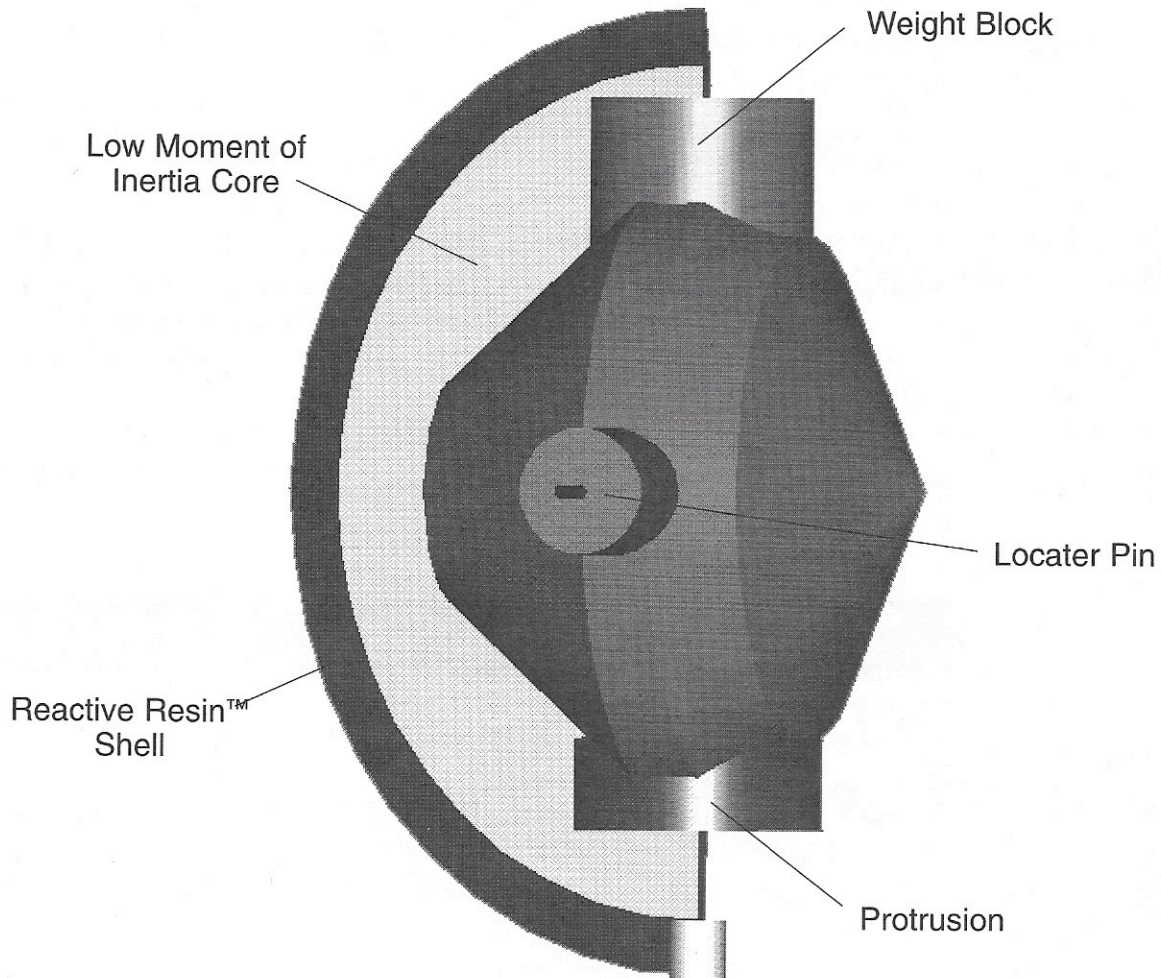


# Omega/R

## Reactive Resin™



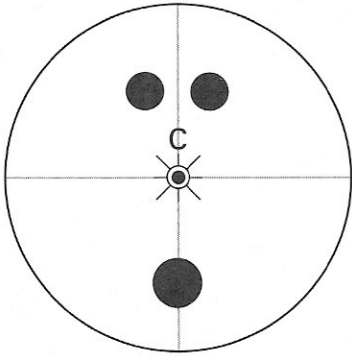
**OMEGA/R**  
**Pearlized Reactive Resin™**  
**Level 4 Core**  
**Ball Rating System**  
**Drilling Suggestions**  
*(see back cover for details)*



Where advanced technology has striking results.

