



## Dynamic Balancing System (SMT-TM-132)

Imbalances on rotating machines are often the reason of troublemaking vibrations and noise. During imbalance, the primary axis of inertia or center of gravity of the revolving machine component is outside its axis of rotation. By adding or removing masses, the center of gravity or the principal axis of inertia can be erased so that both coincide with the axis of rotation. This process is called balancing. The machine component is then balanced and runs without vibration.

Optional Software is available for Data Acquisition and Control Function.

### TECHNICAL SPECIFICATIONS

#### Specifications:

- Study of dynamic imbalance.
- Procedures elaborate in balancing.
- Transparent protective cover for safe operation.
- Foundation with elastic bearing.
- Integrated angular and longitudinal scale.



**Technical Data:**

- Type: Horizontal, low-capacity dynamic balancing machine 4 to 6 adjustable planes (discs)..
- Balancing Type: Dynamic balancing.
- Frame Construction: Rigid steel or aluminum base.
- Max Rotor Weight Capacity: 1 to 5 kg.
- Max Rotor Diameter: 200 mm aprox.
- Speed Range: 300 to 3000 RPM.
- Drive System: Belt or direct coupling drive.
- Support Bearings: High-precision, low-friction bearings.
- Unbalance Measurement Accuracy:  $\pm 0.1$  gmm aprox.
- Balancing Correction Manual (weight addition/removal)
- Rotor Type: Supported Rigid rotor
- Monitoring System:
  - Built-in display screen (7" or larger)
  - Real-time vibration/unbalance data
- Software Built-in firmware only (no external DAQ or PC software)
- Accessories Included:
  - Calibration weights
  - Set of sample rotors
  - Tools
- Safety:
- Safety Features:
  - Protective guard over rotor
  - Emergency stop switch
- Voltage Supply:
  - 230V, 50Hz 1Phase
- Can be used in Research Purposes