

# **EI-4500**

## **Balancing Machine**

**Datasheet**



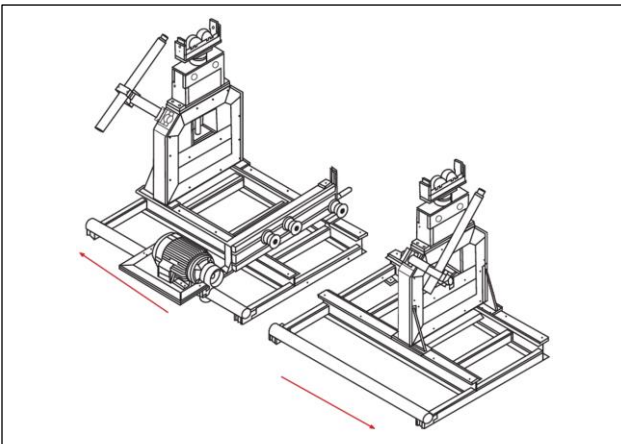
**EI-4500** Balancing Machine can balance all kinds of rotors up to 4.5 tons. Whether they are rollers, electric rotors, crankshafts, fans and more, its **Soft Bearing Suspensions** are strong & light to allow high sensitivity on vibration measurements.

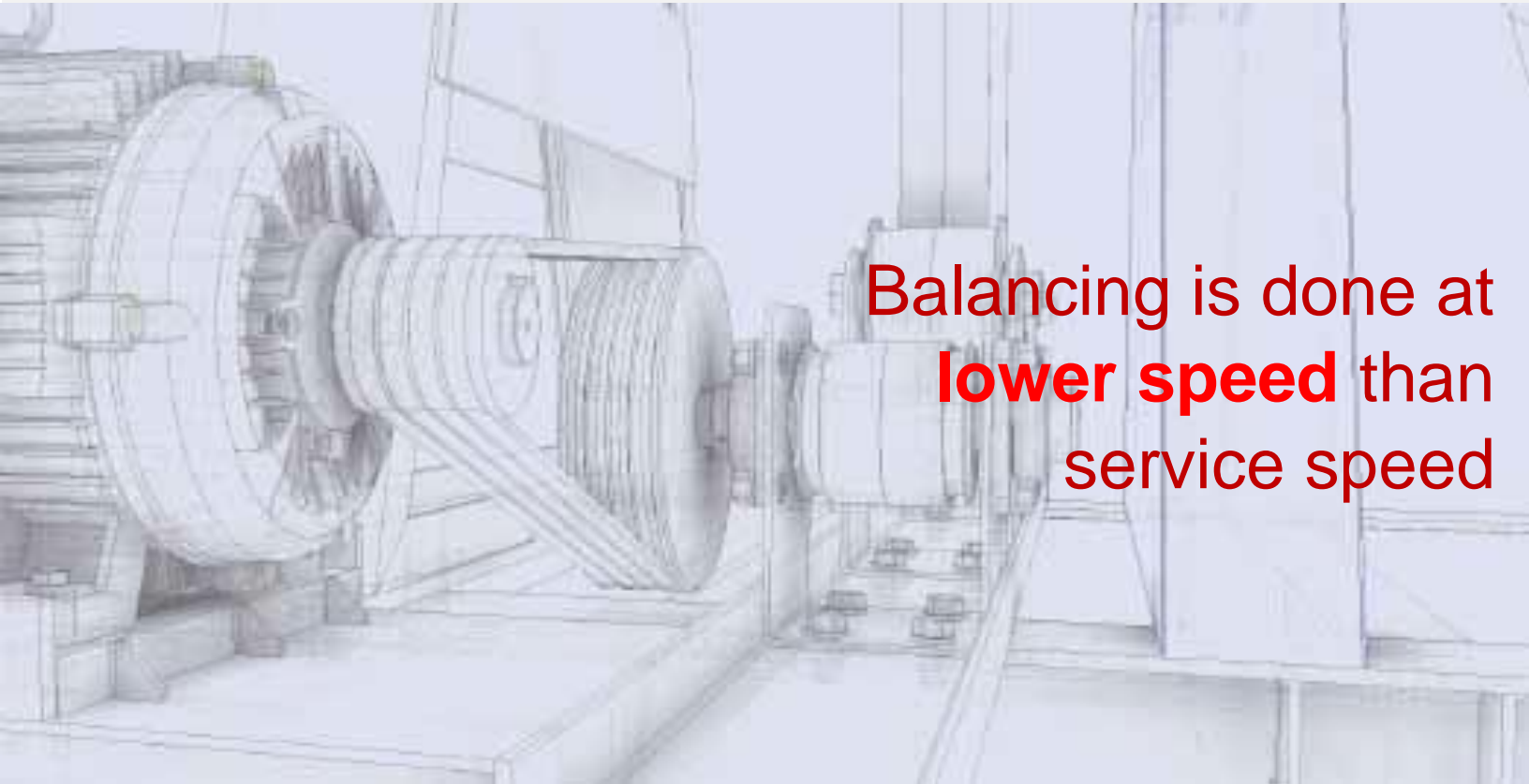
## Characteristics

- 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

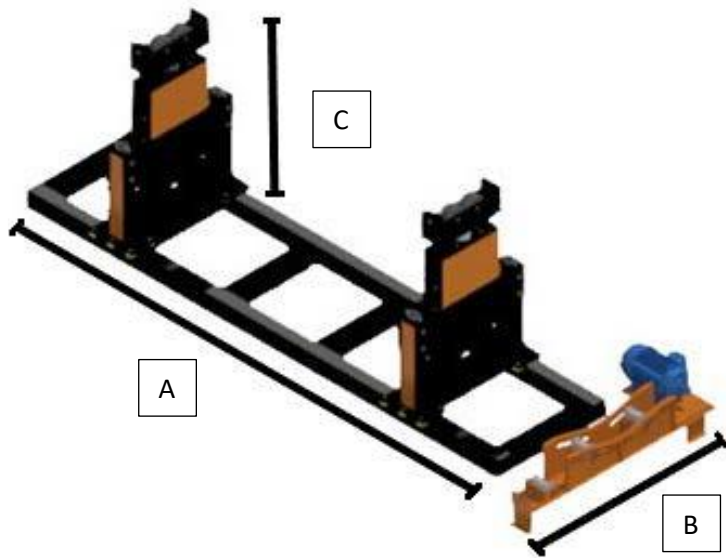
Min-Max Load to Balance using SBS method	100 - 4500 kg / 220 - 10 klb
Maximum Load per Pedestal	2250 kg / 5 klb
Maximum Rotor Diameter with Transmission in – out of pedestals	1800 – 2200 mm / 70 – 86 in
Dimensions Long X Width X Height (2 separable bench frames for long rotors)	(2x)1500 x 1750 x 1325 mm / (2x)59 x 69 x 52 in
Weight of machine (standard package)	700 kg / 1543 lb
