





0.013

0.009

0.040

0.039

0.042

0.040

2.532

2.509

Drilling Angles shown are for 5" PAP – Adjust for other PAPs

Outer Limits Solid Drilling Chart Performance Layout **Layout Specs Total Diff** Low RG Int Diff **RG PAP** Differential **Undrilled** 2.499 0.014 0.051 0.053 Pin Over 70° x 3-1/2" x 20° **Maximum Flip** Α 0.026 0.059 2.520 0.065 Pin Over 45° x 4" x 35° Most Versatile В 0.018 0.050 0.053 2.528 **Smoother Motion** Pin Over 20° x 4-1/2" x 40° C 0.012 0.045 0.047 2.538

This chart uses a 5" horizontal axis co-ordinate. Adjust the drilling angle for other horizontal co-ordinates. Always use the pin to PAP distance and VAL angle to get the desire ball motion.

Pin Under 40° x 4-1/4" x 75°

Pin Besides 90° x 2 1/4" x 45°

"Performance Differential" is a term used to accurately describe the track flare of a ball. The TRUE amount of track flare of a drilled ball is related to both the intermediate and total differential of the drilled ball. The "Performance Differential" of the drilled ball measures the relationship between the intermediate and total differential to give an accurate measure of the amount of track flare in the drilled ball.

D

Midlane Hook

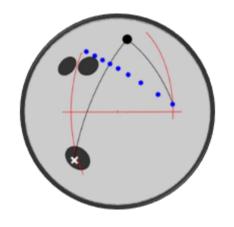
Smaller Hook



Suggested Layouts for Asymmetric Cores

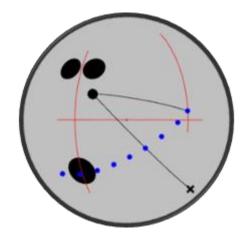
A – Maximum Flip

Pin Over 70° x 3½" x 20°



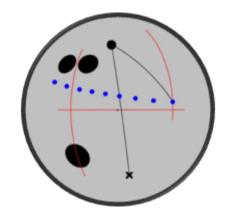
D-Midlane Hook

Pin Under 40° x 4 1/4" x 75°



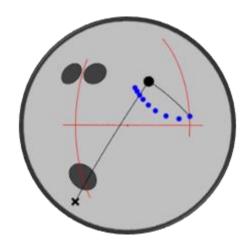
B - Most Versatile

Pin Over 45 x 4" x 35°



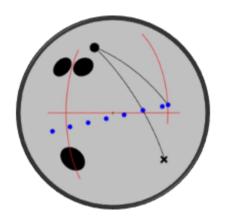
E-Smaller Hook

Pin Under 90° x 2 1/4" x 45°



C – Smoother Motion

Pin Over 20° x 4-1/2" x 40°



The "X" on the diagrams indicates the Preferred Spin Axis (PSA / Mass Bias) of the drilled ball, and the line that connects the PSA and PIN after drilling is referred to as the "Pin to Spin Line" is that the ball revs up when the migrating axis crosses this line so the sooner the migrating axis crosses the "Pin to Spin Line", the sooner the ball rev up.