

Ankle Dynamometer

- Advanced and user-friendly solution for static joint torque measurements.
- Adjustable and rigid mechanical frame is suitable to measure children, tall elite athletes and elderly population.
- Bi-lateral design allows instant left and right comparisons.
- Strong mechanical design with top-level electronics provide the highest level of accuracy, which sets our dynamometers as a top solution for both practice and science.



Product Description

Ankle dynamometer is ergonomically designed state-of-the-art measurement equipment that enables accurate, repeatable and reliable measurements of isometric torque production during plantar and dorsal flexion. The dynamometer measures each leg independently and allows bilateral comparisons. Maximal voluntary torque, rate-of-torque development, endurance in sustained torque, the ability of visio-motor torque tracking and torque matching are the five key sub-abilities related to neuro-muscular performance. The dynamometer consists of an individually adjustable rigid mechanical frame, two high-quality electronic sensors and purpose-built computer software for data acquisition and analysis.

Basic Components of the Product

Provided by the manufacturer:

- Measurement device – Ankle Dynamometer
- USB cable
- PC with licensed software (see ARS Dynamometry user guide)

List of Requirements

Personal Computer:

- Windows 7 (Home, Professional, Ultimate)
- 2 GHz processor
- 2 GB RAM
- 1 GB available on the hard disk
- Video resolution 1280x760 pix
- CD-ROM or DVD-ROM
- 3 USB ports

Note: The manufacturer usually provides a personal computer. If the client wants to provide their own personal computer, it needs to have the above-mentioned minimal requirements to run official software.

Dynamometer should be placed on a working area of at least 200 x 200 cm to ensure safe operation of the dynamometer.

Technical Specifications

Weight

Total weight of the Ankle Dynamometer is 66.0 kg.

Maximum load

Maximum load per one leg lever arm is 500 Nm (800 N at the end of the lever arm). Maximum load on the seat (weight of the subject) is 1500 N.

Environmental conditions

The dynamometer should be stored in a dry space with a temperature range between 10 and 35 °C.

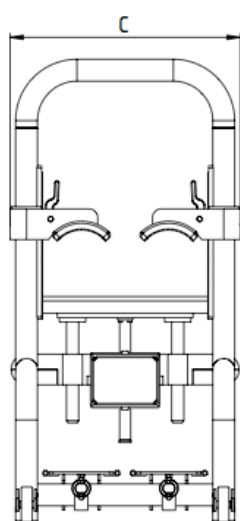
Dimensions

Table: Basic dimensions – Top View

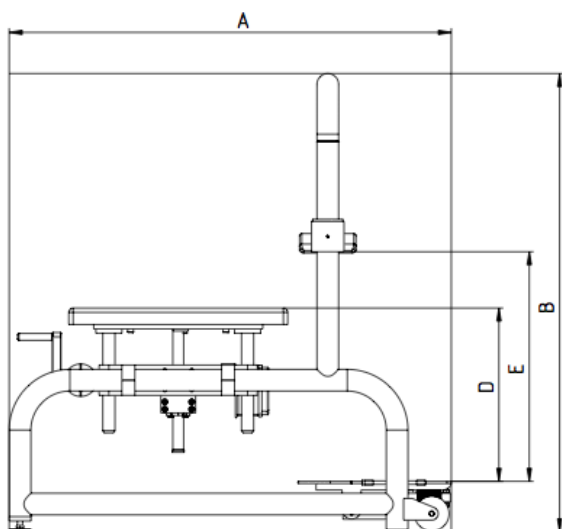
	Max	Min
C	860 mm	530 mm

Table: Basic dimensions – Side View

	Max	Min
A	1020 mm	/
B	1058 mm	/
D	660 mm	520 mm
E	90°	0°



a)



b)

Figure: Ankle Dynamometer, a) Top view and b) Side view.

Components

Part	Description
Seat height adjusting mechanism	To adjust the seat up and down.
Leg support release mechanism	To adjust the position of the leg support for each leg independently.
Leg support	Can be adjusted up and down to fixate the subject's legs.
Foot support	Fixed.
Seat	Fixed.
Frame	Fixed
Wheels	Fixed

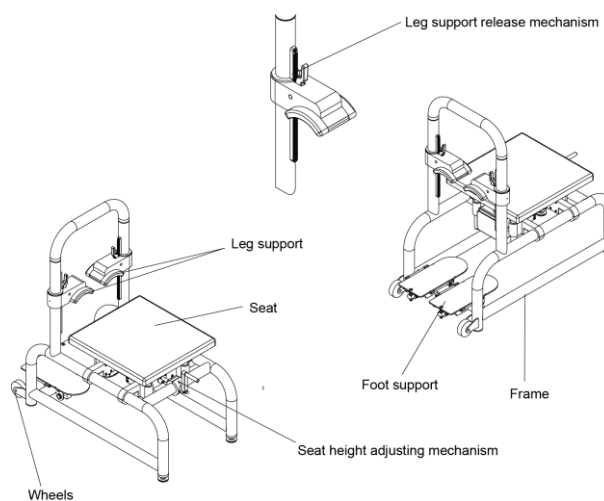


Figure: Components