# LABEL DRILLING

## LEFT HAND



### C

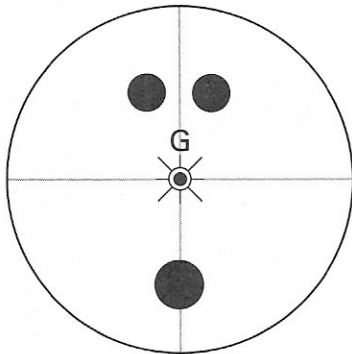
Choose a ball CG-in or CG-out in the A or H area. Place C at 12 o'clock to center of driller's clock. Pin is center of the span. If an extra hole is needed to meet ABC specifications, drill at 5" from the center of the grip through the CG.

*Reaction:* Leverage reaction is with medium skid, flip and set in backend.

*Length:* 4 *Backend:* 7 *Flare Potential:* 4" to 6 1/2"

### Recommended Lane Conditions:

Heads	Pines	Backend
Light to Medium	Light to Medium	Light Carry Down



### G

Choose a ball CG-in or CG-out in the D or E area. Place G at 12 o'clock to center of driller's clock. Pin is center of the span. If an extra hole is needed to meet ABC specifications, drill at 5" from the center of the grip through the CG.

*Reaction:* Leverage reaction with early to medium breakpoint with strong, continuous backend.

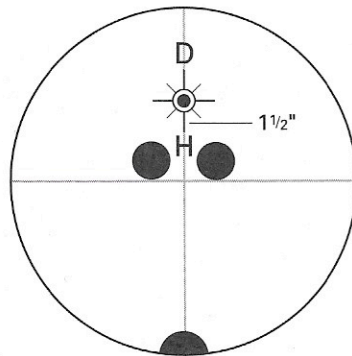
*Length:* 2 *Backend:* 7 *Flare Potential:* 4" to 6 1/2"

### Recommended Lane Conditions:

Heads	Pines	Backend
Light to Medium	Light to Medium	Medium Carry Down

# PIN UP

## LEFT HAND



### D

Choose a ball CG-in or CG-out in the H area. Place D at 12 o'clock to center of driller's clock. Measure 1 1/2" from the center of driller's clock through the letter H to locate center of finger bridge. Measure thumb hole from finger holes. Choose a top weight under 2 oz.

*Reaction:* Long skid, strong snap

*Length:* 8 *Backend:* 6 *Flare Potential:* 3"

### Recommended Lane Conditions:

Heads	Pines	Backend
Light	Light	Light Carry Down

## G-LEVERAGE PIN UP

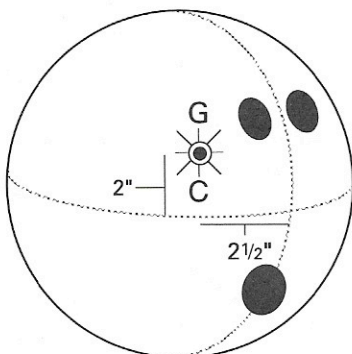
Choose a ball that is CG-out in the B, C, D or E area. Place G at 12 o'clock to the center of the driller's clock. Measure 2" from the center of the driller's clock through the letter C. From this point, draw a perpendicular line 2 1/2" right. This is the center of span. If an extra hole is needed to meet ABC specifications, drill on a line from the center of the grip through the center of gravity at 5".

