



DETACHABLE DISPLAY.
MORE DATA UPFRONT.
BALANCES TO .02 MICRON.

TAKE IT FOR A SPIN.

Model SB-5500 Automatic Balancer System Controller



Quick Detachable Display Multi-Channel Status Indicators Large, High Resolution Color Display Intuitive Menu Interface

BENEFITS:

- Increases throughput by saving setup time
- Improves part quality by automatically balancing to 0.02 micron
- All-digital electronic design increases operating life and reliability
- Easy to install and operate
- Longer life for grinding wheels, dressing wheels and spindle bearing
- Works with existing SBS installations
- Profibus, Ethernet and USB 2.0 communication compatibility
- International adaptability: voltage, frequency, communication, and display language
- Four-channel capability reduces costs by permitting balancing of multiple machines
- Backed by world-class SBS customer service

Improve part quality and throughput at every turn.

SBS strengthens its reputation as the world leader in automatic dynamic balancing and process monitoring for the grinding industry with the SB-5500 controller. With its all-digital electronic design, compact size and larger high resolution detachable display, the SB-5500 provides unsurpassed accuracy (up to 0.02 micron), speed (300-30,000rpm) and flexibility (four-channel capability).

The SB-5500 is easy to install and easy to use. Quick setups and dynamic graphic displays keep you well informed and in control of the grinding process. Optional virtual screen software lets you see readings on your existing monitor, or detach the display panel for installation where you want it. As an inexpensive and permanent installation, the SB-5500 takes the challenge out of grinding wheel balancing, helping you to improve part quality, increase efficiency, and save money.

Productivity through Precision.



SPECIFICATIONS

Physical

Multiple Device Control:

Four (4) available slots accept these control cards:

SB-5512 Mechanical balancers with cable connection

SB-5518 Hydro Balancers

SB-5522 Acoustic Emissions Monitoring System (AEMS)

SB-5532 Mechanical balancers with non-contact connection

SB-5543 Manual balance control

SB-4500 Compatible:

Operates with existing balancers/cables, sensors, CNC/PCL hardwire interface

Display:

Type: Color TFT LCD

Active area: 480 H x 272 V pixel

2.74 inch [95 mm] x 2.12 inch [53,86 mm]

Multi-language Capability:

English, Chinese, French, German, Italian, Polish, Russian, Spanish, Swedish

Communication Interfaces:

Ethernet TCP/IP, USB 2.0, Profibus DP, CNC/PLC hardwire Interface (opto-isolated outputs)

DC or AC Power Options:

DC Supply: Input 21 VDC to 28 VDC. 5.5A max at 21 VDC. Reverse voltage protected.

AC Supply: 100–120 VAC, 50/60 Hz, 2A max;
200–240 VAC, 50/60 Hz, 1A max.
Main supply voltage fluctuations not to exceed +/-10% of nominal supply voltage



The Model SB-5500 Controller with SBS Balancing System sensor connectors, adapters and balancing head.

Performance

RPM Reporting:

300 to 30,000 RPM

Wide Vibration Range:

50 µg to 1,25 g

Vibration Display Resolution:

Three user selectable options

1)	0.1 µm	0.01 mil	0.01 mm/s	1 mil/s
2)	0.01 µm	0.001 mil	0.001 mm/s	0.1 mil/s
3)	0.001 µm	0.001 mil	0.001 mm/s	0.01 mil/s

Vibration Display Repeatability:

6,000 RPM ±1% @ 5,0 µm

300–30,000 RPM ±2% @ 50:1 signal to noise

Vibration Display Accuracy:

6,000 RPM ±2% @ 5,0 µm

300–30,000 RPM ±4% @ 50:1 signal to noise

Auto-Balance Resolution:

0.02 microns displacement at 6,000 RPM

Vibration Filter:

Custom digital filter has bandwidth +/-3% of measurement RPM

Safety and Environmental

Certifications:

ETL and CE certified

Environmental and Installation Conditions:

Pollution degree 2

Installation category II

IP54, NEMA 12

Environmental temperature range: 5 °C to +55 °C

More strategies and further information can be found on www.grindingcontrol.com. Or contact your nearest SBS Sales Representative or call Schmitt Industries.



grindingcontrol.com

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