Measurement of speed ⇒ Electrical tachometers consist of a transducer which converts the rotational speed into a electrical signal.

Types of electrical tachometer ⇒

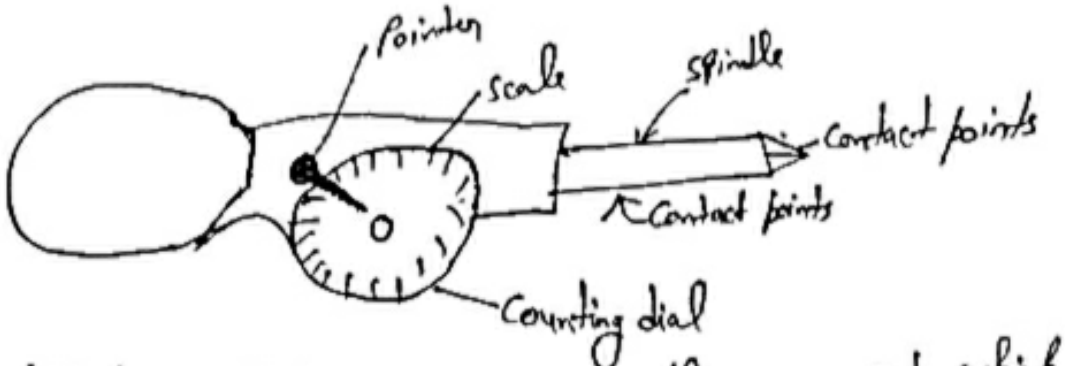
(i) Eddy Current tachometer / magnetic drag type
(ii) Electric generator tachometer
(iii) Contactless tachometer.
(iv) Frequency tachometer.
(v) Ignition type tachometer.
(vi) Stroboscopic tachometer.

Mechanical tachometer employ only mechanical parts and mechanical movements for the measurements of speed.

Types of mechanical tachometer ⇒

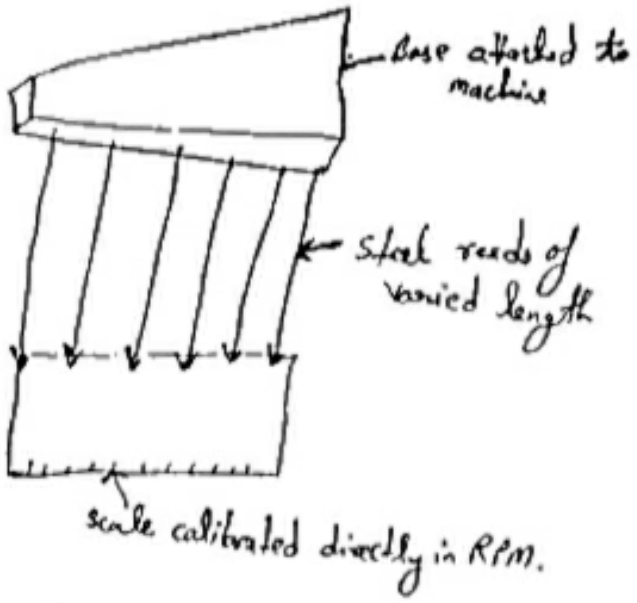
(i) Revolution Counters.
(ii) Centrifugal force tachometers.
(iii) Resonance Tachometers.

Revolution Counter ⇒



when contact points start moving the spindle move and which deflect the pointer on dial and it show the speed.

Resonance tachometer ⇒



One side of each reeds is fixed to a base which is kept in contact with moving part of the machine, while other sides of reeds are attached to a part of bottom of which a scale is calibrated scale is attached that gives reading directly in r.p.m..

When speed of the engine or machine increases the vibration of the base of the machine assembly also increases. Since resonance tachometer is fixed to this base, it also starts vibrating. This vibration changes as the speed of engine or machine changes. This vibration change is calibrated to read the speed of engine. It is used for 600 to 1000,000 rpm and accuracy is better.