

Whirling of Shafts Apparatus

(EDC-TM-121)

EXPERIMENTAL DATA:

- Study of Laval rotor:
 - Self-alignment.
 - Critical Speed.
- Natural mode on a shaft:
 - Different bearing.
 - Different Shaft Diameter.
 - Different Shaft Length.



DESCRIPTION:

Whirling of shafts occurs due to rotational imbalance of a shaft, even in the absence of external loads, which causes resonance to occur at certain speeds, known as critical speeds.

Apparatus can be used to study the resonance, supercritical or subcritical states of a vibrating system. Shafts of different diameter and length available with the apparatus for experimentation.

Optional Software is available for Data Acquisition and Control Function.

SPECIFICATIONS:

- Study of natural and critical speed of a shaft.
- Different shaft with different diameters and lengths.
- Bearing and transparent cover for safety.
- Motor with speed adjustable.
- LCD for display and control.

TECHNICAL DATA:

- Shafts:
 - o Qty 6.
 - 3mm, 6mm, 7mm.
 - Material: tensile steel.
- Motor:
 - 6000RPM.
 - 250W.
- Shaft Safety bearings:
 - Qty 3.
- 230V, 50Hz, 1 phase.



DIMENSIONS AND WEIGHT:

Weight: 30 kg approx.

SCOPE OF DELIVERY:

1 x Instructional Manual.

1 x EDC-TM-121.

L x W x H (mm): 1600 X 400 X 450 approx.