*Reaction:* Leverage reaction with medium breakpoint with a strong, sharp breakpoint.

*Length:* 2 *Backend:* 8 *Flare Potential:* 4" to 6 1/2"

### Recommended Lane Conditions:

Heads	Pines	Backend
Medium	Light to Medium	Light Carry Down



# TECHNIQUES

## RIGHT HAND

### A

Choose a ball CG-in or CG-out in the C or D area. Place A at 12 o'clock to center of driller's clock. Pin is center of the span. If an extra hole is needed to meet ABC specifications, drill at 5" from the center of the grip through the CG.

*Reaction:* Leverage reaction is with medium skid, flip and set in backend.

*Length:* 4    *Backend:* 7    *Flare Potential:* 4" to 6 1/2"

#### Recommended Lane Conditions:

Heads	Pines	Backend
Light to Medium	Light to Medium	Light Carry Down

### E

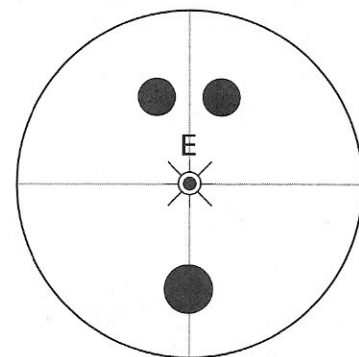
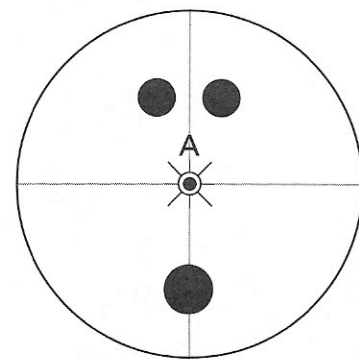
Choose a ball CG-in or CG-out in the G or H area. Place E at 12 o'clock to center of driller's clock. Pin is center of the span. If an extra hole is needed to meet ABC specifications, drill at 5" from the center of the grip through the CG.

*Reaction:* Leverage reaction with early to medium breakpoint with strong, continuous backend.

*Length:* 2    *Backend:* 7    *Flare Potential:* 4" to 6 1/2"

#### Recommended Lane Conditions:

Heads	Pines	Backend
Light to Medium	Light to Medium	Medium Carry Down



# DRILLING TECHNIQUES

## RIGHT HAND

### H

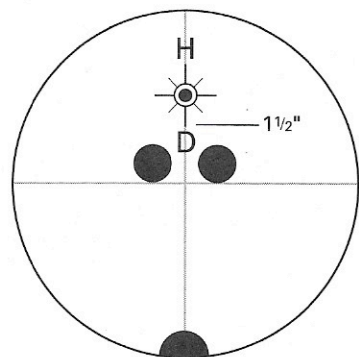
Choose a ball CG-in or CG-out in the D area. Place H at 12 o'clock to center of driller's clock. Measure 1 1/2" from the center of driller's clock through the letter D to locate center of finger bridge. Measure thumb hole from finger holes. Choose a top weight under 2 oz.

*Reaction:* Long skid, strong snap

*Length:* 8    *Backend:* 6    *Flare Potential:* 3"

#### Recommended Lane Conditions:

Heads	Pines	Backend
Light	Light	Light Carry Down



### E-LEVERAGE PIN UP

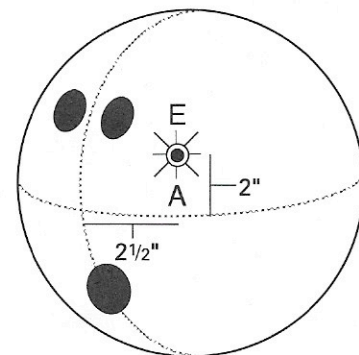
Choose a ball that is CG-out in the A, B, G or H area. Place E at 12 o'clock to the center of the driller's clock. Measure 2" from the center of the driller's clock through the letter A. From this point, draw a perpendicular line 2 1/2" left. This is the center of span. If an extra hole is needed to meet ABC specifications, drill on a line from the center of the grip through the center of gravity at 5".

