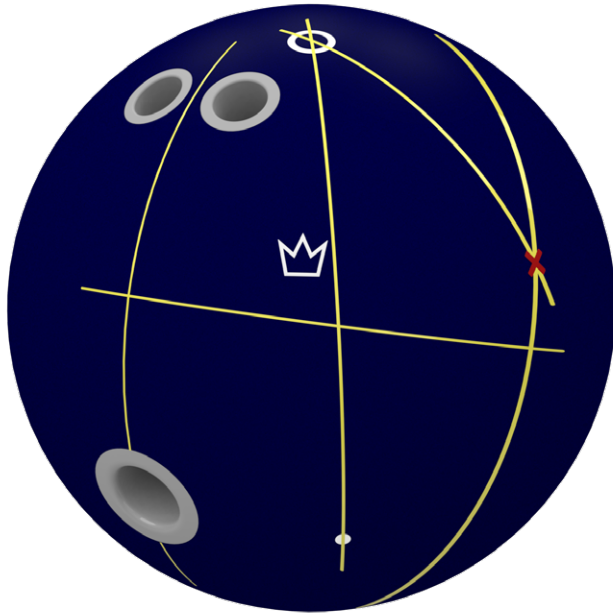


ASYMMETRICAL DRILLING LAYOUTS



ASYMMETRICAL DRILLING LAYOUTS



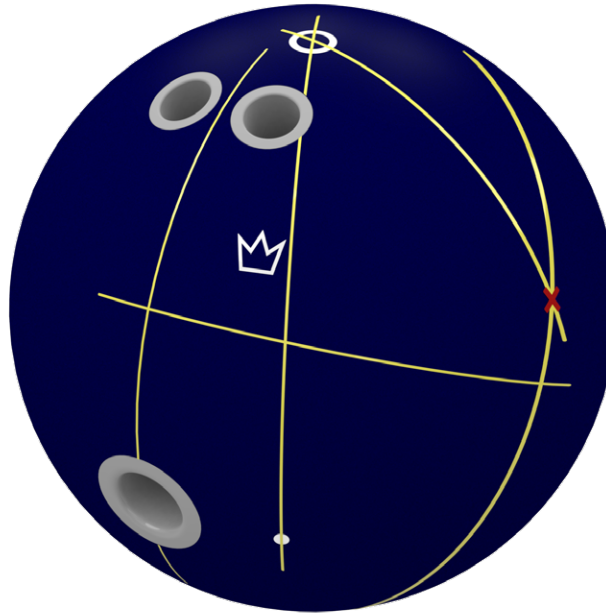
1 STRONG

Reaction Characteristics

- Earliest revving
- Medium response to friction
- Strong total hook with strong midlane read

Dual Angle Layout

- 45° Drill Angle
- 4" pin/DOT to PAP
- 35° VAL Angle



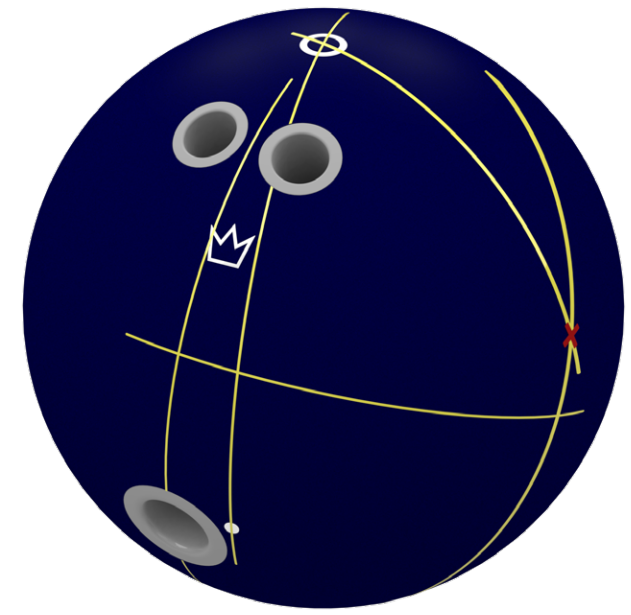
2 BENCHMARK

Reaction Characteristics

- Earlier revving
- Medium response to friction
- All-purpose motion with strong backend

