

B Series – B5F

230 kg (500 lb) Capacity

User Fabricated Balancing Machine



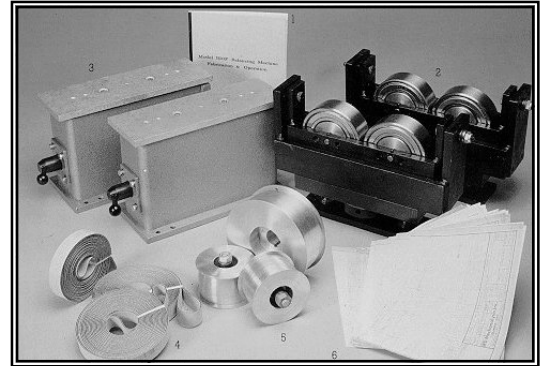
HORIZONTAL AXIS, GENERAL PURPOSE, SOFT BEARING, BALANCING MACHINE

DESCRIPTION:

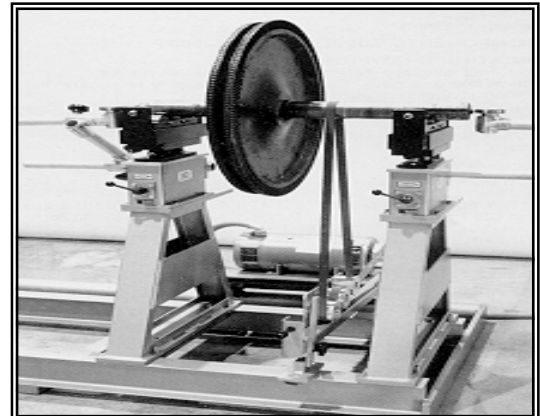
The B5F is a dynamic, horizontal axis, soft bearing Balancing Machine that is assembled with precision balancing parts supplied by IRD and others supplied or fabricated by the user. IRD supplies two modular suspension work supports, two sets of roller work supports, drive motor pulley idler pulleys, belts, end thrusts and fabrication drawings. The customer supplies a machine bed, pedestals for mounting the modular suspension work supports, the drive motor, variable speed motor controller and a frame for the belt drive. Optional instrument packages, V-Block rotor work supports, drive power systems and negative load hold downs are available.

GENERAL SPECIFICATIONS:

- Weight Capacity: 230 kg (500 lb)
- Max. Rotor Diameter: 1962 mm (77.25 inches)
- Maximum Sensitivity: 1.5 g mm (0.06 g in)
- Standard Bed Length: 2170 mm (85.4 inches)
(User Fabricated)
- Journal Diameter Range: 13-200 mm (0.5-8 inches)
- Journal-to-Journal Separation: 50- 2030 mm (2 – 80 inches)
(Based on User Fabricated Bed)
- Drive Type: Underslung Belt Drive with manual belt tensioning
(User Fabricated- Idler Pulleys by IRD)
- Drive Motor Recommended: DC 0.75 (1HP) Variable speed
(User Supplied)
- Balancing Speed Range: 250 to 6000 RPM
(Depends on Driven Rotor Diameter)
- Number of Balance Planes: 1 or 2
- Standard Parts Included: (4) Flat drive belts, (2) roller work supports, (2) modular suspension work supports with motion locks, (2) end thrust assemblies, drive motor pulley (specify bore diameter), (3) idler pulleys and fabrication drawings.
- User Fabricated or Supplied Parts: Fabricate the machine bed and pedestal support frames. Provide the drive system (motor, controls, belt drive frame).



