## ADDITIONAL LAYOUT TECHNIQUES FOR PRO SHOPS



# MOtion tuned cares produce higher revving, more defined breakpoints.

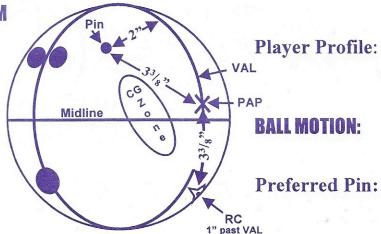
Because MORICH balls contain MOtion tuned coxes, the core profiles change with every revolution as the ball travels down the lane. This allows MOtion tuned coxes to maximize the ball's performance during the ball's entire path to the pins. The result of this unique feature is BETTER PIN CARRY. The shape of the MOtion tuned coxe determines the ball motion. The tapered core of the LABYRINTH produces CONSISTENT MIDLANE REACTION, while the rounded, notched core of the Minotaur produces a LATER, SHARPER BACKEND REACTION.

# **MORICH** Particle Reactive Coverstocks

GRIPPER coverstock is a "DUAL ACTION" cover which rolls like a particle ball when smooth or dull, and a reactive ball when shined. This coverstock is easily adjusted to change the overall hook of the LABYRINTH. The enhanced friction of GRIPPER EF coverstock increases the total overall hook of the Minotaur. Although GRIPPER EF is a MORE HOOKING coverstock, it retains the versatility of the original GRIPPER coverstock.

### **EARLY REVVING LAYOUTS**

MAXIMUM EARLY REVS:

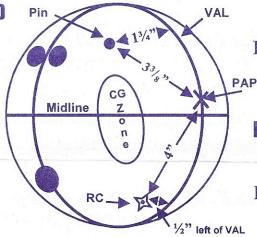


Med. to High Ball Speed Low to Med. Revs Med. to Large Axis Rotation

**Maximum Track Flare** Maximum Forward Roll **Maximum Early Revs** 

2 to 4 Inches Out

FORWARD ROLL:



Player Profile:

Med. Ball Speed

Med. Revs

Med. Axis Rotation

**BALL MOTION:** 

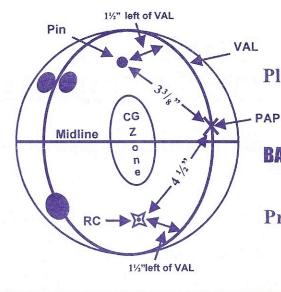
Maximum Track Flare

Forward Roll **Early Revs** 

Preferred Pin:

2 to 4 Inches Out

HOOK AND SET:



Player Profile:

Low to Med. Ball Speed

Med. to High Revs

Small to Med. Axis Rotation

Maximum Track Flare

Hook and Set

**High Revs** 

Preferred Pin:

**BALL MOTION:** 

2 to 4 Inches Out

SAMPLE DIAGRAMS USE PAP OF 5 x 1/2 1/2

Pin= the spot marking the top center of the core of the ball

X RC= Reaction Center= Mass Bias= the spot marking the location of the mass bias



the area on the surface of the = ball; marking the location of the center of gravity of the ball

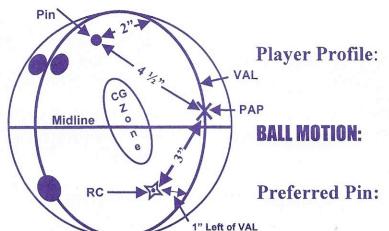
X PAP= Positive Axis Point= the positive end of the bowler's axis of rotation at release

VAL= Vertical Axis Line= a vertical line drawn through the bowler's PAP

Midline= a horizontal line drawn midway between the thumb and finger holes

### MIDLANE REACTING LAYOUTS



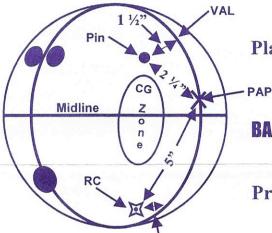


Med. to High Ball Speed All Rev Rates All Axis Rotations

Large Track Flare Strong Midlane Hook High Revs

2 to 5 Inches Out

HOOK AND SET:



Player Profile:

layer rronne.

**BALL MOTION:** 

All Ball Speeds All Rev Rates

Small to Med. Axis Rotation

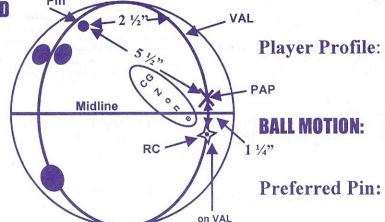
Medium Track Flare Hook and Set

Medium Revs

Preferred Pin:

1 to 3 Inches Out





1/2" Left of VAL

All Ball Speeds
All Rev Rates

Med. to Large Axis Rotation

Large Track Flare Forward Roll

Early Revs

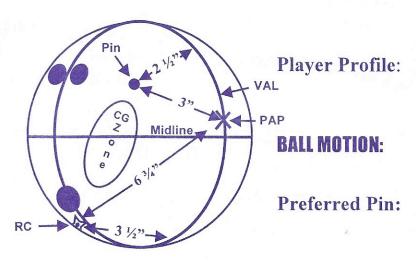
3 to 5 Inches Out

#### SAMPLE DIAGRAMS USE PAP OF 5 x 1/2 1/2

The total overall **hook** of any **MoRich** ball can easily be changed by altering the **surface** texture. **MoRich** balls are factory finished with a **500** grit matte **surface**. To increase the overall **hook** of the ball, dull the **surface** with a burgundy scuff pad or **320-400** grit sandpaper. Smoothing the **surface** with **1000-1500** grit sandpaper will decrease the overall **hook** of the ball, while **polishing** will create a later, sharper breakpoint.

### LATE REVVING LAYOUTS



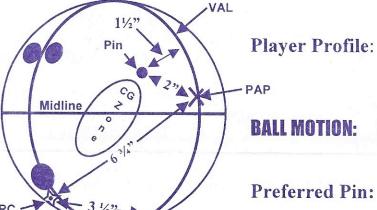


Med. to High Ball Speed Low to Med. Revs All Axis Rotations

Large Track Flare Large Smooth Hook Late Revs

2 to 4 Inches Out



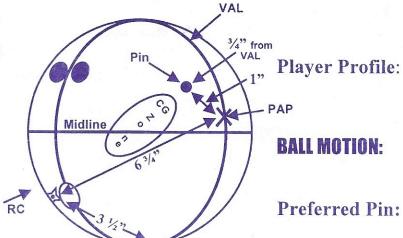


Med. Ball Speed Med. Revs All Axis Rotations

Medium Track Flare Medium Smooth Hook Late Revs

referred Pin: 1 to 3 Inches Out

LEAST HOOK:



Low to Med. Ball Speed Med. to High Revs All Axis Rotations

Small Track Flare Least Hook Late Revs

1 to 3 Inches Out

#### SAMPLE DIAGRAMS USE PAP OF 5 x 1/2 1

When a balance hole is necessary, place the balance hole at the intersection of the VAL and a line drawn from the center of the grip through the CG (center of gravity). Pitching the balance hole 1 1/4" away from the center of the grip will increase flare.