.

Reliability.

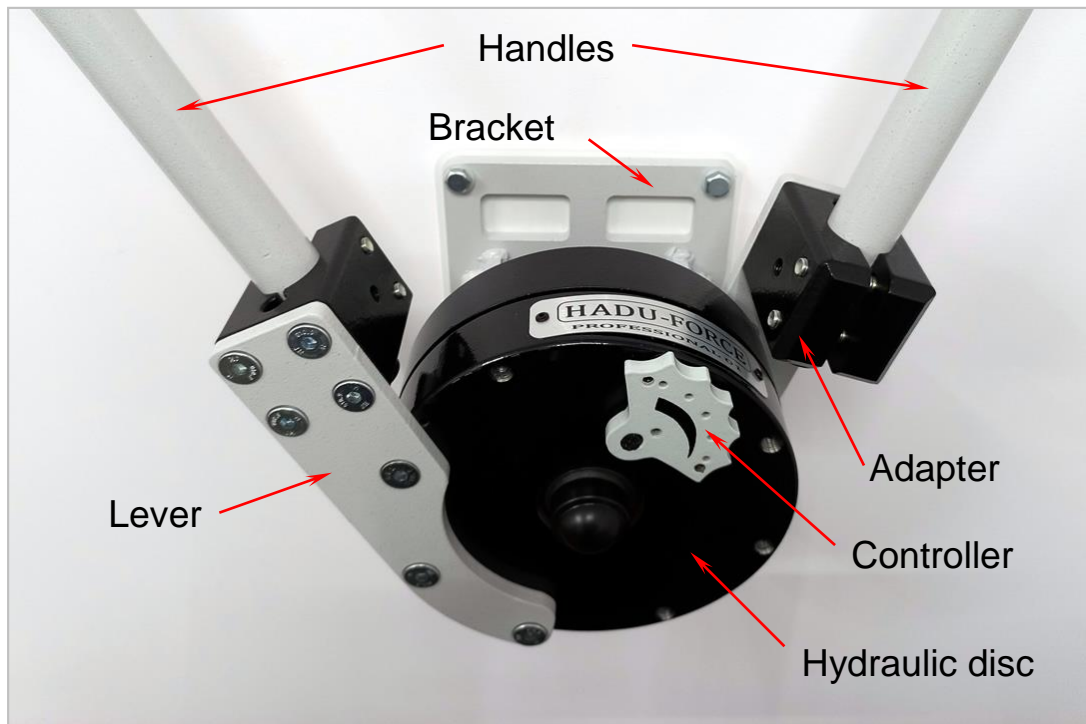
The original design with a minimum number of moving parts was engineered according to the norms of industrial hydraulic machines. Safety margin and wear resistance is several times higher than the requirements for any other exercise machines.

