### **Drilling #5 - Full-Roller Layout**

Full-Roller Ball Track Only!

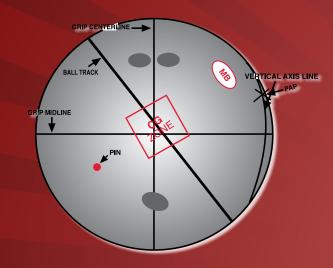
**Lane Condition:** Medium to Heavy Oil

Strong arc

Flare Potential:

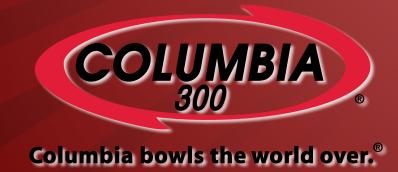
**Ball Motion:** 

Place pin at 3½" from the center of the span located in 7:30 position **Pin Placement:** Mass Bias: Place mass bias in 2:30 position relative to the center of the span



More information can be obtained by going to <a href="www.columbia300.com">www.columbia300.com</a> and visiting the tech docs section for more details on drilling and technical information.

Thanks for choosing one of the best brands in bowling, and remember we're here when you have questions or need help; our support line is ready with trained professionals to assist you in optimizing your bowling experience. The support line number is 316-209-9035.



P.O. Box 746 Hopkinsville, KY 42241-0746 1-800-531-5920 www.Columbia300.com



## Columbia bowls the world over.®

# **Mass Bias Drilling Instructions**

Columbia 300 Mass Bias balls are designed to provide length and backend reaction for a wide variety of bowling styles. Overall, bowlers can expect to see excellent all-purpose ball motion with more entry angle to the pocket and improved hitting power.

High Mass Bias cores, provide excellent drilling versatility by placing the pin and mass bias in different configurations. When drilling a High Mass Bias ball, the placement of the Mass Bias will have a significant impact on changing the breakpoint shape and overall ball motion.

#### **Columbia 300 Ball Motion Versatility:**

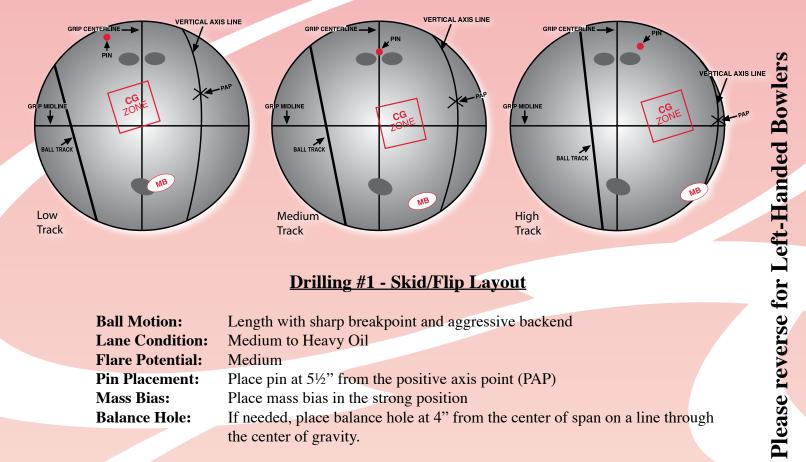
The coverstock used on this ball will provide good length and strong backend reaction. However, it is important to keep in mind that all bowlers have different needs. The coverstock can easily be sanded to a rougher grit for stronger hook motion in oil or polished for more length, more aggressive breakpoint and less total hook. Please consult your pro shop operator for additional assistance in tuning ball motion.

#### Columbia 300 Ball Care:

Illustrations shown are for Right-Handed Bowlers. Please reverse for Left-Handed Bowlers

It is imperative to maintain your new Columbia 300 ball by cleaning the coverstock immediately after each bowling session using bowling ball cleaning products designed for reactive balls. Columbia 300 highly recommends POWERHOUSE ENERGIZER BALL CLEANER applied with a mico-fiber towel to remove the dirt and oil from the surface of the ball.





## **Drilling #1 - Skid/Flip Layout**

Length with sharp breakpoint and aggressive backend **Ball Motion:** 

Medium to Heavy Oil **Lane Condition:** 

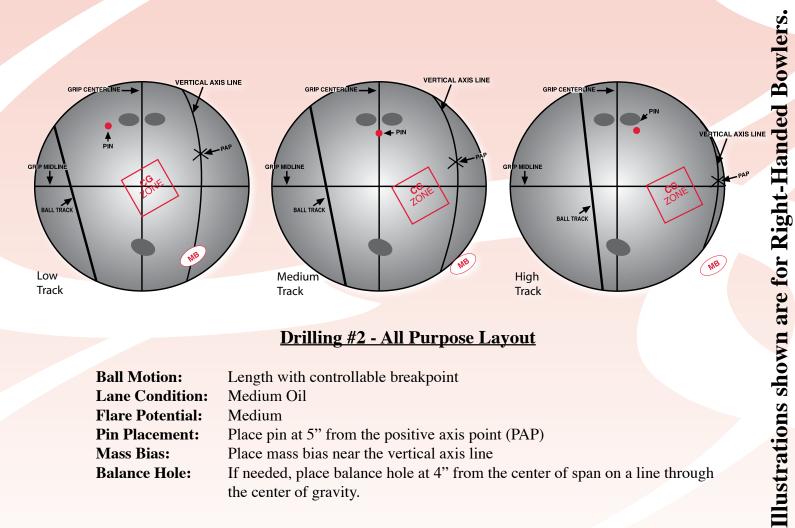
**Flare Potential:** Medium

Place pin at 5½" from the positive axis point (PAP) **Pin Placement:** 

**Mass Bias:** Place mass bias in the strong position

**Balance Hole:** If needed, place balance hole at 4" from the center of span on a line through

the center of gravity.



