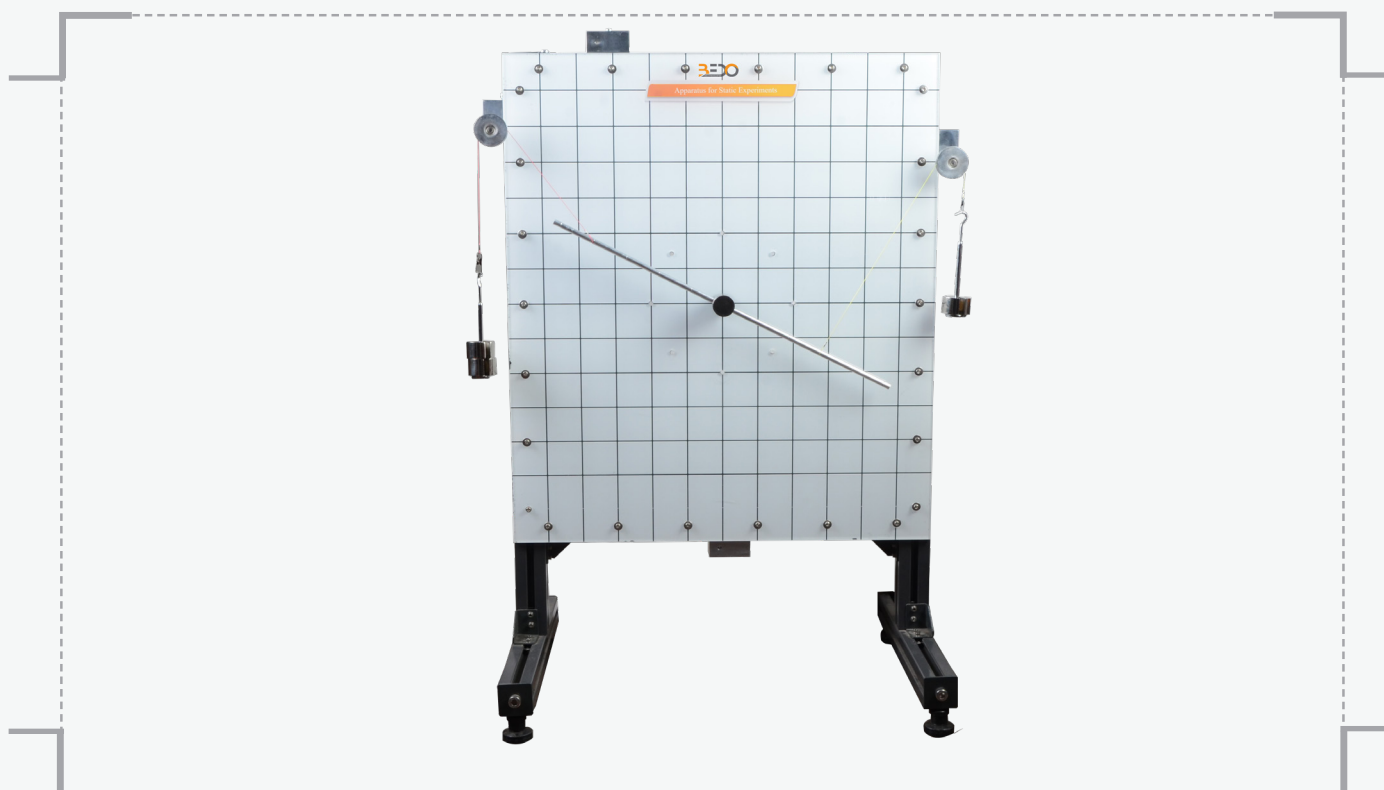


# Fundamentals of Statics Training System

## Overview

The Apparatus for Static Experiments unit is designed based on statics principles. It investigates statics principles such as the equilibrium of forces and moments, resolution of forces, the law of levers, and many more principles.



## Specifications

- The base element is a mountable bench top upright panel with an included set of accessories for usage in the experiments.
- The unit also includes different sets for the experiments such as Force gauge, pull rod, weights, pull-and-push rod, lever rod, slide fixings, free pulley, pivot bearing and deflection pulley (torque disk).
- All parts required for the experiment can be easily attached to the rails around the edges.
- The imprinted line grid and grid-marked lever rods allows precise assembly.
- The lengths marked on the grid make it easy to define angles.
- Bearings can be integrated into the panel to permit low-friction torque experiments.
- The variety of sets equipped with the unit allows students to use their creativity in developing their own experiments.
- Force gauges are equipped for demonstration purposes.
- Feet enable the panel to stand on a laboratory bench.
- The trainer has the feature of writing directly on it with erasable board markers. To add
- sketches and comments to the experiments.
- All parts are clearly protected and sealed in a stackable, space-saving storage kit.

## Experiments

- Force parallelogram for accumulation of forces.
- Equilibrium of forces.
- Law of lever.
- Determination and equilibrium of moments.
- Combined lever systems.
- Bearings Force.
- Fixed and free pulleys Deflection force.

## Technical Data

### Panel Divided into grid

- » WxH: 600x700mm
- » Line grid: 50mm

### 2 x Force Gauge

- » Model: NK-50
- » Max load:50N/5kg
- » Min load:5N/0.5kg
- » Load graduation value:0.25 N/50 g
- » Rod journey: 10 mm

### 4 x Carriage

- » Flexible hanged

- » Dimension 60 x 45 x 30
- » With two threads M5, M7

### Lever rod

- » Aluminum Rod marked with constant distance

### Deflection pulley

- » Torque disk
- » Aluminum Pulley mounted a pivot bearing
- » Diameter: 55 mm

## Components



1	2 x Force gauges	2	Push and pull extensions • Hanger extension • Extensions of different shapes
3	deflection pulley	4	free pulleys
5	pivot bearing	6	hanged pulley
7	4 carriages (slide fixing)	8	2 x short lever rods
9	long lever rod	10	2 X push and pull rods
11	2 X weight hangers	12	Strings of different colors and lengths 26, 45, 68, 76, 87, 93 cm

## Scope of Delivery

- Fundamentals of Statics Training System (SM - 001)
- Hard copy user manual

## Required for Operation

- Mounting frame (BI - 05)

## Options

- Digital content (BI-01)