Dual Angle Layout

- 55° Drill Angle
- 4.5" pin/DOT to PAP
- 35° VAL Angle



3 SKID-FLIP

Reaction Characteristics

- Later revving
- Sharp response to friction
- Medium total hook with angular backend

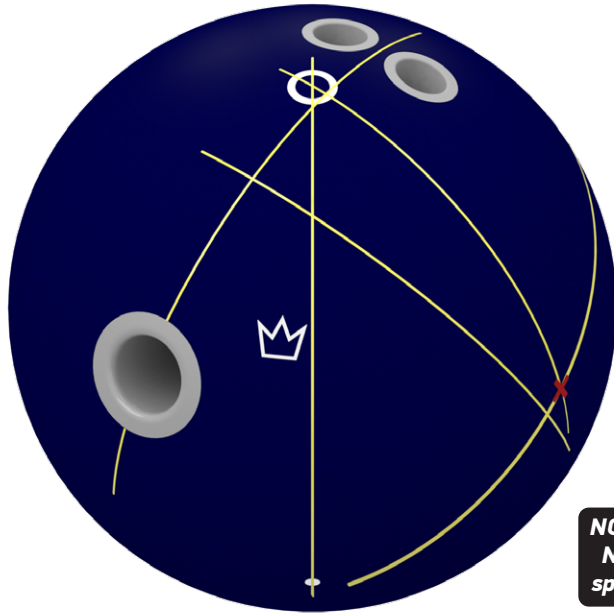
Dual Angle Layout

- 65° Drill Angle
- 5" pin/DOT to PAP
- 30° VAL Angle

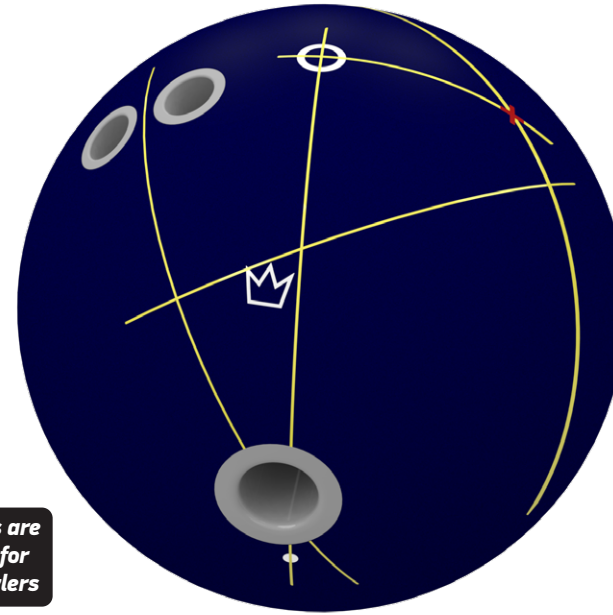
PAP used for these layouts is 5" over and 1" up.

These images are for reference only. The layout on your drilled ball may look slightly different.

ASYMMETRICAL DRILLING LAYOUTS



NOTE: These layouts are NOT recommended for speed dominant bowlers



4 VERSATILE CONTROL

Reaction Characteristics

- Later revving
- Smooth response to friction
- Medium total hook with continuous backend

Dual Angle Layout

- 60° Drill Angle
- 5" pin/DOT to PAP
- 70° VAL Angle

5 MAX CONTROL

Reaction Characteristics

- Later revving
- Smoothest response to friction
- Controlled motion with arcing backend