Design of Hadu-Force

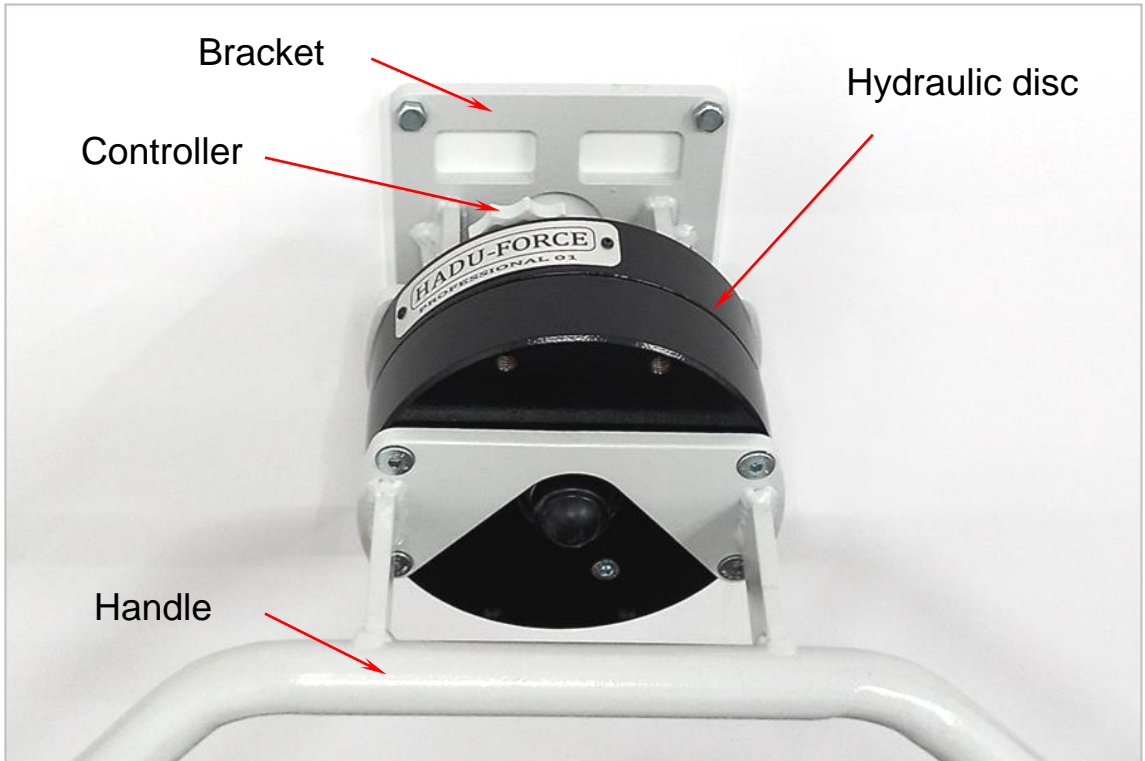
The main unit of all exercise machines is a unique hydraulic disc, being the original hydraulic machine. Due to this it was possible to simplify the mechanism for adjusting the load and significantly reduce the weight and overall dimensions of exercise machines. Structural elements and the location of regulator for each exercise machine are given in the figures below.



