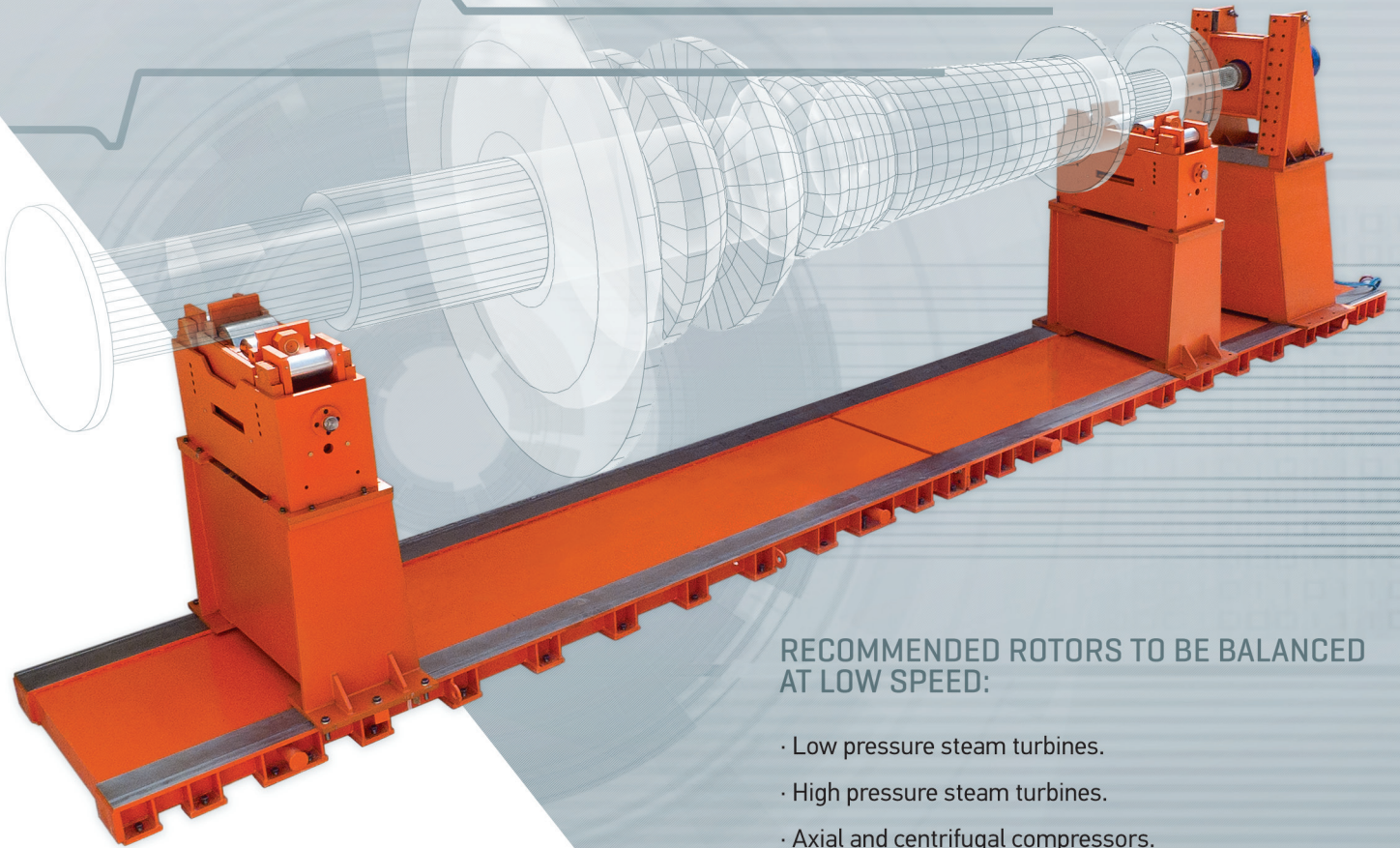


# MBM-100

## MOBILE BALANCING MACHINE



### RECOMMENDED ROTORS TO BE BALANCED AT LOW SPEED:

- Low pressure steam turbines.
- High pressure steam turbines.
- Axial and centrifugal compressors.
- 2 bearings Gas Turbines, frame 4, 5, 6, 7 and 9 (turbine and compressor).
- Boiler fans.
- 4 or more poles generators.
- 2 pole generators (with exclusions).

### ROTATING EQUIPMENT BALANCING

*Balancing of turbo machinery is one of the most critical tasks during rotating equipment maintenance activities.*

The results of an incorrect balancing are translated into vibrations and loads on the bearings that could significantly shorten their useful life.

**Mecanalis** has an extensive experience in detecting and solving diverse balancing problems in turbo machinery. Our methods developed over the years have proven to be effective in detecting, analyzing and correcting such problems.

We have the technology and experience to perform **on-site balancing** with the unit in operation or to perform multiple plane low speed balancing on our mobile balancing machine **MBM-100** to ensure an optimum solution.



# MBM-100

## MOBILE BALANCING MACHINE

### BENEFITS OF BALANCING ON MBM-100 MOBILE BALANCING MACHINE:

- The rotor never leaves site and all the work could be done on site for the client to witness.
- Risks and costs related to transporting the rotor to specialized workshops are eliminated.
- Balancing could be performed in parallel to other activities and ceases to be on the critical path of the maintenance program.
- Balancing grades in accordance to **ISO, API, DVI and MIL-STD-167-1** could be achieved.
- Run-out measuring on the whole length of the rotor could be done and correlated to the balancing state of the unit indicating whether the shaft is fit for operation; revealing problems such as bending, unbalance or local deformations.
- Allows access to all balancing planes at the same time and in a simple manner making it possible to manipulate balancing weights in places that are not accessible when the machine is in operation.
- Guarantees a better balancing quality permitting the distribution of correction weights on multiple planes.
- Allows for the consolidation of the existing balancing weights freeing the field balancing planes and facilitating future balancing with the machine in operation.
- The balancing machine is also suitable to perform light machining such as polishing and grinding.

### OUR CLIENTS INCLUDE:

- Thermal Power Stations.
- Hydro Power Stations.
- Pulp and Paper.
- Steel industry.
- Mining industry.
- Fans and blowers manufacturing.
- Motor repair workshops.
- OEM and turbine repair workshops.



### CHARACTERISTICS OF THE MOBILE BALANCING MACHINE MBM-100:

#### POWER SUPPLY

Voltage	380 V- 480 V / 50-60Hz 3-Phase
Current	60 Amps
Power consumption	40 KW
Torque	723 Nm

#### BALANCING CAPACITY

Rotor maximum diameter	3400 mm
Rotor length	10000 mm
Rotor weight	Up to 100 tons
Balancing speed range	100 - 390 rpm
Rotor journal minimum dimensions	Ø150mm x 220 mm
Balance quality	ISO G 1.0
Rotor center of gravity must be	Within journals

#### MACHINE FOOTPRINT

Area	5 m, 14 m, 6 m (W, L, H)
Machine weight	Approx. 20000 kg
Crane access	Needed
Support surface	Concrete