RADICAL BOWLING TECHNOLOGIES®

COUNTER ATTACK

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

Counter Attack Pearl Drilling Chart

	Layout	Layout Specs	Low RG	Int Diff	Total Diff	Performance Differential	RG PAP
	Undrilled	**-**	2.575	0.001	0.023	0.023	
A	**All Purpose**	**Pin Over 70° x 4 1/2" x 35°**		0.013	0.027	0.030	2.587
B	**Most Total Hook**	**Pin Over 70° x 3 3/4" x 20°**		0.013	0.031	0.033	2.583
C	**Smooth Hook**	**Pin Under 85° x 4" x 85°**		0.004	0.016	0.016	2.584
D	**Length with Control**	**Pin Under 80° x 5 1/4" x 80°**		0.006	0.013	0.015	2.590
E	**Total Control**	**Pin Over 90° x 2 1/4" x 45°**		0.003	0.011	0.011	2.575
F	**Maximum Flare**	**65° x 4" x 30° with balance hole**		0.024	0.043	0.050	2.595

*Layout F - Maximum Flare utilizes a balance hole and is not USBC compliant as of August 1, 2020

“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.

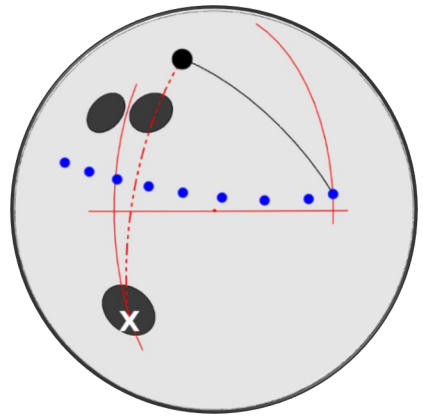
RADICALBOWLING.COM

DOCUMENT # 60-900337-602 FORM #0306-19

Suggested Layouts for Symmetric Cores

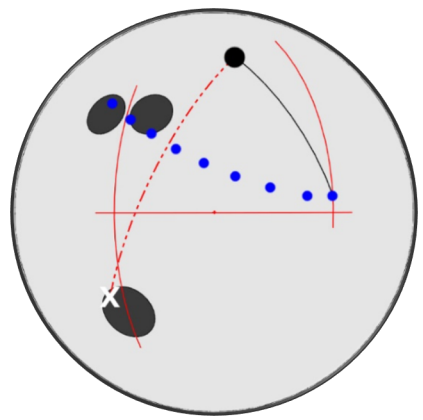
A – All Purpose

Pin Over
70° x 4 ½” x 35°



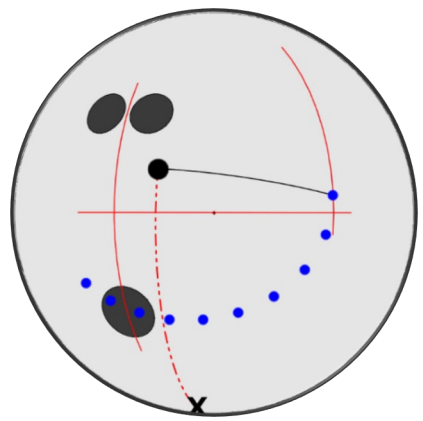
B – Maximum Hook

Pin Over
70° x 3 ¾” x 20°



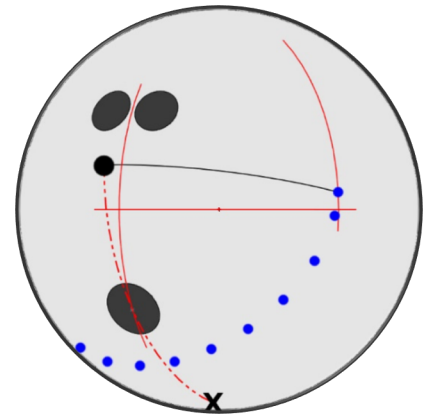
C – Smooth Hook

Pin Below
85° x 4” x 85°



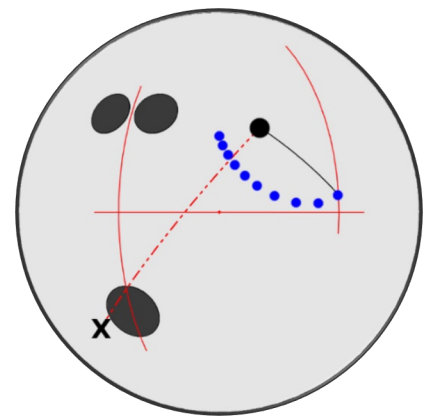
D – Length with Control

Pin Under
80° x 5 ¼” x 80°



E – Total Control

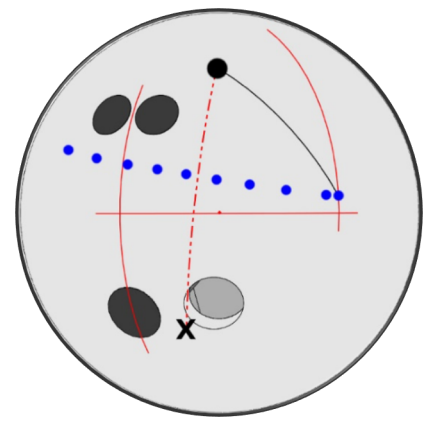
Pin Beside
90° x 2 ¼” x 45°



F – Maximum Flare

65° x 4” x 30°
with balance hole

****Not USBC Compliant***
as of August 1, 2020



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”. The important feature of 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.