*Reaction:* Leverage reaction with medium breakpoint with a strong, sharp breakpoint.

*Length:* 2    *Backend:* 8    *Flare Potential:* 4" to 6 1/2"

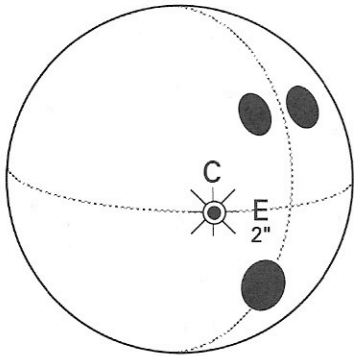
#### Recommended Lane Conditions:

Heads	Pines	Backend
Medium	Light to Medium	Light Carry Down



# LEVERAGE 2"

## LEFT HAND



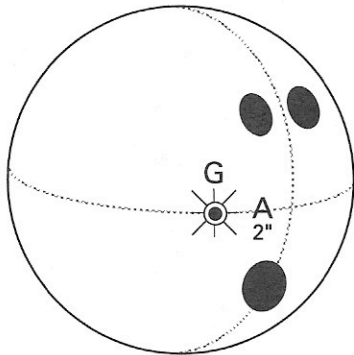
**2C** Choose a ball CG-in or CG-out in the A, E, G or H area. Place C at 12 o'clock to center of driller's clock. Measure 2" from the center of the driller's clock through the letter E. This is the center of the span. (If bowler's axis point is known, measure  $3 \frac{3}{8}$ " from the center of the driller's clock through the letter A. Use this point as the bowler's positive axis point. Reverse axis coordinates to locate the center of the span.) If an extra hole is needed to meet ABC specifications, drill at 5" from the center of the grip through the center of gravity.

*Reaction:* Leverage reaction with early to medium breakpoint, flip and set in backend.

*Length:* 3    *Backend:* 8    *Flare Potential:* 4" to  $6 \frac{1}{2}$ "

### Recommended Lane Conditions:

Heads	Pines	Backend
Medium	Medium	Medium Carry Down



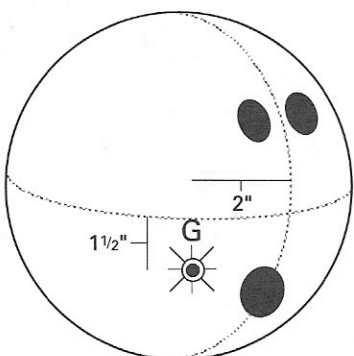
**2G** Choose a ball CG-in or CG-out in the A, C, D or E area. Place G at 12 o'clock to center of driller's clock. Measure 2" from the center of the driller's clock through the letter A. This is the center of the span. (If bowler's axis point is known, measure  $3 \frac{3}{8}$ " from the center of the driller's clock through the letter E. Use this point as the bowler's positive axis point. Reverse axis coordinates to locate the center of the span.) If an extra hole is needed to meet ABC specifications, drill at 5" from the center of the grip through the center of gravity.

*Reaction:* Leverage reaction with early breakpoint, strong continuous roll in backend.

*Length:* 1    *Backend:* 9    *Flare Potential:* 4" to  $6 \frac{1}{2}$ "

### Recommended Lane Conditions:

Heads	Pines	Backend
Medium	Medium	Medium Heavy Carry Down



Lower Track

## 2G PIN DOWN

Choose a ball CG-in or CG-out in the C, D, E, F or G area.

**LOWER TRACK** ( $2 \frac{1}{2}$ " or greater from right edge of middle finger and thumb) Place G at 12 o'clock from center of driller's clock. Measure  $1 \frac{1}{2}$ " from the center of the driller's clock through the letter G. From this point draw a perpendicular line 2" right. This is the center of span.