Max. SBS oscillation displ. (Pk-Pk)	40 mm / 1.6 in
Min-Max shaft diameter (Recommended)	24 - 300 mm / 0.9 – 11.8 in
Max. elevation height for SBS leveler	30 mm / 1.2 in
Min-Max dist. between pedestals with the 2 benches together	200 - 2200 mm / 7.9 – 86.6 in
Transmission type & belt width	Flat belt – 75 mm / 3 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	7.4 kW – 10 hp, 220-440V, 3ph, 4p
VFD / Speed Inverter (select voltage 220V or 440V with PO)	Included 7.4 kW / 10 hp
Min. Balancing Speed RPM using SBS	450 RPM
SBS Calibration Coeff. (with NLS)	50 (+9)



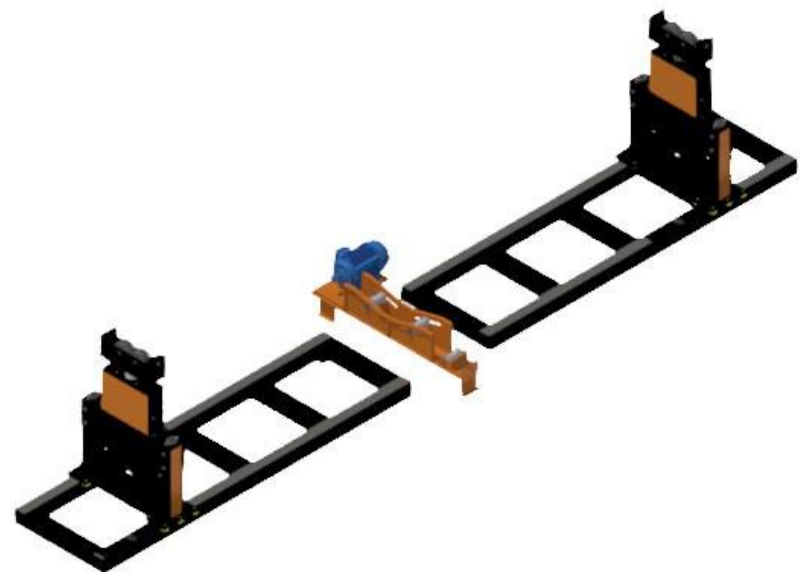
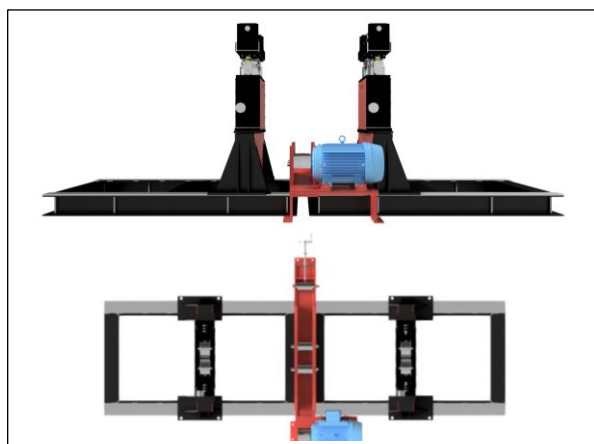


### Mounting Configurations

### Dimensions



A	3000 mm / 118 in
B	1750 mm / 68.9 in
C	1325 mm / 52.2 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 5mAcc
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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