

## Rack & Spur Gear Identification Guide

### To identify Spur Gear:

- a) Count the number of teeth in a gear
- b) Measure O/D (Outside Diameter) in mm
- c) Divide O/D by number of teeth plus 2, to give MOD

E.g. 20 teeth pinion with 55mm O/D:

$$\text{Mod} = \frac{55}{22} = 2.5$$

### To calculate Rack MOD (Module):

- a) Measure distance of 10 (ten) Pitches, as shown below
- b) Divide this number by 10 (ten)
- c) Then divide the resulting number again by  $\pi$  (pi), this would give us the required Module.

E.g.

$$\text{Module} = \frac{\left( \frac{\text{(Distance of 10 Pitches mm)}}{10} \right)}{\pi}$$

Distance of 10 Pitches = 78.53 mm

Distance of one Pitch = 7.853 mm

$$\text{Required Mod} = \frac{7.853}{\pi} = 2.5$$

**Rack Pinion Mounting Distance Sketch**