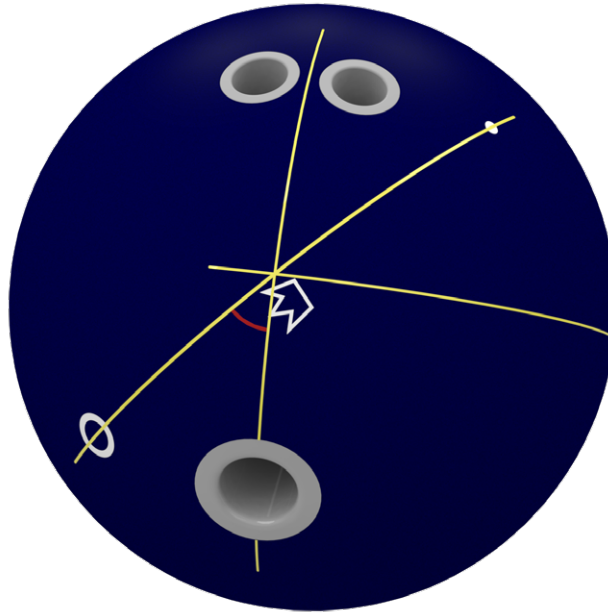
Dual Angle Layout

- 90° Drill Angle
- 2.5" pin/DOT to PAP
- 50° VAL Angle

PAP used for these layouts is 5" over and 1" up.

These images are for reference only. The layout on your drilled ball may look slightly different.

ASYMMETRICAL DRILLING LAYOUTS



6 FULL ROLLER

Reaction Characteristics

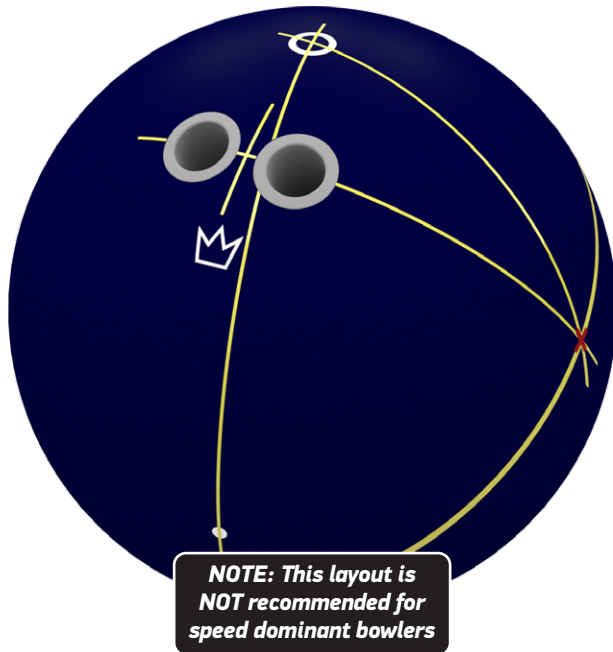
- Great for bowlers whose ball track passes over the gripping holes
- Moves the ball track to pass between the gripping holes, ensuring a consistent ball reaction
- Effective for a wide variety of lane conditions

Layout Information

- Riser pin 3.75" from grip center, 45° from grip line in 7:30 position.
- PSA/MB locator pin 45° from grip line at a 1:30 position relative to grip center.

Image is for reference only. The layout on your drilled ball may look slightly different.