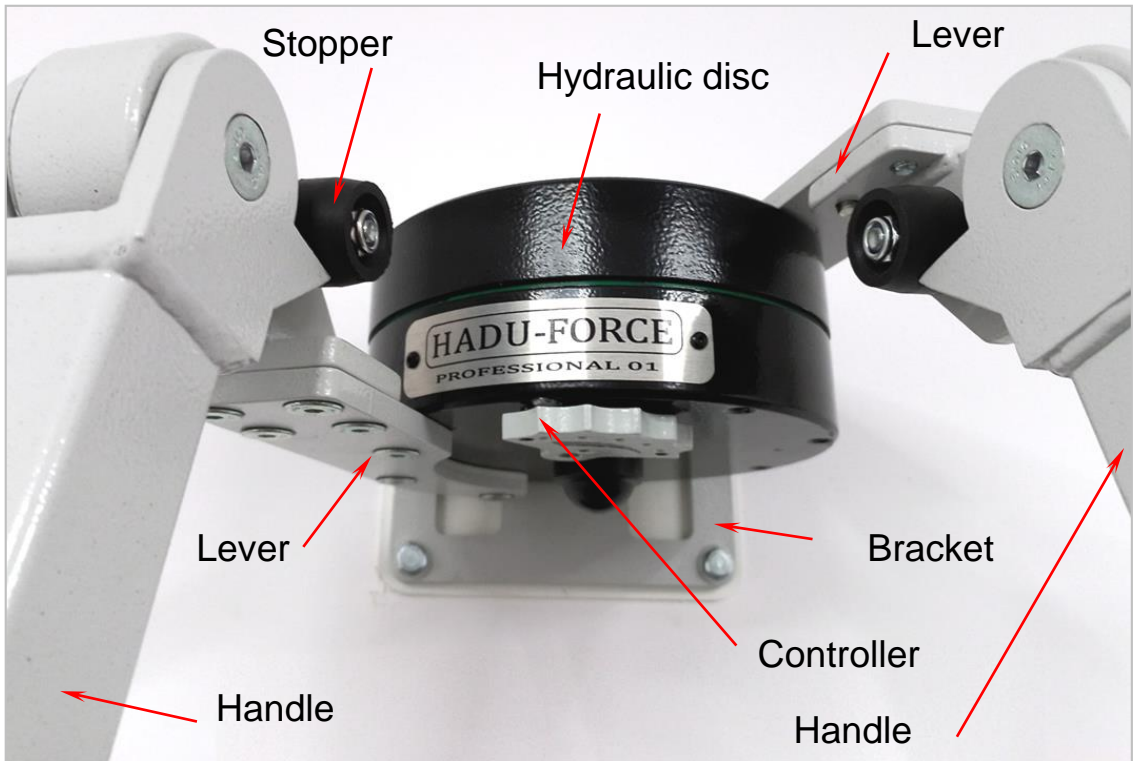
Parallel Bars or Dumbbells



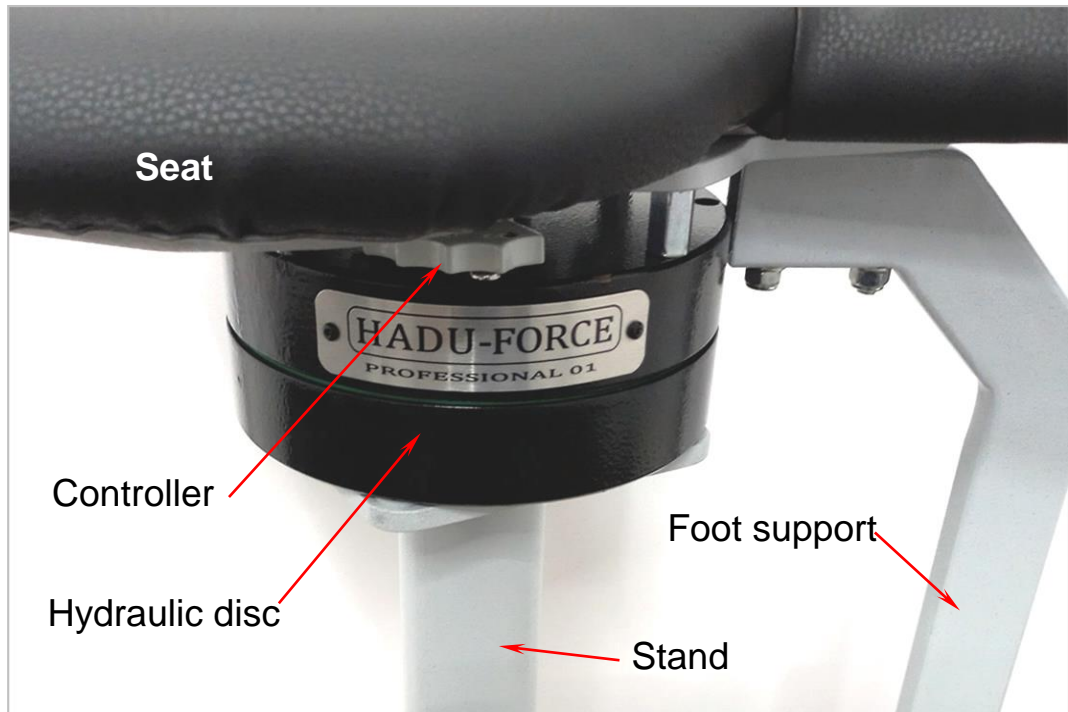
Top Arc or Bottom Arc



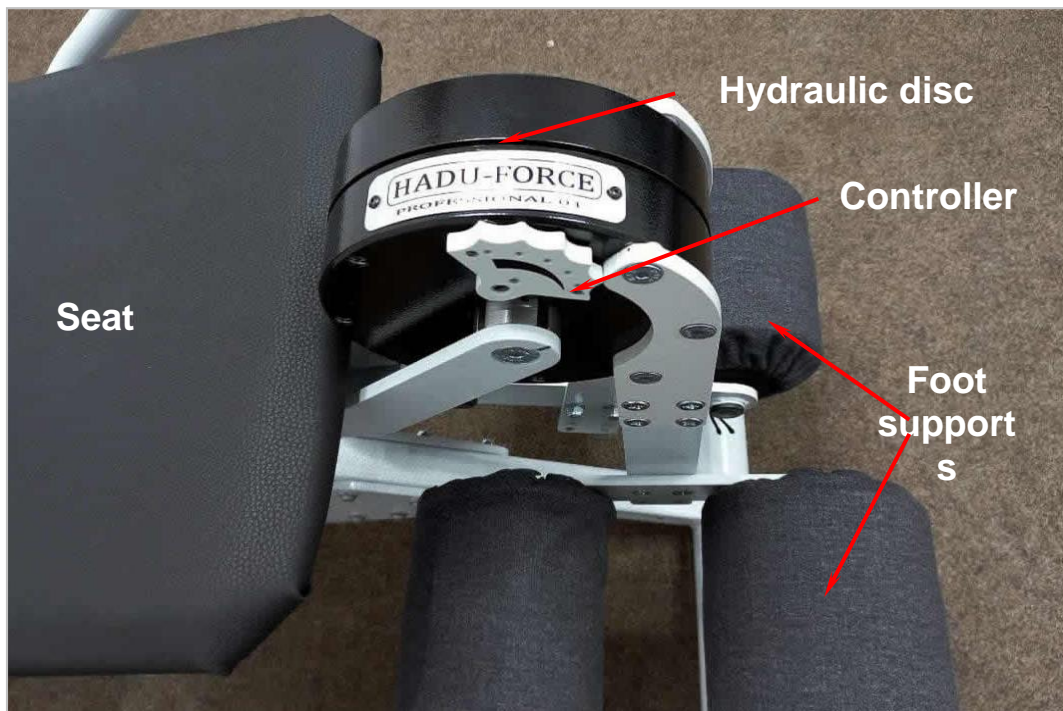
Steering Wheel



Butterfly



Hydraulic Chair



Leg Trainer

Load adjustment

Load can be controlled in two ways.

The first one is using a regulator, which directly changes hydrodynamic resistance of the exercise machine.

The second one is by changing the speed of exercises. With the increase of the speed the resistance from the exercise machine and the load on the muscles is increased. This allows for complete load of the muscle in one set. The second and third approaches are no longer required.

Specific features of workout

Rehabilitation. All exercises are performed with a small load with maximum amplitude and in comfortable rhythm. Exercises should be performed before the onset of muscle fatigue.

Stamina training. Exercises are performed with an average load at a comfortable pace for about 60 seconds. Over time the duration of the exercise can be increased to several minutes to reach muscle fatigue.

Training using hydraulic exercise machines can be close to power training mode. Muscle fatigue occurs faster than in a regular gym. A complete workout lasts 15-20 minutes. After performing an exercise using any hydraulic exercise machine, a rest of the same duration is recommended. Each exercise is performed in only one set. One set should last for not more than 60 seconds. If the exercise is performed easily, it is recommended to increase its pace. Trainees can start with 5 repetitions and bring them to 50-60 over time.

