OGASAWARA PRECISION LABORATORY, LTD.



Outline —

Angular deviation from a determined ratio between the input and output revolution of a gear train is detected and processed with the finest resolution of 1 sec. of arc.

A set of two gears are to be measured with this machine.

Examples

- Worm / Worm Wheel
- Spur and / or Helical Gear
- Bevel Gears
- Face Gear and Pinion
- Internal Gear and Pinion etc.

Measuring Equipment for Angular Transfer Accuracy of gear train MEATA-3

Specifications -

Measuring range : 30", 1', 3', 10', 30' (of arc)

Resolution / finest : 1' (1 sec. of arc)

 $: 1/1 \sim 1/150 (z1/z2 \text{ or } z2/z1)$ Gear ratio

Gear outside diameter max. (mm) ϕ 65 / drive ϕ 160 / driven

: 60 rpm (both spindles) Rev. speed max.

SettingCapacity(max.)

Z = 90mm (3.54") ± 75 mm (± 2.95 ") Y = 65mm (2.56")

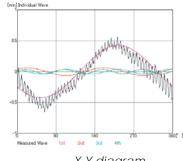
 $\theta = 0 \sim 30^{\circ}$ R.H. $/0 \sim 20^{\circ}$ L.H. (with center support)

Output -

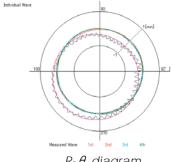
Data is stored, analyzed and displayed as explained below.

- Display / printout.: Phase Angle vs. Error Rectangular (X-Y diagram) Polar (R- θ diagram)
- Fourier Series Analysis* Stored data can be analyzed further with Fourier Analysis software including backlash characteristics.

*marked are optional



X-Y diagram



R- θ diagram

