

EI-500

Balancing Machine

Datasheet



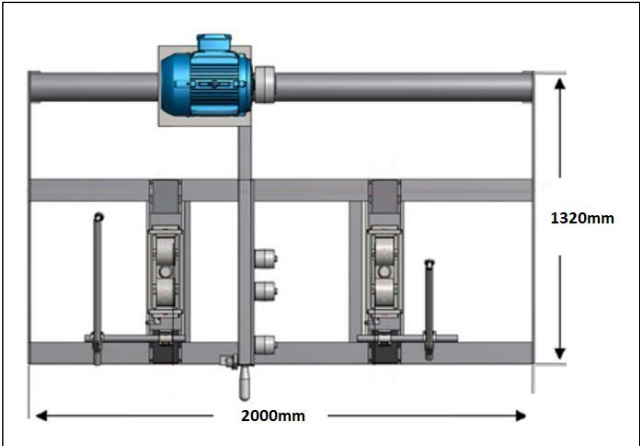
The **EI-500 Balancing Machine** is ideal for all types of rotating parts up to **500 kg**, such as rollers, motor rotors, crankshafts, fans, mills, among others. The floating supports are built strong and lightweight to reduce mechanical inertia.

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).

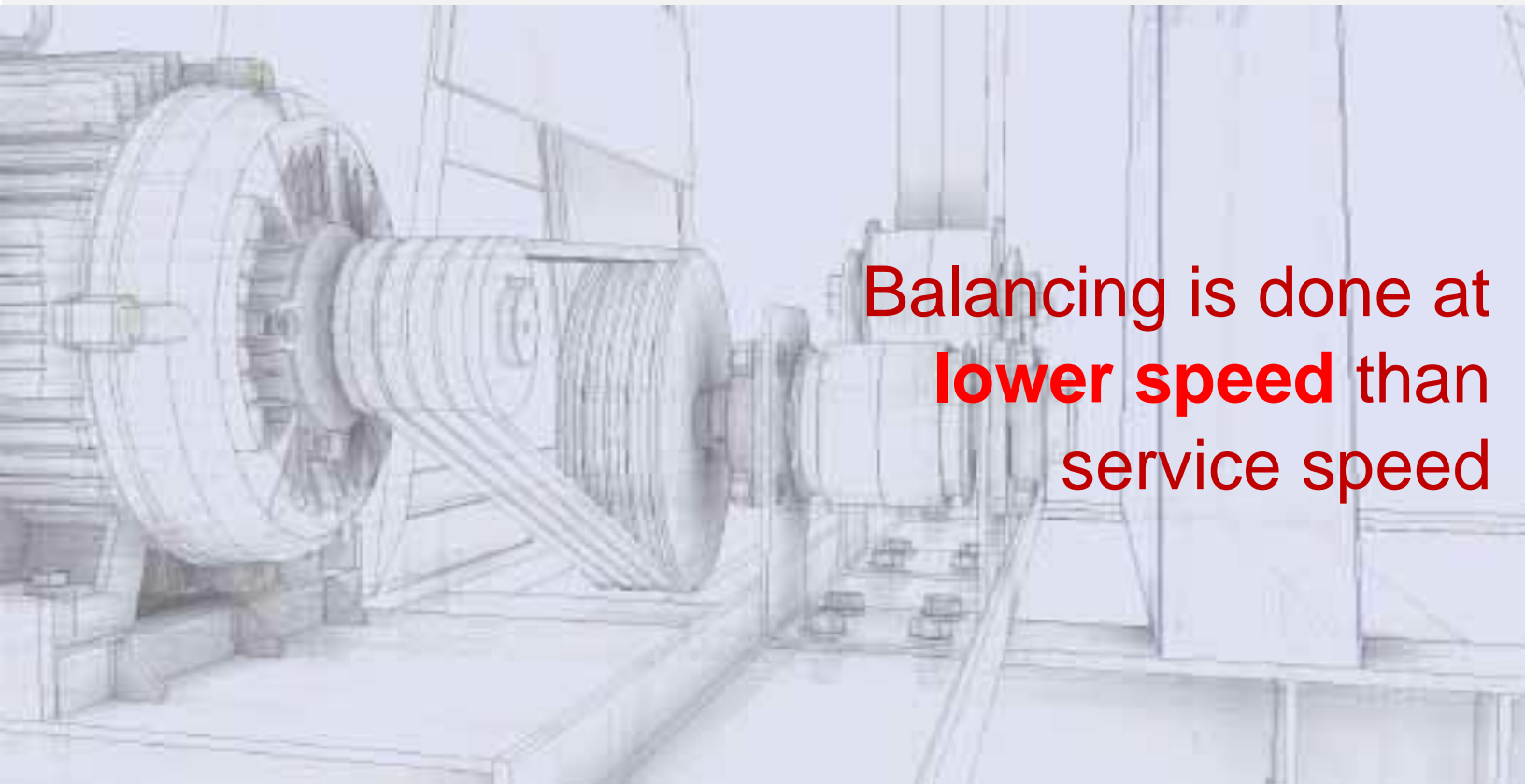
Technical Specs

Min-Max Load to Balance using SBS method	1 - 500 kg / 2.2 - 1100 lb
Maximum Load per Pedestal	250 kg / 550 lb
Maximum Rotor Diameter with Transmission in – out of pedestals	1066 – 1600 mm / 42 – 63 in
Dimensions Long X Width X Height (2 separable bench frames for long rotors)	(2x)1000 x 1320 x 1006 mm / 79 x 52 x 40 in
Weight of machine (standard package)	332 kg / 732 lb
Max. SBS oscillation displ. (Pk-Pk)	35 mm / 1.4 in
Min-Max shaft diameter (Recommended)	12 - 130 mm / 0.5 - 5.1 in
Max. elevation height for SBS leveler	15 mm / 0.6 in
Min-Max dist. between pedestals with the 2 benches together	114-1700 mm / 4.5-70 in