NO-THUMB ASYMMETRICAL LAYOUTS



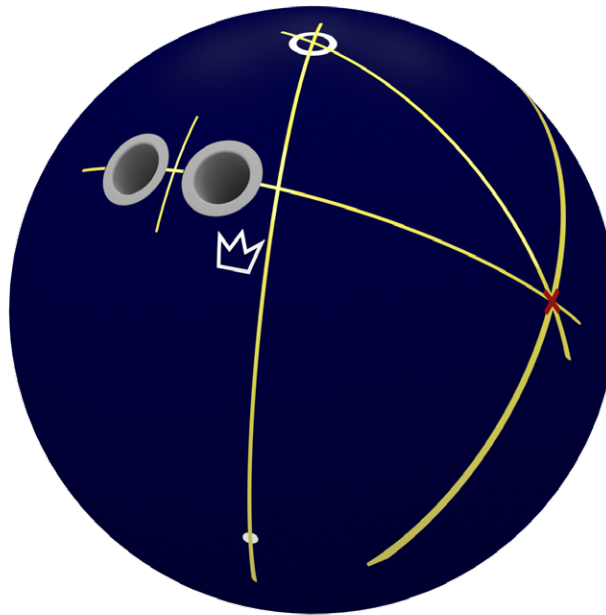
A Control

Reaction Characteristics

- Latest revving
- Smoothest response to friction
- Controlled motion with arcing backend

Recommended Dual Angle Converter Inputs

- Drilling angle range: 60°-80°
- 5.25" pin/DOT to PAP
- 2" pin/DOT to CoG



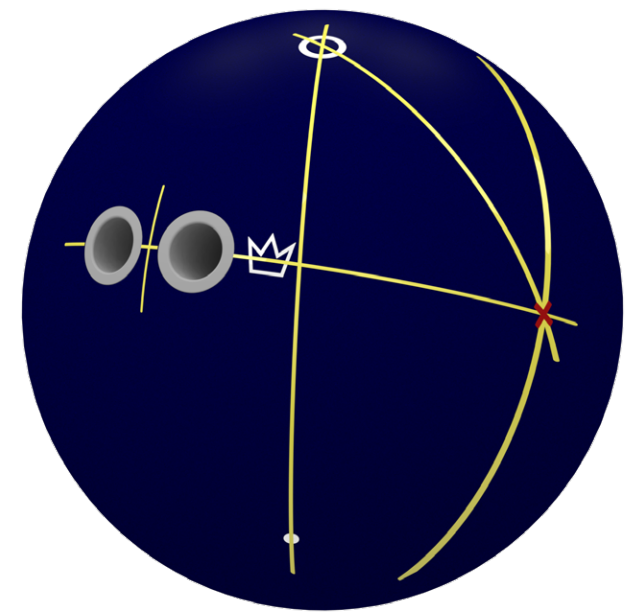
B Smooth Benchmark

Reaction Characteristics

- Later revving
- Smooth response to friction
- All-purpose motion with arcing backend

Recommended Dual Angle Converter Inputs

- Drilling angle range: 50°-70°
- 4.5" pin/DOT to PAP
- 2.5" pin/DOT to CoG



C Strong Benchmark

Reaction Characteristics

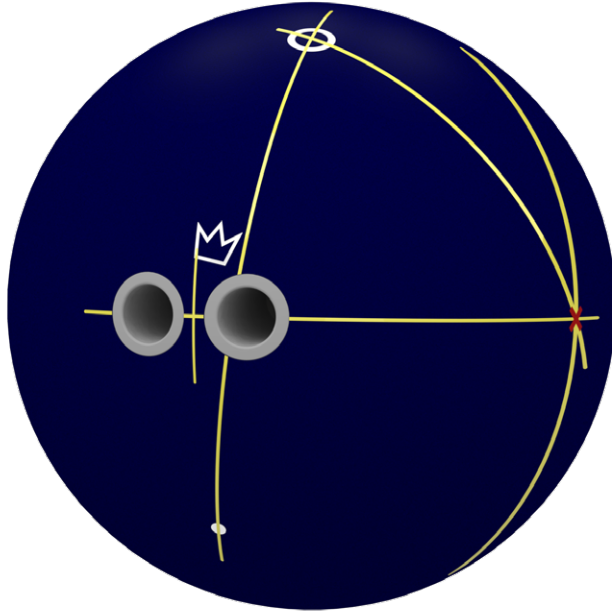
- Earlier revving
- Medium response to friction
- All-purpose motion with strong backend

Recommended Dual Angle Converter Inputs

- Drilling angle range: 40°-60°
- 4.5" pin/DOT to PAP
- 3.5" pin/DOT to CoG

*PAP used for these layouts is 5" over and 0" up or down.
These images are for reference only. The layout on your drilled ball may look slightly different.*

