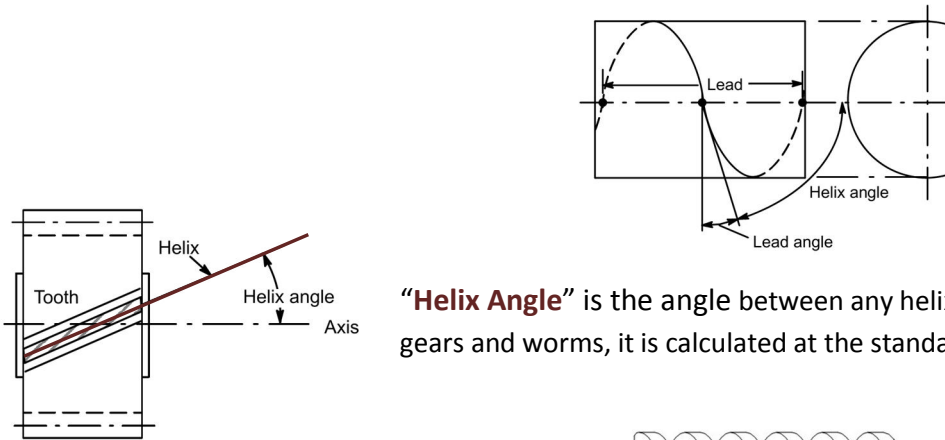
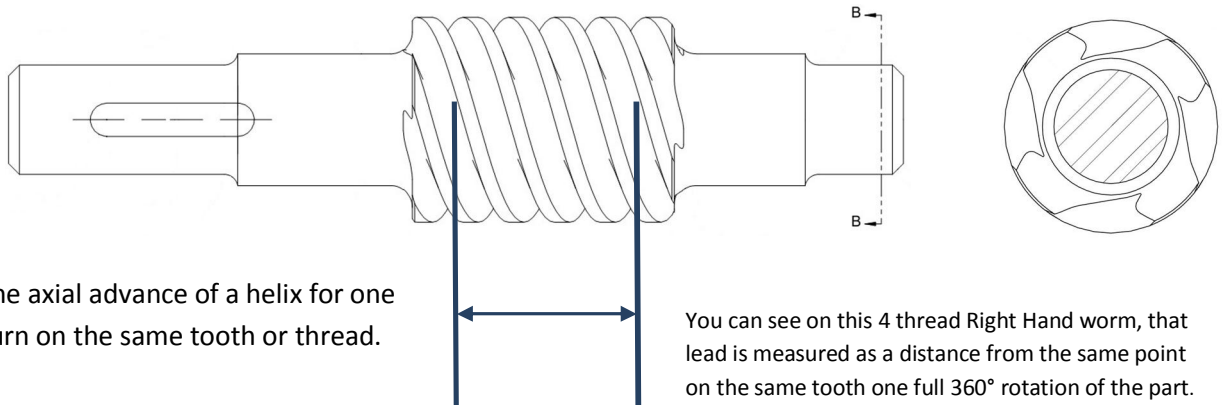


Doppler Gear TechBit: Gear 301, Helix and Lead

Helical gears are often specified with a “Helix Angle” yet this feature is measured as “Lead”. So **what is the difference between Helix and Lead?**



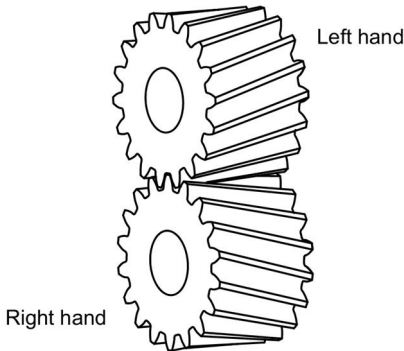
“**Helix Angle**” is the angle between any helix and an axial line on its cylinder. In helical gears and worms, it is calculated at the standard pitch circle unless otherwise specified.



“**Lead**” is the axial advance of a helix for one complete turn on the same tooth or thread.

You can see on this 4 thread Right Hand worm, that lead is measured as a distance from the same point on the same tooth one full 360° rotation of the part.

Helix Angle is specified in **degrees** and **Lead** is measured in **length**.

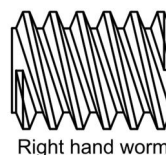
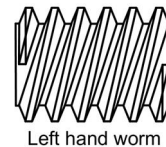


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