

B Series - B200

11000 kg (25000 lb) Capacity

Horizontal Balancing Machine



HORIZONTAL AXIS, GENERAL PURPOSE, SOFT BEARING, BALANCING MACHINE

DESCRIPTION:

The B200 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 medium to heavy weight rotors such as motor armatures, fans, turbines, etc. The machine is constructed from heavy gauge steel weldments and can be mounted to existing shop floors without the need for a special foundation. Two work supports with rollers are used to support the rotor journals. The left work support has a built in height adjustment to accommodate rotors with unequal journal diameters. One work support pedestal 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 controller is mounted inside the control console and is equipped with regenerative braking for quick stops. The B200 is supplied completely wired and ready to connect to existing input power. Optional instrument packages, V-Block rotor work supports, drive power systems and negative load hold downs are available.

GENERAL SPECIFICATIONS:

- Weight Capacity: 11000 kg (25000 lb)
- Max. Rotor Dia.: 3150 mm (124 inches)
- Maximum Sensitivity: 14.5 g mm (0.6 g in)
- Standard Bed Length: 3353 mm (132 inches)



- Journal Diameter Range: 76 - 610 mm (3 - 24 inches)
- Journal-to-Journal Separation: 203 - 3150 mm (8 - 124 inches)
- Drive Type: Underslung Belt Drive with air belt tensioning
- Drive Motor (std): DC 18.6 kW (25 HP) Variable speed motor with encoder
- Balancing Speed Range: 250 to 4000 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, (2) roller work supports, suspension motion locks, end thrust assemblies, motor control console.
- General configuration (without rotor):
 - Dim: 5486 x 2375 x 1562 mm (l x w x h) (216 x 93.5 x 61.5 in) (l x w x h)
 - Weight: 2200 kg (4850 lb)
- General configuration (continued)
 - Power (std): 460VAC, 3 ph, 50 or 60 Hz
 - Temperature: Operating 0 to +40° C
 - Air supply: 480 to 690 kPa (70 to 100 psi)

OPTIONAL FEATURES:

- Rotor Safety Hold Downs
- V-Block Rotor Work Supports
- Negative Load Hold Downs
- Narrow Width Roller Work Supports
- Bed extensions
- 236 Digital Balancing Instrument
- 246 Portable Balancing Instrument
- 290 Touch Screen Balancing Computer
- Different drive motors
- External transformers for other voltages



STANDARD CONFIGURATIONS:		
B200 Basic Machine	Brief Description	Detailed Description
E08905	Complete B200 Balancing Machine with 18.6 kW (25 HP) 2500 RPM, force ventilated, DC motor for 460VAC, 3 phase , 50 or 60 Hz Operation	Complete B200 Balancing Machine includes a machine bed, 2 pedestals (the left pedestal has height adjustment and is movable along the length of the bed), 2 roller work supports, drive motor with encoder, motor controller with regenerative braking and drive belts. For 460 VAC operation. This machine does not include a balancing instrument or sensors which must be purchased separately.
E48629	Complete B200 Balancing Machine with 17 kW (23 HP) 1500 RPM, force ventilated, DC motor for 380VAC, 3 phase , 60 Hz Operation	Same as E08905 above, except for 17 kW (23 HP) DC motor and line voltage/frequency.
E25980	Complete B200 Balancing Machine with 30 kW (40 HP) 2500 RPM, force ventilated, DC motor for 460VAC, 3 phase , 50 or 60 Hz Operation	Same as E08905 above, except for 30 kW (40 HP) DC motor.

Part Number	E08905, E25980 and E48629 include
-	Basic B200 balancing machine with machine bed, two pedestals, drive motor, control console and motor controller
E09108	Flat drive belt, 76 mm wide x 4750 mm long (3 x 187 in)
E09109	Flat drive belt, 76 mm wide x 5664 mm long (3 x 223 in)
E09110	Flat drive belt, 76 mm wide x 6579 mm long (3 x 259 in)
E07725	Roller Work Supports, pivoting, no height adjustment. Work supports include two 127 mm dia x 68 mm wide rollers (5 x 2.69 in). Weight capacity: 5600 kg (12500 lb) for each work support. 2 included
E07951	Height adjustment module with 76 mm (3 in) vertical adjustment. Fitted on left pedestal
E08102	Fixed height module, 96 mm (3.75 in) high. Fitted on right pedestal.
E08850	Adjustment bar for height adjust module, E07951
E36240	End thrust assemblies, mount to rear of pedestals, 2 included
E09781	Operation manual for B200 Balancing System-English
E09475	Lubrication fitting for roller

Part Number	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.

Part Number	Options, Accessories, and Supplies
E13167	Rotor safety hold down with counter roller, 2 recomnd'd
E09144	V-block Rotor Work Supports, 2 recommended
E32354	V-Block pivot assembly. Fits under V-Block, E09144, and provides better plane separation when balancing. 2 recommended
E08147	Negative load hold down assembly for rotors with an outboard center of gravity. Fits E07725 roller work support and B200 pedestal suspension.
E11713	Replacement roller for standard E07725 roller work support, 127 mm dia x 68mm wide, 2 req'd per roller work support.
E11698	Narrow width roller work support, pivoting, no height adjustment with (2) 100mm diax40mm wide rollers (4x1.6 in). Weight capacity:3500 kg (7500 lb) each work support.
E10491	Bed extension 1200 mm (48 in) long
E11806	Bed extension 2100 mm (84 in) long
E10492	Bed extension 3400 mm (132 in) long
E09108	Flat drive belt, 76 mm wide x 4750 mm long (3 x 187 in)
E44328	Flat drive belt, 76 mm wide x 5334 mm long (3 x 210 in)
E09109	Flat drive belt, 76 mm wide x 5664 mm long (3 x 223 in)
E09110	Flat drive belt, 76 mm wide x 6579 mm long (3 x 259 in)
E32226	Flat drive belt, 76 mm wide x 6782 mm long (3 x 267 in)
E48623-305	Flat drive belt, 76 mm wide x 7747 mm long (3 x 305 in)
E32227	Flat drive belt, 76 mm wide x 8077 mm long (3 x 318 in)

Part Number	Options, Accessories, and Supplies (cont).
E48682	Low Profile Fixed height module, 30 mm (1.18 in) high. Use in place of standard E08102 module for rotors with larger differences in journal diameters.
E30330	Heavy duty end thrust assembly. End thrust frame fits to base instead of rear of pedestal.
E46785	Air powered holding brake kit with drive pulley, brake disk and caliper for E08905 and E25980 machines. (1.875 inch motor shaft diameter.)
E39491	Safety enclosure (perimeter fence) for machine, non-interlocked.
E02785	546DP Vibration sensor - no magnetic tip or mounting bracket
E10170	Magnetic tip for 546DP vibration sensor
E11194	546DP Vibration sensor, magnetic tip and mounting 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)
E39143	Rebuild kit for Roller Work Support P/N 07725. Includes new wear plates, cam bearings, thrust bearings, pivot bearing and roller axles. This kit does not include new E11713 rollers.
ERM-11713	Regrind the outside diameter of E11713 rollers to factory specifications.
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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