**HIGHER TRACK** ( $2 \frac{1}{4}$ " or less from right edge of middle finger and thumb) Place G at 12 o'clock from center of driller's clock. Measure 1" from the center of the driller's clock through the letter G. From this point draw a perpendicular line  $2 \frac{1}{2}$ " right. This is the center of span.

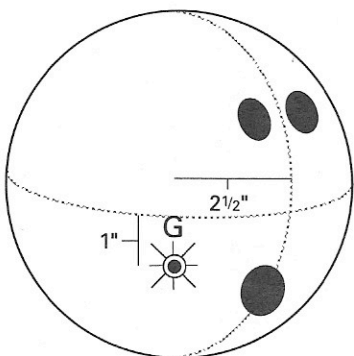
**EXTRA HOLE:** If center of gravity is in the E, F, or G area, drill hole on a line from the center of span through the center of gravity at 5". If center of gravity is in the C or D or a CG-in ball, drill hole on a line from the center of span through the center of gravity at 8".

*Reaction:* Stronger, earlier leverage reaction than 2G above.

*Length:* 1    *Backend:* 10    *Flare Potential:* 4" to  $6 \frac{1}{2}$ "

### Recommended Lane Conditions:

Heads	Pines	Backend
Medium Heavy	Medium	Light to Medium Carry Down



Higher Track

# PIN DOWN

# DRILLING TECHNIQUES

## RIGHT HAND

**2A** Choose a ball CG-in or CG-out in the C, D, E or G area. Place A at 12 o'clock to center of driller's clock. Measure 2" from the center of the driller's clock through the letter G. This is the center of the span. (If bowler's axis point is known, measure  $3 \frac{3}{8}$ " from the center of the driller's clock through the letter C. Use this point as the bowler's positive axis point. Reverse axis coordinates to locate the center of the span.) If an extra hole is needed to meet ABC specifications, drill at 5" from the center of the grip through the center of gravity.

*Reaction:* Leverage reaction with early to medium breakpoint, flip and set in backend.  
*Length:* 3    *Backend:* 8    *Flare Potential:* 4" to 6  $\frac{1}{2}$ "

### Recommended Lane Conditions:

Heads	Pines	Backend
Medium	Medium	Medium Carry Down

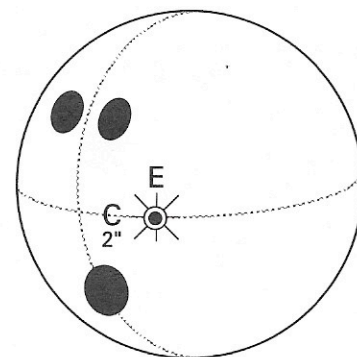
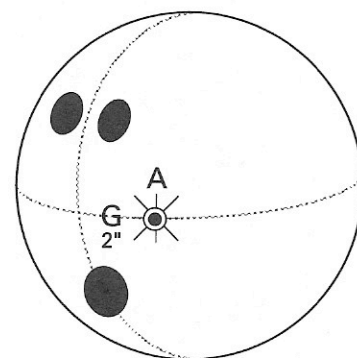
**2E** Choose a ball CG-in or CG-out in the A, C, G or H area. Place E at 12 o'clock to center of driller's clock. Measure 2" from the center of the driller's clock through the letter C. This is the center of the span. (If bowler's axis point is known, measure  $3 \frac{3}{8}$ " from the center of the driller's clock through the letter G. Use this point as the bowler's positive axis point. Reverse axis coordinates to locate the center of the span.) If an extra hole is needed to meet ABC specifications, drill at 5" from the center of the grip through the center of gravity.

*Reaction:* Leverage reaction with early to medium breakpoint, strong continuous roll in backend.