B5F Kit of Parts, typical



Typical User Fabricated Machine

- General configuration (without rotor):
Dim: 4826 x 1830 x 1525 mm (l x w x h)
(190 x 72 x 60 in) (l x w x h)
-Kit Weight: 159 kg (350 lb)

OPTIONAL FEATURES:

- Rotor Safety Hold Downs
- V-Block Rotor Work Supports
- Negative Load Hold Downs
- Large Diameter Rollers
- 236 Digital Balancing Instrument
- 246 Portable Balancing Instrument
- 290 Touch Screen Balancing Computer
- Drive motor/controller

STANDARD CONFIGURATIONS:

B5F Basic Machine	Brief Description	Detailed Description
E44849	Complete B5F Balancing Machine kit for motors with 22.2mm/0.875" diameter shaft.	Complete B5F Balancing Machine kit includes modular suspension work supports, roller work supports, belts, idler pulleys, drive pulley with 0.875" diameter bore, end thrust assemblies and fabrication drawings. This does not include a balancing instrument.

	E44849 includes
E44847	Flat drive belt, 13mm wide x 3429mm long (0.5 x 135 in)
E44848	Flat drive belt, 13mm wide x 3810mm long (0.5 x 150 in)
E12219	Flat drive belt, 25mm wide x 4191mm long (1 x 165 in)
E12220	Flat drive belt, 25mm wide x 4572mm long (1 x 180 in)
E20610	Modular Suspension Work Supports, 2 included
E13400	Roller Work supports, with 76mm dia x13mm wide rollers (3.x0.5in), no height adjustment,2 included
E23843	End thrust assemblies, 2 included
E07409	102 mm diameter x 38mm wide (4 x1.5 in) idler pulley assembly, 3 included
E23966	152 mm diameter x 38mm wide (6 x1.5 in) motor drive pulley, 0.875" bore.
	Fabrication drawings:E33000 (Imperial) or E33300 (Metric)
E33002	Operation/Fabrication manual for B5F Balancing System
Balancing Instrument Options	
E00303	Model 236 Digital Balancing Instrument with all accessories needed for balancing. Includes the 236 Balancing Instrument, two 546DP (direct prod) vibration sensors with brackets and magnetic tips, photoelectric speed sensor, 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) vibration sensors with brackets and magnetic tips, photoelectric speed sensor, reflective tape and all cables.
E00577	Model 290 Touch Screen Balancing Computer with all accessories needed for balancing. Includes the 290 Balancing Instrument, two 546DP (direct prod) vibration sensors with brackets and magnetic tips, photoelectric speed sensor, reflective tape and all cables.

	Other Options, Accessories, and Supplies
E18806	Rotor safety hold down with counter roller, 2 recomnd'd
E03803	V-block Rotor Work Supports, 2 recommended
E24035	Pivot assembly for use under V-block, E03803.
E24916	Negative load hold down assembly for rotors with an outboard center of gravity.
E13434	76mm/3" replacement roller assembly for E13400 roller work support, no hub. 76 dia x 13mm W (3 x 1/2")
E13435	127mm/5" optional roller assembly, mounts in place of standard 76mm roller, no hub. 127 dia x13mm W (5x1/2")
E13424	Hub for E13434 or E13435 roller assemblies.
E18608	Height adjust assembly, 23 mm (.94in), non-pivoting.
E29537	Fixed height assembly, non-pivoting, for use on opposite side when using height adjust, E18608.
E46951	0.75kW (1 HP) Motor/Console Assembly. Includes a 1750 RPM DC motor with 0.875" dia. shaft, angular location sensor and 12'/3.6m flex conduit connected to a 42"/1067mm high control console with a variable speed regenerative braking drive controller mounted inside, operator control panel and circuit breaker; wired for 230VAC, 1-phase operation. Specify 60 Hz or 50 Hz on order.
E02785	546DP Vibration sensor- no magnetic tip or mtg. bracket
E10170	Magnetic tip for 546DP vibration sensor
E11194	546DP Vibration sensor, magnetic tip and mtg. bracket kit
E21000	Photoelectric speed sensor, standard, reflective tape trigger, 25-610 mm (1-24 in) range
E21200	Reflective tape for use with speed sensor, 47.5m (150 ft)
E11820	Balancing wax, sold by the pound
E32147	Epoxy balancing weight compound kit, 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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Specifications are subject to change without prior notice.

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