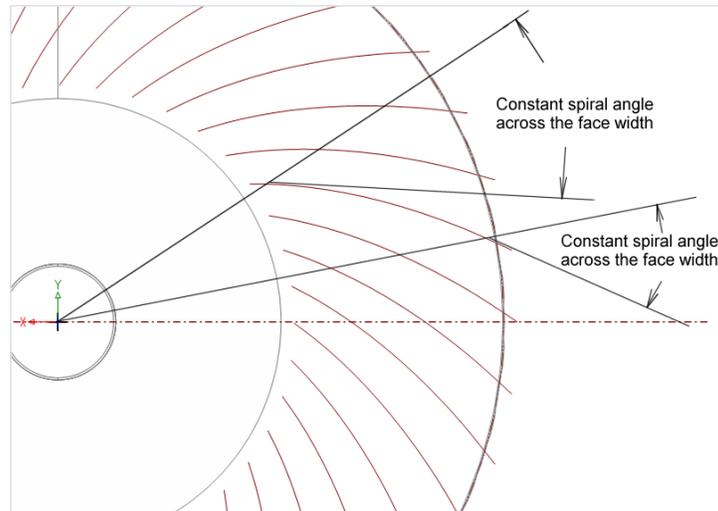
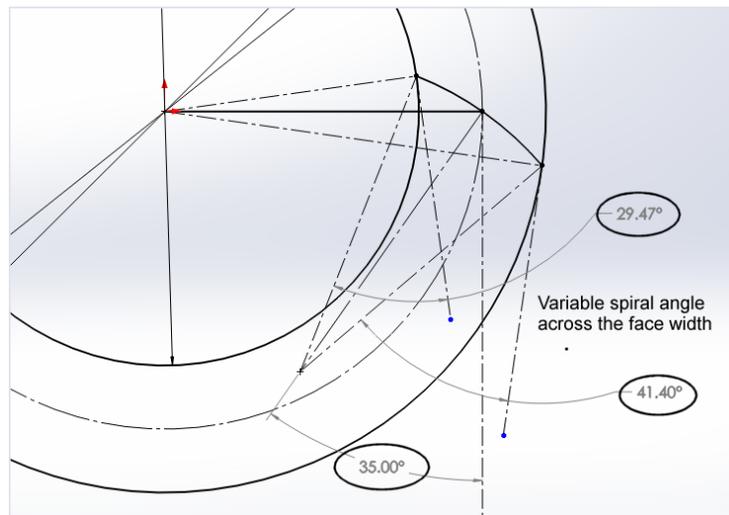


Camnetics TruSpiral™ Bevel Gear

The spiral of the Camnetics bevel gear tooth design is a constant angle across the entire face width, typically 35 degrees. The Gleason and Klingelnberg are only 35 degrees at the center of the face width and the rest of the curve is determined by the tooth generating tool radius.



Camnetics TruSpiral™



Gleason Spiral

The involute profile of a Camnetics TruSpiral™ is almost perfect (see below), whereas the Gleason spiral involute profile is a close approximation.

With the Camnetics TruSpiral™ you never need to know the tooth generating diameter because it is determined through a logarithmic spiral.

The spiral angle can be set to any value between 0 (straight bevel) and 45 degrees.

The curvature of a Gleason spiral tooth form is constant even when the "spiral" angle is set to zero (Zero Bevel Gear).

The curvature of a Camnetics TruSpiral™ is an equiangular spiral that is defined by the spiral angle. The greater the angle, the more curvature of the tooth. A spiral angle of 0.0 degrees will create a straight tooth.



10 DP Camnetics TruSpiral™
Bevel Gear Set 20-40 teeth

The SolidWorks Clearance Verification tool at 8 random rotations was within a range of 9 millionths of an inch.