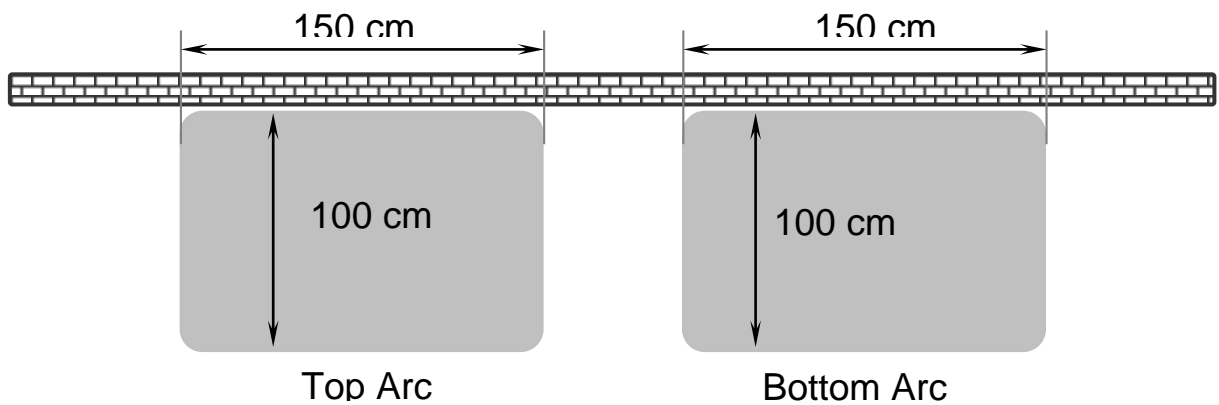
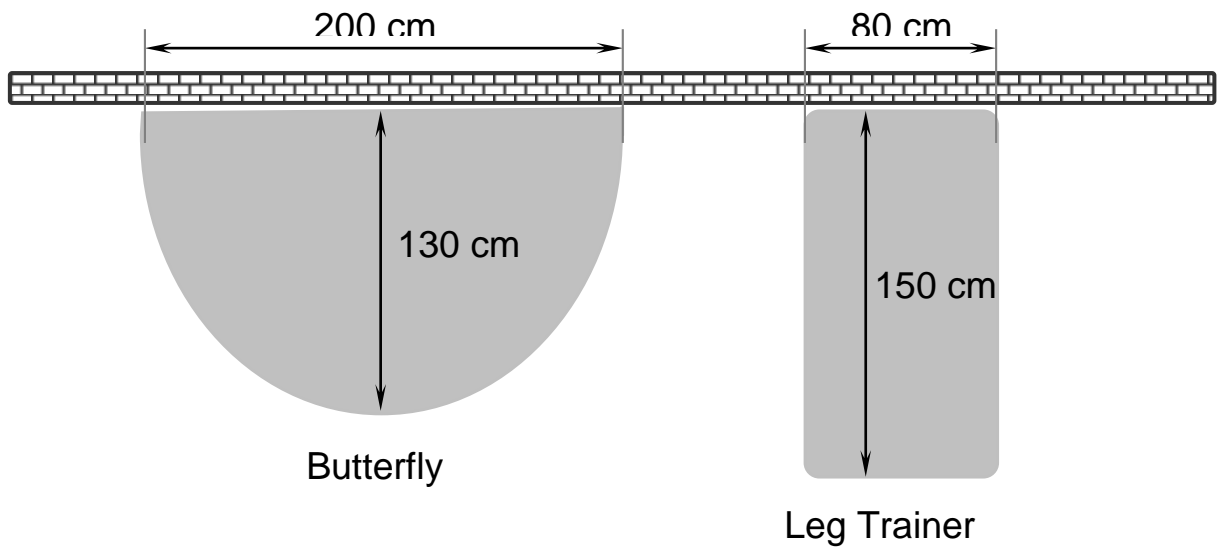
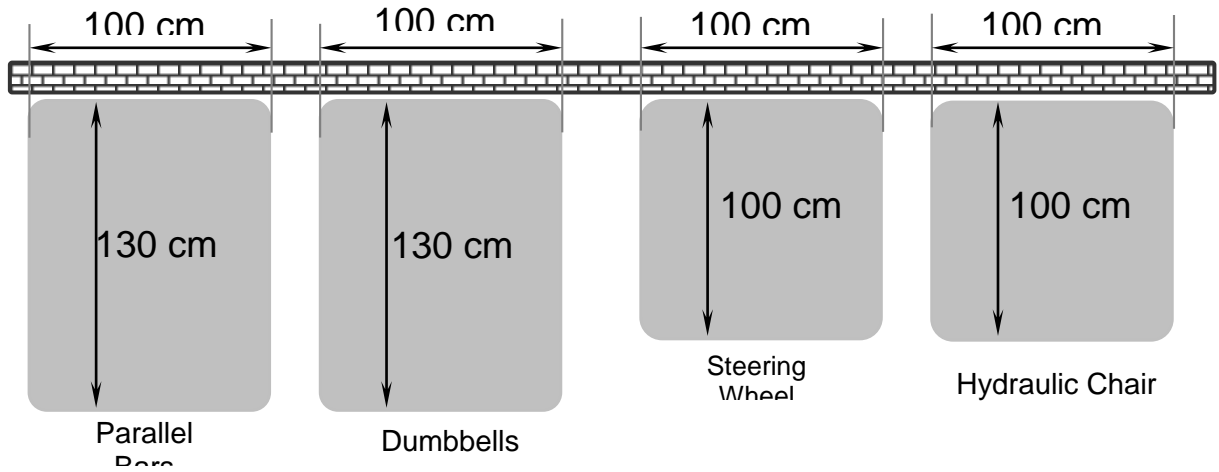
The central task is to provide muscle fatigue. This is felt in slowing down the pace of the exercise and absolute failure of the muscle. Therefore, the number of repetitions does not matter if there is a clear slowdown in the performance of the muscle.

Important!

