

# B Series - B02

## 7 kg (15 lb) Capacity

### Horizontal Balancing Machine



#### HORIZONTAL AXIS, TABLE TOP, SOFT BEARING, BALANCING MACHINE

#### DESCRIPTION:

The Model B02 is a dynamic, horizontal axis, soft bearing Balancing Machine. This is a precision balancing machine that can be used with any IRD Balancing instrument. It is suited for balancing small, lightweight rotors such as those found in small high speed machines. The machine is of lightweight construction and can be mounted on a rigid tabletop or workbench. Two work supports with rollers and an integral height adjustment are used to support the rotor journals. Both work support pedestals can be moved on the machine bed to accommodate different length rotors. The drive system consists of a DC variable speed motor with a belt drive. The motor and motor controller are mounted inside the base unit. Optional V-Block rotor work supports are available. An optional pivoting, dynamic top table assembly with quick lock clamping is available for mounting self powered rotors that cannot be supported on rollers.

#### GENERAL SPECIFICATIONS:

- Weight Capacity: 7 kg (15 lb)
- Max. Rotor Dia.: 415 mm (16.3 inches)
- Maximum Sensitivity: 0.018 g mm (0.0008 g in)
- Standard Bed Length: 450 mm (17.7 inches)
- Journal Diameter Range: 6 - 60 mm (0.24 - 2.4 inches)
- Journal-to-Journal Separation: 25 - 400 mm (1 - 15.7 inches)



- Drive Type: Underslung Belt Drive
- Drive Motor: DC 0.095 kW (0.13 HP)  
Variable speed motor with encoder
- Balancing Speed Range: 500 to 10000 RPM
- Number of Balance Planes: 1 or 2
- Encoder output port: Used by IRD balancing instruments for determining rotor angular position
- Standard Accessories: (3) Flat drive belts, (3) O-Ring drive belts, roller work supports, mounting arm for photocell, end thrust assemblies.
- Tabletop configuration:
  - Dim: 520 x 480 x 400 mm (l x w x h)
  - Weight: 27 kg (60 lb)
  - Power: 120 or 230VAC, 50/60 Hz
  - Temperature: Operating -10 to +50° C

#### OPTIONAL FEATURES:

- V-Block Rotor Work Supports
- Dynamic table top assembly for self powered rotors
- Underbelt tangential belt drive assembly
- 236 Desktop Balancing Instrument
- 246 Portable Balancing Instrument

**STANDARD CONFIGURATIONS:**

<b>B02Package</b>	<b>Brief Description</b>	<b>Detailed Description</b>
E46200	Complete B02 Balancing System with 0.095 kW (0.13 HP) 3000 RPM, DC motor for <b>120VAC</b> Operation	Complete B02 Balancing Machine that includes a table top machine bed, 2 movable pedestals, 2 roller work supports with height adjustment, drive motor with encoder, motor controller, drive belts and manual. For 120 VAC operation. This machine does not include a balancing instrument or sensors which must be purchased separately.
E47055	Complete B02 Balancing System for <b>230VAC</b> Operation	Same as E46200 above, except for 230 VAC operation.

<b>Part Number</b>	<b>E46200 and E47055 include</b>
-	Basic B02 balancing machine with drive motor, adjustable roller work supports and motor control
E71201	Flat drive belt, 6mm wide x 480mm long
E70031	Flat drive belt, 6mm wide x 500mm long
E71202	Flat drive belt, 6mm wide x 560mm long
E71043	O-Ring drive belts set of 3, 1.78 mm diameter x 360/400/440mm lengths
E19643	AC Power Supply Cable with US plug US, 3 m
E46436	Operation manual for B02 Balancing System-English
<b>Part Number</b>	<b>Balancing Instrument Options</b>
E00303	Model 236 Desktop Balancing Instrument with all accessories needed for balancing. Includes the 236 Balancing Instrument, two 546DP (direct prod) sensors, two magnetic tips for the 546DP sensors, photocell, photocell reflective tape and all cables.
E00310	Model 246 Portable Balancing Instrument with all accessories needed for balancing. Includes the 246 Balancing Instrument, two 546DP (direct prod) sensors, two magnetic tips for the 546DP sensors, photocell, photocell reflective tape and all cables.

<b>Part Number</b>	<b>Other Options, Accessories, and Supplies</b>
E71034	Rotor safety hold downs, 2 included
E71144	V-block Rotor Work Supports, 2 included
-	Dynamic table top assembly for self powered rotors
-	Underbelt (tangential) belt drive assembly
E41874	AC Power Supply Cable with UK plug
E41554	AC Power Supply Cable with European plug
E41626	AC Power Supply Cable with Australian plug
E41952	AC Power Supply Cable with S.Africa/India plug
E02785	546DP Vibration sensor
E10170	Magnetic tip for 546DP vibration sensor
E04521	Cable for use with 544/546DP vibration sensor, 3.6m/12'
E21000	Photoelectric speed sensor, standard, reflective tape trigger, 25-610 mm range
E21200	Reflective tape for use with speed sensor, 47.5m/150'
E11689	Cable for use with E21000 photoelectric speed sensor, 1.5m/5'
E11820	Balancing wax, sold by the pound
E32147	Epoxy balancing weight compound, 2 lb package
E04753	Balancing weights, set of 16, C-shaped with set screw
E11946	Balancing clips for squirrel cage fans (7 sizes of 100 ea)

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