

5.6 Radial composite deviation

Deviation and methods of measurements are introduced in 5.2 ~ 5.5 for individual deviations. These measurement methods are analyzed in two dimensions. On the other hand, perform engagement testing by engaging the gear to be measured with Mating gear or Cylindrical master gear and rotate to check gear condition. Even though accuracy of a gear is proper, problems do not occur unless the gear is actually engaged and rotated. Therefore gear performance is checked by engagement test.

Radial composite deviation is defined in JIS B 1752 (old),

- (a) **For a gear on its own:** Engaged with Cylindrical master gear without backlash and rotated to check for fluctuation of centre distance.
- (b) **For a gear pair:** Engaged together (hereinafter called specific Gear pair) without backlash and rotated to check for fluctuation of centre distance.

Refer to Fig. 15 for example of Radial composite deviation and refer to Fig. 16 for method of measurement for Radial composite deviation.

Another deviation is Tooth-to-tooth radial composite deviation, which is omitted here.

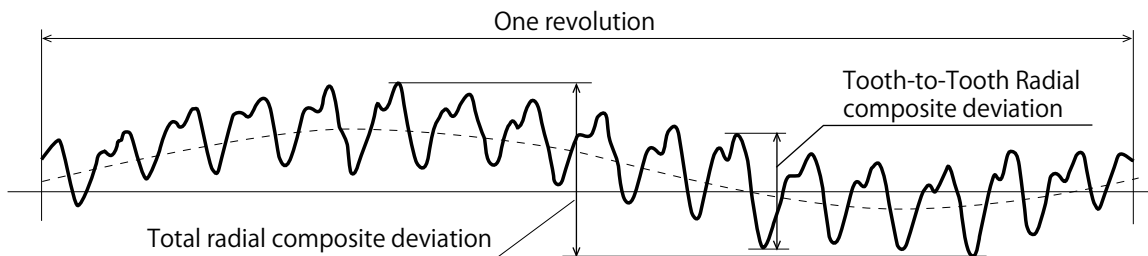


Fig. 15 Radial composite deviation (for gear on its own)

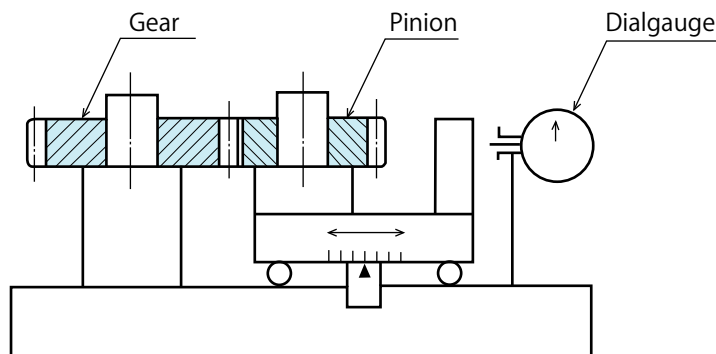


Fig.16 Method of measurement for Radial composite deviation