



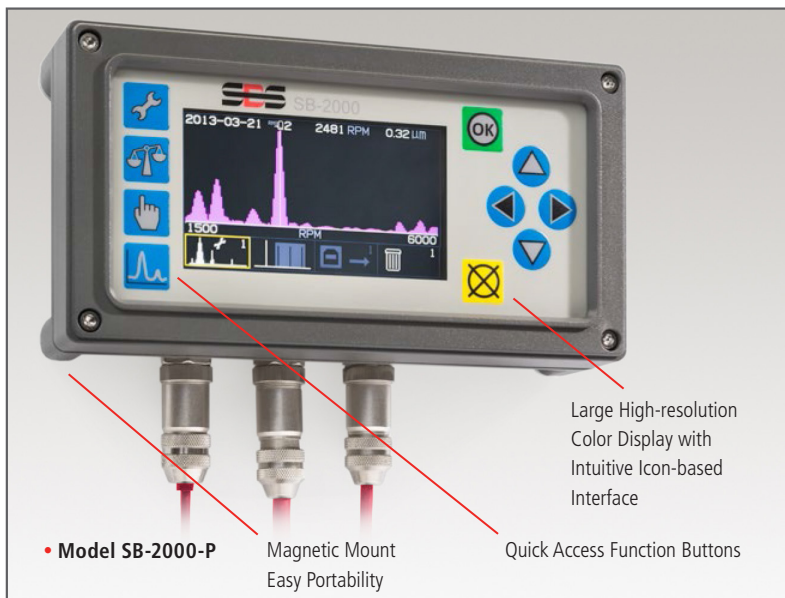
• Model SB-2000

MANUAL BALANCING  
SINGLE OR DUAL PLANE

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SINGLE OR DUAL PLANE

IMPROVE PART  
QUALITY FOR LESS

## Model SB-2000/SB-2000-P Manual Balancing System



• Model SB-2000-P

Magnetic Mount  
Easy Portability

Quick Access Function Buttons

Large High-resolution  
Color Display with  
Intuitive Icon-based  
Interface

The portable SB-2000-P version attaches magnetically to any location for easy setup and use. The SB-2000 dedicated install version allows for CNC/PLC integration and for operators to set alert and alarm limits for tolerance and critical thresholds through the CNC/PLC interface. The USB port allows for exporting of balance data and settings and for updating of unit firmware.

### BENEFITS

- Single or dual plane manual balancing
- Offered in both portable and fixed installation versions
- Easy to understand language independent symbol-based user interface
- Five balancing modes (single position, 2-weight, 3-weight, fixed position and circumferential arc)
- Measurement range of 30 to 100,000 RPM
- Store over 30 balancing profiles and vibration plots
- All digital design increases operating life and reliability
- Economical price
- Works with SBS fixed installations and accessories
- Easy CNC/PLC interface; USB 2.0 communication capability for firmware upgrades and retrieving stored data
- Backed by world-class and worldwide customer service

### Single or Dual Plane Manual Balancing at an Economical Price.

The SB-2000 is an easy-to-use, compact manual balancing system offering both one and two plane manual balancing capabilities. It comes in a dedicated machine installation version (SB-2000) and a portable version (SB-2000-P), both at a very low price. In both versions this control provides exceptional balancing accuracy. It displays up to four digits for vibration and six digits for RPM, and supports a spindle speed range of 30 to 100,000 RPM.

With its digital design and intuitive icon-driven user interface, the SB-2000 is simple to set up and easy to use. Five balancing modes are supported (single position, 2-weight, 3-weight, fixed position and circumferential arc) with storage capacity for up to 30 balancing profiles for different machines or setups. The unit also allows spectrum vibration plots to be generated and stored.

Australian / New Zealand Distributor-----

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Productivity through Precision.



## SPECIFICATIONS

### Physical

#### User Interface:

Universal icon-based (language independent)

#### Display:

Type: Color TFT LCD

Active area: 480H x 272V pixel

3.74 inch [95 mm] x 2.12 inch [53.86 mm]

#### Dimensions:

W x H x D: 210 mm x 112 mm x 33 mm

### Power Input Requirements

#### Power Supply:

SB-2000: 24 VDC with terminal block connection, and M5 ground stud

SB-2000-P: 24 VDC with 8 pin M12 connector

#### Input Voltage:

+22VDC to +26 VDC at 0,75A max.

Surge protected

Negative protected (reverse protected from a non-grounded supply)

Fused

#### Communications Interfaces:

1 x USB 2.0

SB-2000: CNC/PLC hardwire interface (opto-isolated outputs)

### Safety and Environmental

CE certified

RoHS compliant

#### Environmental and Installation Conditions:

Installation category I

IP54, NEMA 12

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

Humidity: 0 to 85 % relative humidity

(non-condensing) throughout temperature range



The SB-2000-P model is available as part of the SB-2040 dual-plane kit:

Kit includes:

- SB-2000-P control unit
- SB-3420 Vibration sensor (2 ea.)
- SB-1802 RPM Sensor\*
- SB-1916 RPM Cable
- SB-1799 RPM Sensor Stand
- SB-1875 Universal Power Adapter
- SB-1500 Carry Case
- MC-1716 Reflective Tape

\*Sensor included is rated for applications up to 24,000 RPM. Contact SBS for assistance with higher RPM applications.

### Performance

#### Balance methods supported:

**Circumferential Weight** > Single weight is positioned around rotor circumference.

**Single Point** > Single weight is positioned on the rotor face.

**2 and 3 Slide Weight** > 2 or 3 repositionable weights on a fixed diameter.

**Fixed Positions** > Multiple polar positions where weight can be positioned.

#### RPM Reporting:

30 to 100,000 RPM

#### Wide Vibration Range:

50 µg to 1,25 g

#### Vibration Display Resolution:

Four digit display, with display resolution to 0.001 µm

#### Vibration Display Repeatability:

6,000 RPM ±1 % @ 5.0 µm

30–100,000 RPM ±2 % @ 50:1 signal to noise

#### Genauigkeit der Vibrationsanzeige:

6.000 U/min ±2% bei 5,0 µm

30 – 100.000 U/min ±4% @ 50:1 signal to noise

Balance Resolution: 0.02 microns displacement at 6,000 RPM

Custom digital filter has bandwidth +/- 7% 0-40,000 RPM

+/- 14% 40,000+ RPM

More strategies and further information can be found on [www.grindingcontrol.com](http://www.grindingcontrol.com). Or contact your nearest SBS Sales Representative or call Schmitt Industries.



[grindingcontrol.com](http://grindingcontrol.com)

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