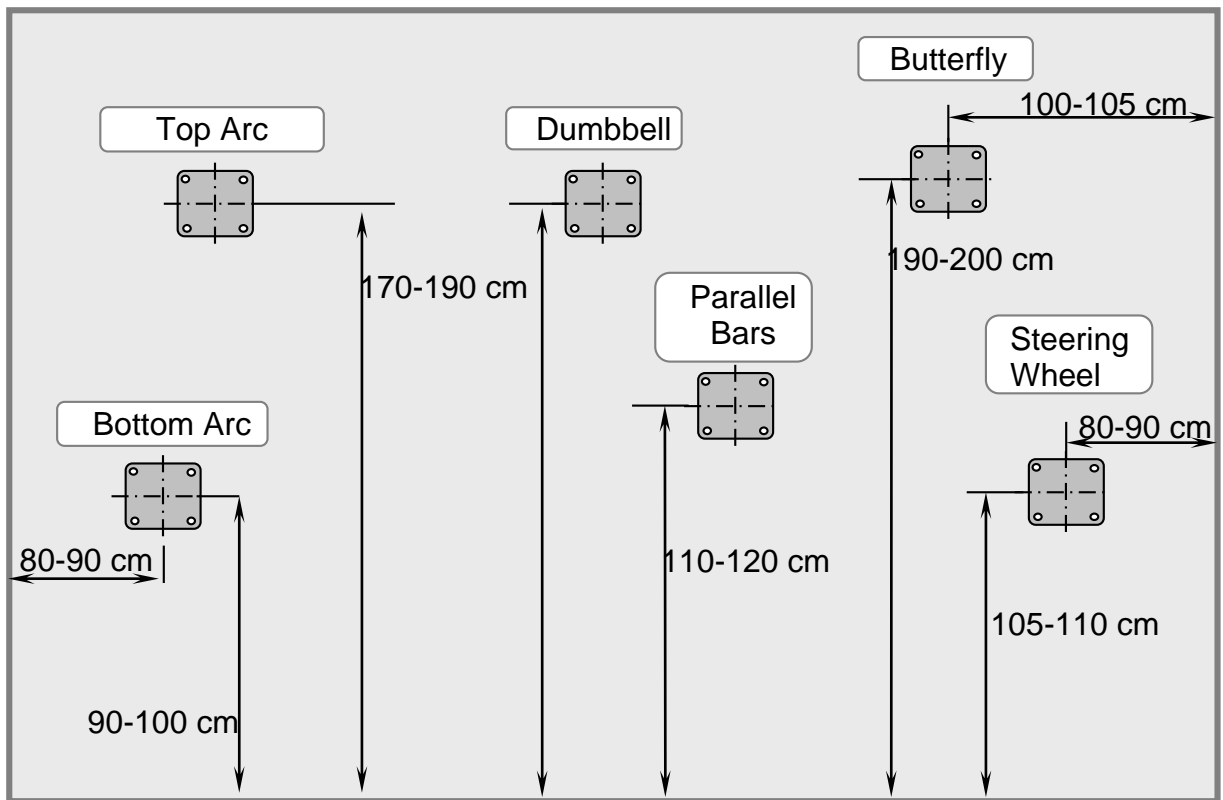
In case of discomfort or pain it is necessary to limit the movement amplitude or slow down the pace of the exercise.

The list of basic exercises using hydraulic exercise machines is provided in the printed application, as well as at the following URL: www.hadu-force.com

Working areas of exercise machines (top view)



