

Gear Design For Solidworks

For ANSI Metric gears

U specify:

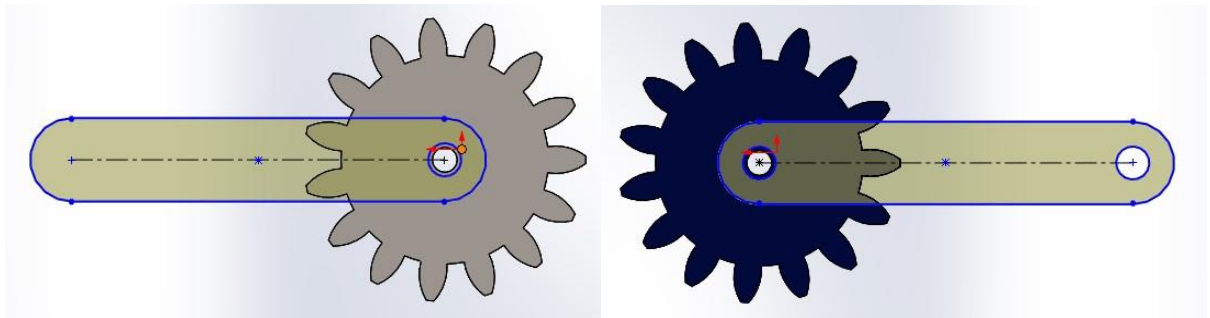
- Module.
- Number of teeth.
- Pressure Angle (14.5, 20).
- Face width.
- Hub style (one side, both sides).
- Nominal Shaft diameter.
- Keyway.

U calculate:

$$\text{Pitch diameter } P = \text{module} * \text{no. of teeth}$$

Save Gear After selecting parameters as part & open it, start sketching gear additional like the following.

- ✚ Interconnected gears must be of the same module.
- ✚ For interconnection symmetrically draw additional as follow.



- ✚ To check motion. Make assembly and do that

- ✓ Sketch Circle for each gear with the same pitch diameter.
- ✓ Mate each gear with its circle.
- ✓ Make sure no intersection between Gears @ interconnected point.
- ✓ Select move component tool and choose physical Dynamics.
- ✓ Start rotating any gear.

