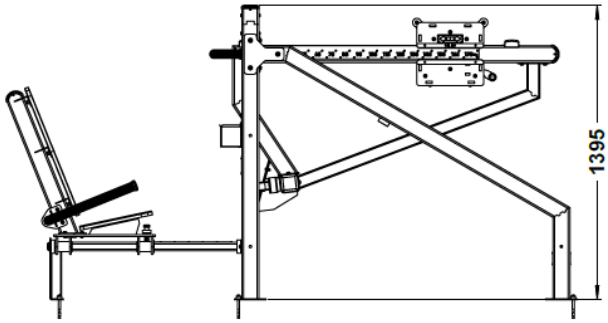
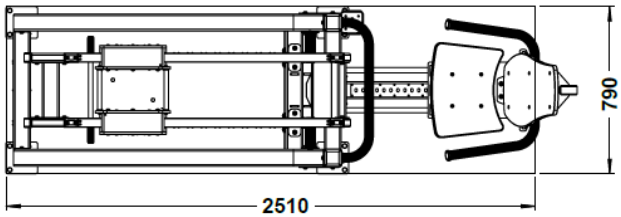
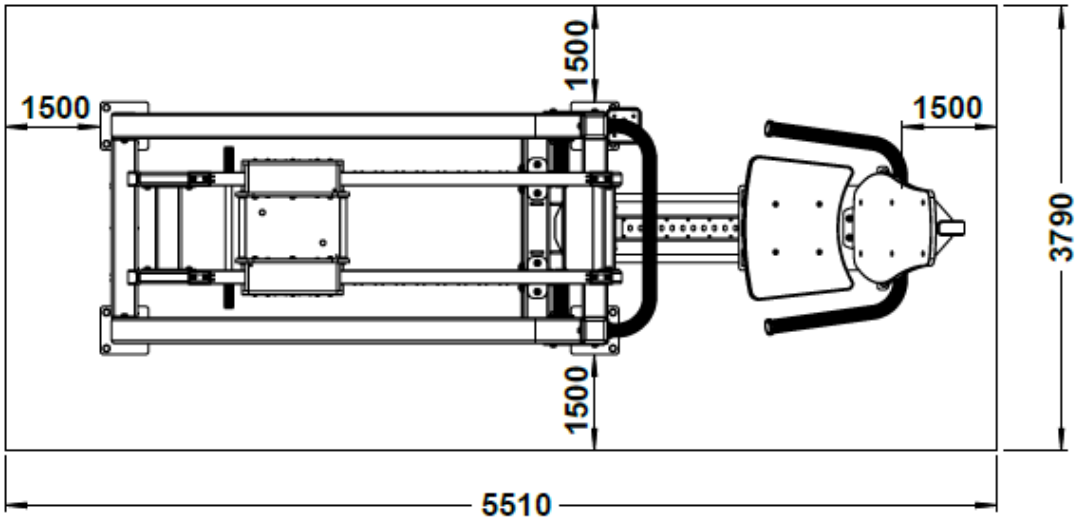
YD-LKF1160

LEG PRESS TECHNICAL SPECIFICATIONS





Safe Settlement Area Measure



1. SCOPE

This specification covers the technical characteristics of the mechanical LEG PRESS machine, designed for use in outdoor sports areas, which targets the lower and upper body muscles.

2. GENERAL CHARACTERISTICS

All metal parts shall be sandblasted.

The machines shall include a compartment for users to place 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 scratching during transport.

The products will have no sharp edges or surface details that could cause injury to 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 10 kg at each level.

The minimum operating weight shall not be less than 45 kg, and the maximum operating weight shall not be less than 175 kg.

The product shall be manufactured as a dual weight unit; the total weight shall be 175 kg.

The mechanism shall be capable of operating on both sides and shall provide dual-sided usage capability.

One wheel will be used in each weight system, and each wheel system will have two closed and surface-coated bearings.

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

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 user contact points.

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

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 adjustable according to the user's height.

The adjustment mechanism will operate on sliding bearings and Ø20 mm stainless steel pins.

There will be locking holes and a stainless steel safety pin for height adjustment.

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 19 mm thick vandal-resistant UHDPE (Ultra High Density Polyethylene) material.

The handrails will be manufactured from Ø34 and 48*3 mm tubing. To prevent hands from slipping on the handrails, a PVC-enhanced product containing synthetic rubber, which is unaffected by adverse weather conditions and sunlight, will be used.

10. DIMENSIONS AND ASSEMBLY

The passive (closed) dimensions of the machine shall be at least 790 mm width x 2510 mm length x 1395 mm height.

The product shall be fully demountable for transport.

The products shall be manufactured in accordance with EN16630 standards.