

**500 Pound (227 kg)  
Part Capacity,  
Hard Bearing  
Balancing Machine**

Completely state-of-the-art, and highly affordable, the BalanStar HB500 is the digital hard bearing balancing machine of choice.

The Balanstar HB500 is easy to set up, safe and easy to use yet rugged, versatile, fast and dependable. Call the BalanStar Corporation today and see for yourself just what over 65 years experience in the intricacies of balancing can mean to your operation.



**FEATURES**

- **500 Pound Capacity**
- **42" Maximum Diameter**
- **48" Maximum length (standard bed)**
- **70" Maximum length (extended bed)**
- **Dual microprocessor Control**
- **Quick and accurate run times**
- **Large 17" Touchscreen LCD display**
- **Windows based operating system**
- **No computer knowledge necessary**
- **Printing and Saving of balancing data**



*The Seal of Good Balance*

**BALANSTAR CORPORATION**

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### General Specifications

- |     |   |  |
|-----|---|--|
| 1.  | Instrumentation sensitivity:  | 0.000010 oz.in.                                  |
| 2.  | Maximum sensitivity:  | 120 RPM    0.1 oz.in.<br>1000 RPM    0.01 oz.in. |
| 3.  | Minimum Unbalance expressed in inches of mass displacement achievable under ideal conditions with a test rotor: | .000010 in.                                      |
| 4.  | Instrumentation speed range:  | 60–7200 RPM                                      |
| 5.  | Unbalance reduction ratio:  | up to 95 %                                       |
| 6.  | Maximum diameter allowed:   | 42 in.   |
| 7.  | Maximum plane separation allowed:   | 48 in.   |
| 8.  | Minimum plane separation allowed:   | 5 in.  |
| 9.  | Single Plane and Two Plane options  |  |
| 10. | Motor Drive:  | 3 hp (2.2 kw)                                    |
| 11. | Voltage:  | 240 / 480 VAC, 3 Phase                           |

### Electronic Data

- |     |                           |                                      |
|-----|---------------------------|--------------------------------------|
| 1.  | Operating System          | Windows 10N Pro                      |
| 2.  | Processor                 | Intel Braswell 1.6 GHz               |
| 3.  | Main Motherboard          | Mitac PD14R1 PC Mini-ITX form factor |
| 4.  | Hard Drive                | SATA 128 GB Solid State Hard Drive   |
| 5.  | Digital Aquisition Card   | Proprietary to BalanStar Corporation |
| 6.  | Analog To Digital Chipset | AD677JN                              |
| 7.  | Linear Power Supply       | Low Ripple +12 V, -12 V, +5 V        |
| 8.  | Computer Power Supply     | 350W ATX                             |
| 9.  | Power Source              | 120 /230 VAC 50 / 60 Hz              |
| 10. | Power Requirement         | 1.5 Amp                              |

### **Instrumentation Features**

1. Two Plane - Static / Couple (Force) - Single Plane balancing modes
2. Electronic Zeroing: electronic compensator of the initial unbalance of a rotor to simplify checking of machine calibration. Also known as Single Compensation.
3. Tooling Compensation: electronic double compensator for minor tooling errors, to eliminate requirement for mechanically biasing the tooling.
4. Keyway Compensation is a standard feature.
5. ISO-1940 Balance Tolerance Calculator is a standard feature.
6. Segment balancing is a standard feature for single plane mode.
7. Unbalance units selectable: ounces, grams, kg, Newtons, inches, mm, cm, m.
8. Location of unbalance will be displayed in degrees of rotation.
9. Remote Angle feature uses a rotary encoder to display the real-time part location in degrees of rotation.
10. Rotor Memories: Save unlimited part setups on solid state disk drive.
11. The HBX keeps up to 10 previous balance runs in local memory for easy reference.
12. Printing of balance run data is standard. Print balance certificates and reports to USB or network printers. PDF format is also available.
13. USB data output is standard. This option saves data runs on the internal solid state hard drive which can then be downloaded through standard ethernet connections to your networked computer or external USB drive.
14. Empirical Calibration Capability (Customized Setups): Our HBX includes the capability to provide unique rotor specific calibrations for rotors and tooling that require special setup parameters. The computer flags these unique calibrations on the main measuring screen.

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