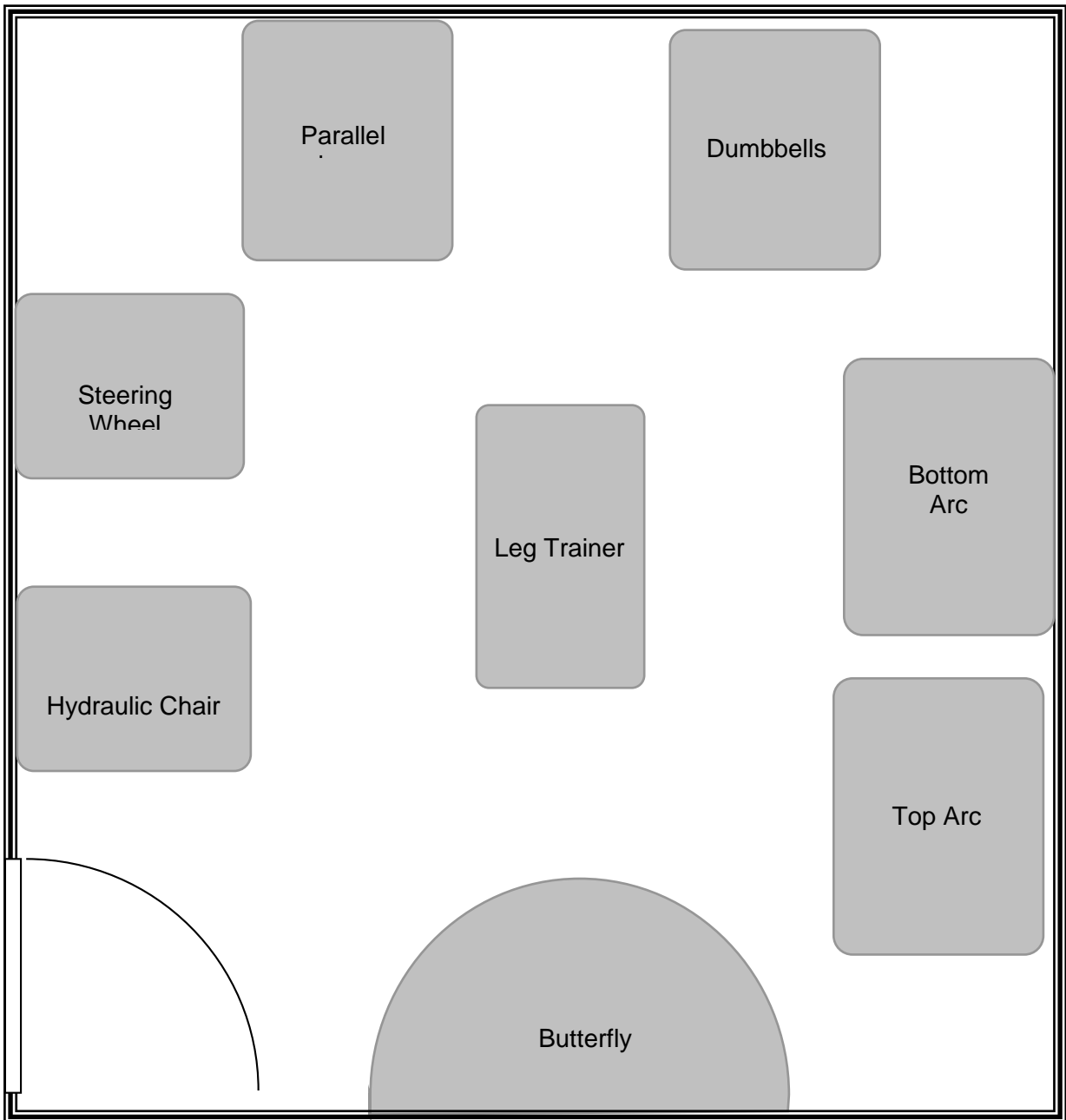
Placement of exercise machines on the wall



Important!

A special tool is required to mount exercise machines on the wall. Therefore, we recommend that you consult the specialists in this field or the exercise machine supplier.

Option - Layout of exercise machines on an area of 30m²
when creating a commercial fitness studio



Maintenance of exercise machines

These exercise machines have been designed in accordance with the norms of industrial hydraulic technology and have a huge safety margin. There are few moving parts in the exercise machines. As a result, they are easy to operate and require minimal maintenance.

First three months of operation of exercise machines provide a traditional mechanical run-in period. Afterwards it is recommended to tighten all threaded connections. This can be done locally or by consulting the seller.

During operation a few droplets of hydraulic oil may appear on the exercise machines. This is the so-called process oil. Its appearance in droplets is absolutely normal and is not considered to be a defect or product failure.

Maintenance of exercise equipment includes wiping them with a dry or damp cloth from dust. Washing and moisturizing is prohibited.

In case of any problems related to the operation of exercise machine, please contact the manufacturer or seller. Warranty period is 5 years.

Opening the hydraulic disc will void the warranty.