#### ERBESSD INSTRUMENTS

# El-1000 Balancing Machine Datasheet

### ERBESSD INSTRUMENTS<sup>®</sup>



## **Characteristics**

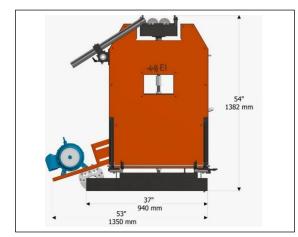
- 2-Plane balancing without trial weights (SBS).
- Variable speed (speed driver included).
- Easy Adjustable pulleys (manually).
- 3 liberty axes on each pedestal.
- Simple settings for transmission set & pedestals.
- 2 Separable bench-frames with levelers.
- Soft bearing suspensions to minimize mechanical losses.
- Axial supports included.
- Auto-aligned rollers.
- Sealed accelerometers to avoid corrosion.
- Autocalibration for interface and sensors.
- Very Low balancing speed.
- SBS prepared to use Negative Load Supports (optional).
- Control module & balancing kits (optionals).

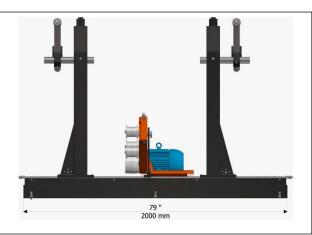
# EI-1000 | Balancing Machine

EI-1000 Balancing Machine can balance all kinds of rotors up to 1000 kg. Whether they are rollers, electric rotors, crankshafts, fans and more, its Soft Bearing Suspensions are strong & light to allow high sensitivity on vibration measurements.

# Technical Specs

Min-Max Load to Balance using SBS method	3 - 1000 kg / 6.6 - 2200 lb
Maximum Load per Pedestal	500 kg / 1100 lb
Maximum Rotor Diameter with	1828 – 2286 mm / 72 – 90 in
Transmission in – out of pedestals	
Dimensions Long X Width X Height (2	(2x)1000 x 1320 x 1382 mm /
separable bench frames for long rotors)	(2x)39.4 x 52 x 54 in
Weight of machine (standard package)	410 kg / 904 lb
Max. SBS oscillation displ. (Pk-Pk)	22 mm / 0.9 in
Min-Max shaft diameter (Recommended)	12 - 200 mm / 0.5 - 7.9 in
Max. elevation height for SBS leveler	20 mm / 0.8 in
Min-Max dist. between pedestals with the	152 - 1550 mm / 6 - 61 in
2 benches together	
Transmission type & belt width	Flat belt – 50 mm / 2 in
Lubrication	Type-I (manual)
Precision	+/- 0.01 mm/s – G0.4
Accelerometer Sensitivity	100mV/G (opt. 500mV/G)
ISO 2953 Seq. Unbal. Reduction	95%
Residual Imbalance (mechanics ++)	0.2 g.mm/kg
Motor features	3.7 kW – 5 hp, 220-440V, 3ph, 4p
VFD / Speed Inverter (select voltage 220V	Included 3.7 kW / 5 hp
or 440V with PO)	
Min. Balancing Speed RPM using SBS	450 RPM
SBS Calibration Coeff. (with NLS)	28.9 (+5.6)







#### **ERBESSD INSTRUMENTS°**

EI-1000 | Balancing Machine

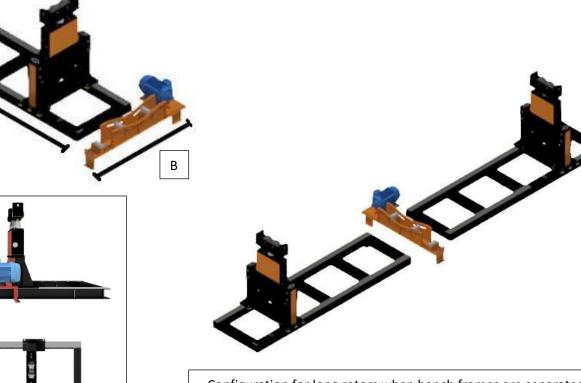
Balancing is done at lower speed than service speed

#### **Mounting Configurations**

С

#### Dimensions

А	2000 mm / 78.7 in
В	1320 mm / 52 in
С	1382 mm / 54.4 in



Configuration for long rotors when bench frames are separated.

#### **ERBESSD INSTRUMENTS°**

#### EI-1000 | Balancing Machine

# DigivibeMX M10

An **easy-to-use** system designed specifically for all our **Balancing Machines**.

The software includes 2 balancing modes:

- No-trial weights (SBS)
- Influence Coefficients (with trial weights, in-situ balancing).



# Software Features

- Balancing without Trial Weights (SBS).
- Balancing Calculator ultra-easy-to-use.
- Plug&Play DAQ interface.
- Balance speeds from 120 to 150'000 RPM.
- Manual and Guides in English.

- 2 Polar charts.
- Balancing Reports with tendency graphs.
- Compatible with other formats (ANL, ASCII, WAV).
- 2 Accelerometers + 1 tachometer included.
- 3 Activation license, NO annual fee.
  - \* tablet not included in the standard kit.

# Includes:

1x 4-Channel Interface INT4-GX400



3 LEMO 5-pin Connectors
2-plane simultaneous readings
Up to 4 mono-axial accelerometers
Sample Rate: 48kHz
Protection grade: IP67
Power supply: 5V
Dimensions: 67x74x22mm
Weight: 100g

#### 2x Accelerometers AC500-2P



Dyn. Impact: 80G (max 5000G) Freq. Resp: (+/- 3dB): 0.32Hz-13kHz Sensitivity: 100mV/G +/- 10% Power supply: 18-30V 5mAcc Oper. Temp: -50°C a 121°C Protection grade: IP68 Connector: 2-pin MIL Weight: 50g Stainless (w/o mgnt)



1x Laser Tachometer

Freq. Resp: 1 – 5000Hz
Power supply: 5V – 10mA
Oper. Distance: 20cm – 5m
Oper. Temp: -10 to 50°C
Protection: IP60 III
Analogic output
Weight: 60g
Material: Nylon

For more information visit: www.erbessd-instruments.com

# **ERBESSD INSTRUMENTS®**

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