

## 5.5 Runout

Runout defined in **JIS B 1702 (old)** as “maximum difference in radius direction when contact pieces such as Over balls or Rollers are put to Tooth space near the Pitch circle. In short, the amount of off-centre measured between gear and axis. Deviations of Pitch, Pressure angle, Profile and others can influence Runout. If larger Runout occurs, it should be related to such deviations. To maintain minimum Runout, note that accurate bore tolerance is necessary. Pay special attention to chucking gear material to hobbing machine.

Below 1) and 2) are defined in JIS B 1752 (old).

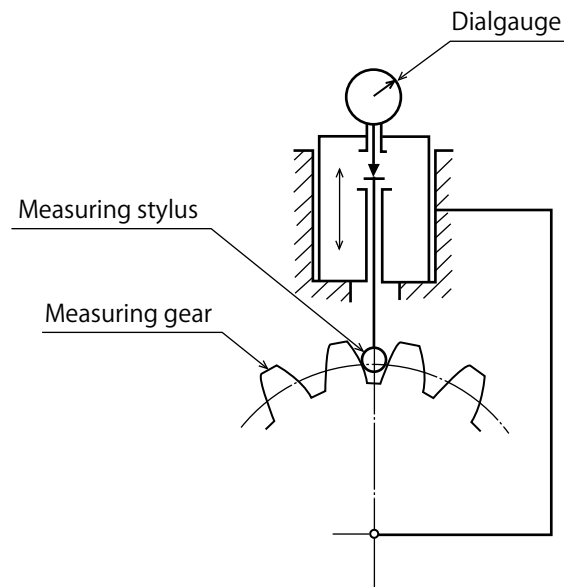
### 1) Use Over balls or Rollers for measurement

## 2) Measurement of pitch

Refer to Fig. 14, shows measurement of Over balls or Rollers.

Select diameter of the Over balls or Rollers to makes contact near the centre of effective tooth depth of the gear which is measured. Please refer to Fig. 3 in Chapter 4 (page 63) for graph to find suitable diameter of Over balls or Rollers (for module  $m_n=1.0$ ).

For measurement, put Over balls or Rollers at the centre of Facewidth.



### Fig. 14 Measurement of Runout