Transmission type & belt width	Flat belt – 30 mm / 1.2 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	2.3 kW – 3 hp, 220-440V, 3ph, 4p
VFD / Speed Inverter (select voltage 220V or 440V with PO)	Included 2.3 kW / 3 hp
Min. Balancing Speed RPM using SBS	450 RPM
SBS Calibration Coeff. (with NLS)	6.76 (+4.1)



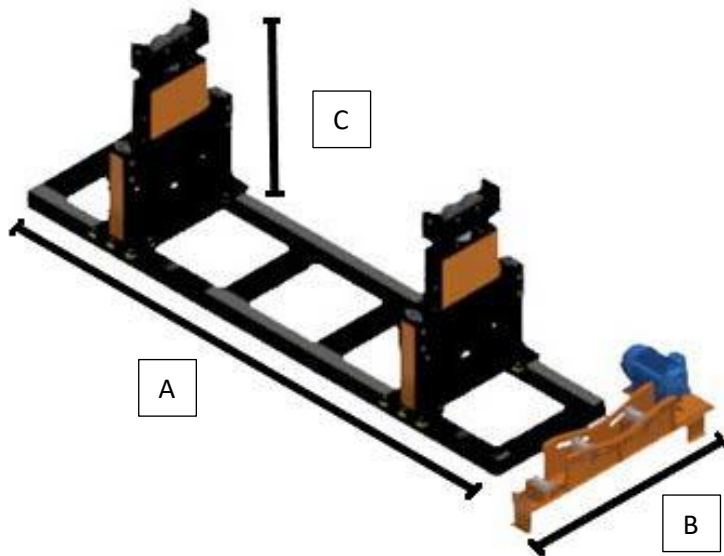
Cantilever rollers for short shafts





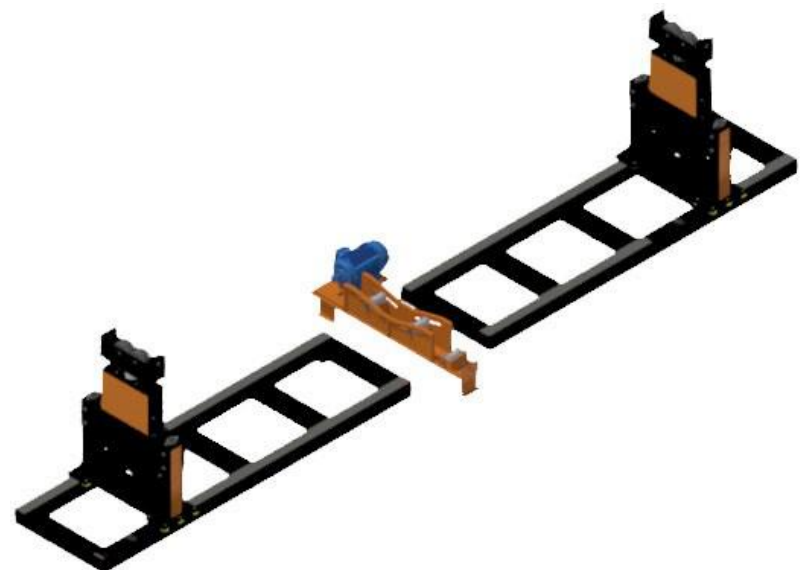
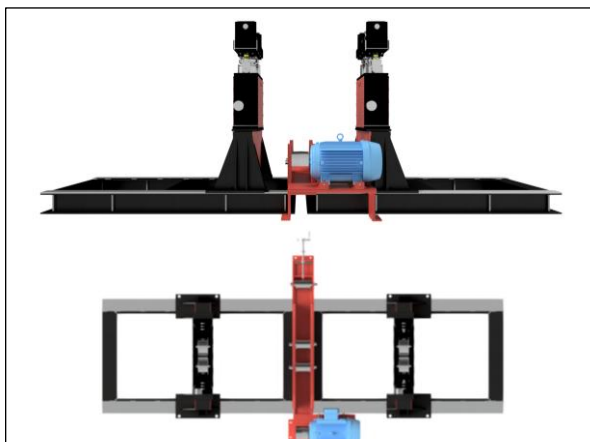
Balancing is done at
lower speed than
service speed

Mounting Configurations



Dimensions

A	2000 mm / 78.7 in
B	1320 mm / 52 in
C	1006 mm / 40 in



Configuration for long rotors when bench frames are separated.

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



2x Accelerometers
AC500-2P



1x Laser Tachometer
OP20-5P



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

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

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

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