## **Drilling #2 - All Purpose Layout**

**Ball Motion:** Length with controllable breakpoint

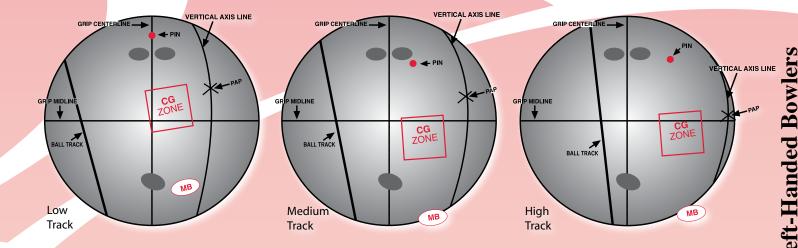
**Lane Condition:** Medium Oil Flare Potential: Medium

**Pin Placement:** Place pin at 5" from the positive axis point (PAP)

**Mass Bias:** Place mass bias near the vertical axis line

If needed, place balance hole at 4" from the center of span on a line through **Balance Hole:** 

the center of gravity.



## **Drilling #3 - Strong Layout**

**Ball Motion:** Strong and controllable hook

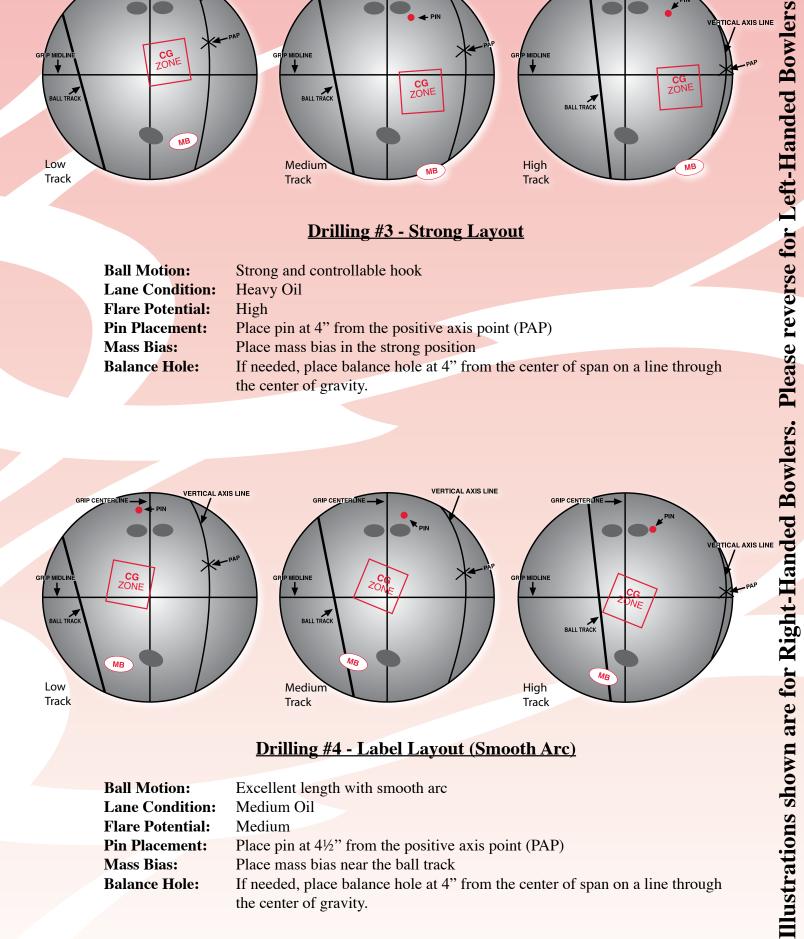
**Lane Condition:** Heavy Oil Flare Potential: High

**Pin Placement:** Place pin at 4" from the positive axis point (PAP)

**Mass Bias:** Place mass bias in the strong position

**Balance Hole:** If needed, place balance hole at 4" from the center of span on a line through

the center of gravity.



## **Drilling #4 - Label Layout (Smooth Arc)**

**Ball Motion:** Excellent length with smooth arc

Medium Oil **Lane Condition:** Medium Flare Potential:

**Pin Placement:** Place pin at 4½" from the positive axis point (PAP)

**Mass Bias:** Place mass bias near the ball track

If needed, place balance hole at 4" from the center of span on a line through **Balance Hole:** 

the center of gravity.