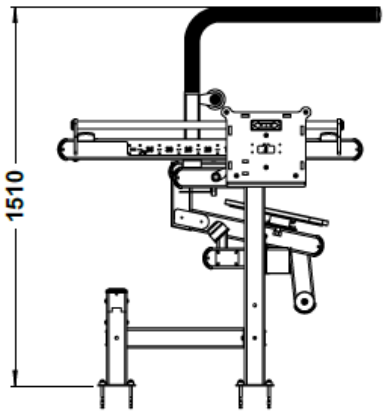
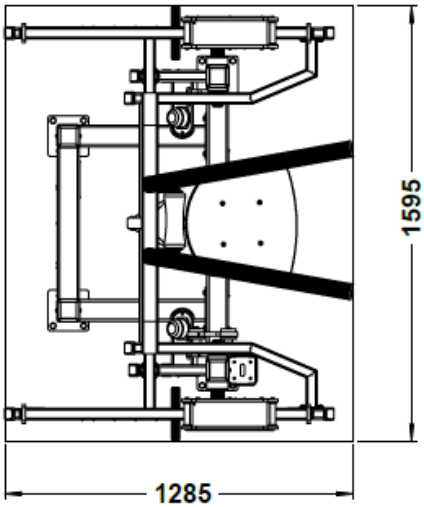
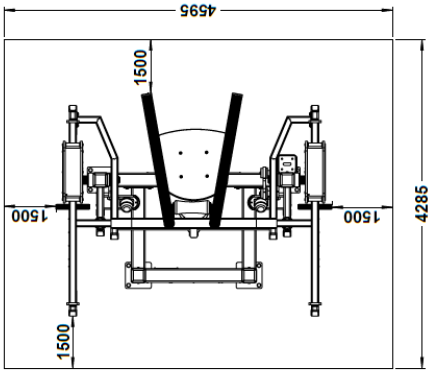
LKF1260

ABDOMINAL MACHINE TECHNICAL SPECIFICATIONS





Safe Settlement Area Measure



1. SCOPE

This specification covers the technical characteristics of the mechanical abdominal machine designed for use in outdoor sports areas, intended to exercise users' upper body and abdominal muscles.

2. GENERAL FEATURES

All metal parts shall be sandblasted.

The machines shall include a compartment for users to store their phones and drinks.

Each machine will feature a QR code providing access to a video explaining the correct use and operating principle of the product.

Each part will be packaged to prevent friction and scratches during transport.

The products will have no sharp edges or surface details that could harm the human body during use. Contact points will consist of rounded lines and curves.

3. SURFACE TREATMENTS AND PAINT

Oil, rust and dirt on metal surfaces will be cleaned using a pressurised air spraying method.

The material surface will be sandblasted to open pores, ensuring better adhesion of the zinc primer and paint.

After sandblasting, all metal surfaces will be painted with zinc primer-coated electrostatic paint.

4. MECHANICAL SYSTEM AND BODY STRUCTURE

Square profiles measuring 80 x 80 x 4 mm will be used in the main body of the machine.

Rectangular profiles measuring 40 x 80 x 4 mm will be used in the moving load arms.

The shaft connecting the main body to the load arms will have a diameter of Ø40 mm.

The moving load arms will be connected to the main body with self-sealed bearings.

Surface-coated bearings numbered 6206 will be used.

The bearing systems will be protected against water, dust and external factors by polyamide-based covers produced by plastic injection moulding.

The machine will be manufactured for use by more than one person.

5. WEIGHT SYSTEM

The weight increase system will be designed to be 2.5 kg at each level.

The minimum operating weight will be 5 kg, and the maximum operating weight will not be less than 75 kg.

The product will be manufactured as a dual weight unit; the total weight will be 75 kg.

The weight system is designed to allow users to operate both sides independently.

The weight system will feature a mechanism that allows it to slide evenly on both the right and left load arms.

The mechanism will be capable of operating on both sides and will provide the possibility of dual-sided use.

A single wheel will be used in each weight system, and each wheel system will contain two sealed and surface-coated bearings.

The weight system will move forwards and backwards on a 40x80x4 mm load arm using Ø 90 mm wheels.

UV-printed aluminium labels will be used as kilogram increase/decrease indicators. (There will be absolutely no foil or adhesive.)

The profile rails on which the weight moves will be covered with wear and corrosion-resistant stainless steel sheet.

The weight system will be equipped with a double-sided locking mechanism that prevents forward and backward movement during operation.

The locking mechanism will operate via a Ø21x2 mm steel tube, and Ø30 mm rubber hand grips (93 mm) will be located at the user contact points.

A Ø20 mm chrome shaft will be used to ensure the integrity of the weight system.

The weight system will move horizontally via a Ø30 mm chrome shaft and slide on CrNi 304 stainless steel sheet with the aid of wheels.

6. SAFETY AND ERGONOMICS

Ø72x52 mm rubber buffers will be used to prevent impact situations.

To prevent metal-to-metal contact, 45x68x35 mm elliptical rubber buffers will be mounted on 40x80 profiles.

For user safety, half-circle, square or elliptical polyamide caps will be fitted to the ends of the 40x80 – 80x80 profiles.

7. SEAT AND ADJUSTMENT MECHANISM

The seat platform will be manufactured to rotate to the right or left, allowing the user to work their right and left abdominal muscles as desired.

There will be locking holes and stainless steel safety pins for position adjustment.

The metal parts through which the pins pass will be manufactured from 2 mm CrNi 304 stainless steel sheet.

8. SUPPORTS AND HANDLES

The back, chest and seat platforms will be manufactured from vandal-resistant 19 mm thick UHDPE (Ultra High Density Polyethylene) material.

To prevent the user from applying pressure to their back or neck during training, a vandal-resistant hard plastic material, specially designed for the human neck and machined on a CNC lathe, will be used.

The hand grips will be manufactured from 48*3 mm tubing. To prevent slipping, the hand grips will feature a PVC-enhanced product containing synthetic rubber, which is unaffected by adverse weather conditions and sunlight.

10. DIMENSIONS AND ASSEMBLY

The passive (closed) dimensions of the machine shall be at least 1595 mm width x 1285 mm length x 1510 mm height.

The product shall be fully demountable for transport.

The products shall be manufactured in accordance with EN16630 Standards.