Gearing Outside Spin (English)

Effects of different amounts of sidespin:

**40% Rule** – System for visualizing the “gearing” amount of outside spin:

- The tip offset (x) is 40% of the distance (L) to the line-of-centers point.
- The OB moves along the line-of-centers direction with no throw.
- Parallel to line of centers.
- Line of centers.

Alternative to using gearing outside spin (e.g., when shot calls for different sidespin):

Adjust aim for throw (before adjusting for squirt/swerve, for example with BHE/FHE), understanding:
- Maximum throw is about 1 inch per foot of OB travel, which is about 5 degrees.
- Maximum CIT occurs with a slow-speed stun shot at about a 1/2-ball hit.
- Maximum SIT, for a straight shot, occurs with slow speed, stun, and about 50% sidespin.
- Throw is less with faster speed and with topspin or bottom spin (unless drag, then more throw).