NO-THUMB ASYMMETRICAL LAYOUTS



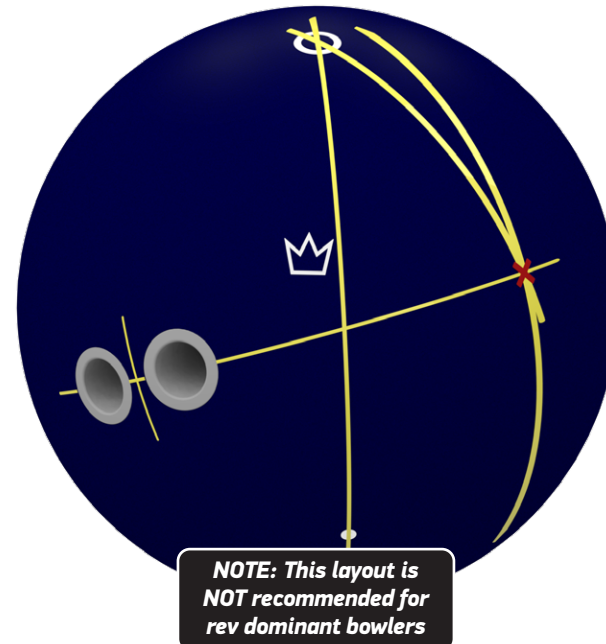
D Sharp Backend

Reaction Characteristics

- Later revving
- Sharp response to friction
- Medium total hook with angular backend

Recommended Dual Angle Converter Inputs

- Drilling angle range: 60°-80°
- 5" pin/DOT to PAP
- 4" pin/DOT to CoG



E Strong Mid-Lane

Reaction Characteristics

- Earliest revving
- Medium response to friction
- Strong total hook with strong midlane read

Recommended Dual Angle Converter Inputs

- Drilling angle range: 40°-60°
- 4" pin/DOT to PAP
- 5" pin/DOT to CoG

PAP used for these layouts is 5" over and 0" up or down.

These images are for reference only. The layout on your drilled ball may look slightly different.

APPENDIX

ALL NO-THUMB LAYOUTS ONLY

These layouts use the Pin/DOT to CoG (Center of Grip) distance and Pin/DOT to PAP distance as the defining measurements for the appropriate layout. Use our **Converter** to determine the proper Dual Angle converted layout based on the desired ball reaction. [Click HERE to Download the Converter](#). Alternatively, you can find the converter at <https://dv8bowling.com/products/no-thumb-resources>.

SPEED AND REV-DOMINANT LAYOUT ADJUSTMENTS

We recommend the following adjustments to these layouts for certain types of bowlers:

Bowlers who are Speed Dominant:

Decrease the drill angle by 10 degrees, move the Pin/DOT .25" closer to PAP, decrease the VAL angle by 5 degrees.

Bowlers who are Rev Dominant:

Increase the drill angle by 5 degrees, move the Pin/DOT .5" further away from PAP, increase the VAL angle by 5 degrees.

Manufacturer Disclaimer: 1) These layouts are general recommendations and results are not guaranteed. We recommend working with your local Rewards+ Pro Shop who specializes in tuning the layout of the bowling ball to perfectly match your physical game characteristics. 2) All drilled finger and thumb holes must have at least a moderate bevel and the Riser Pin must be at least one inch from any drilled hole to comply with the Brunswick warranty. The Riser Pin condition does not apply to bowling balls with DOT technology. 3) The images displayed for each layout are for reference only and your ball may not look exactly as the displayed image for your chosen layout does. Positions of the Pin/DOT, CG, and Mass Bias locator pin may vary, depending on the bowler's Positive Axis Point, gripping specs, and box specs of the individual ball. ©2026 Brunswick Bowling Products, LLC. • Form #0725-19