*Length:* 1    *Backend:* 9    *Flare Potential:* 4" to 6  $\frac{1}{2}$ "

### Recommended Lane Conditions:

Heads	Pines	Backend
Medium	Medium	Medium Heavy Carry Down



# DRILLING TECHNIQUES

## 2E PIN DOWN

Choose a ball CG-in or CG-out in the A, E, F, G or H area.

**LOWER TRACK** ( $2 \frac{1}{2}$ " or greater from left edge of middle finger and thumb)  
 Place E at 12 o'clock from center of driller's clock. Measure  $1 \frac{1}{2}$ " from the center of the driller's clock through the letter E. From this point draw a perpendicular line 2" left. This is the center of span.

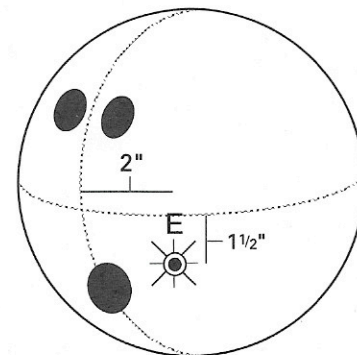
**HIGHER TRACK** ( $2 \frac{1}{4}$ " or less from left edge of middle finger and thumb)  
 Place E at 12 o'clock from center of driller's clock. Measure 1" from the center of the driller's clock through the letter E. From this point draw a perpendicular line  $2 \frac{1}{2}$ " left. This is the center of span.

**EXTRA HOLE:** If center of gravity is in the E, F or G area, drill hole on a line from the center of span through the center of gravity at 5". If center of gravity is in the H or A or a CG-in ball, drill hole on a line from the center of span through the center of gravity at 8".

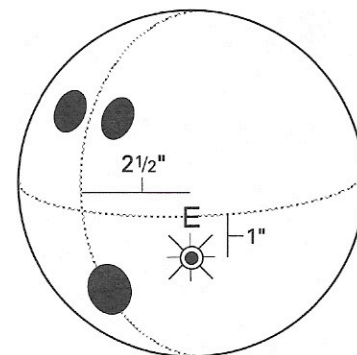
*Reaction:* Stronger, earlier leverage reaction than 2E above.  
*Length:* 1    *Backend:* 10    *Flare Potential:* 4" to 6  $\frac{1}{2}$ "

### Recommended Lane Conditions:

Heads	Pines	Backend
Medium Heavy	Medium	Light to Medium Carry Down



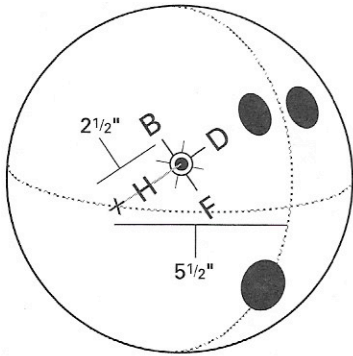
Lower Track



Higher Track

# LEVERAGE 3"

## LEFT HAND



### L3B

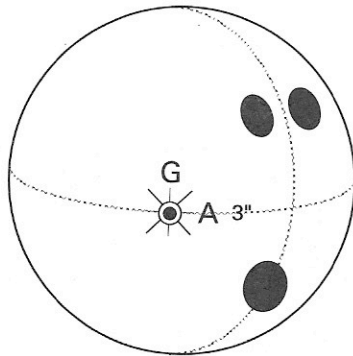
Choose a ball CG-in or CG-out in the E, F, G or H area. Place B at 12 o'clock to center of driller's clock. Measure 2 1/2" from the center of the driller's clock through the letter H. Measure 5 1/2" from this point through the letter F. This is the center of the span. If an extra hole is needed to meet ABC specifications, drill at 6" from the center of the grip through the CG.

*Reaction:* Early roll with strong backend move.

*Length:* 4    *Backend:* 6    *Flare Potential:* 3"

#### Recommended Lane Conditions:

Heads	Pines	Backend
Medium	Light	Moderate Carry Down



### L3G

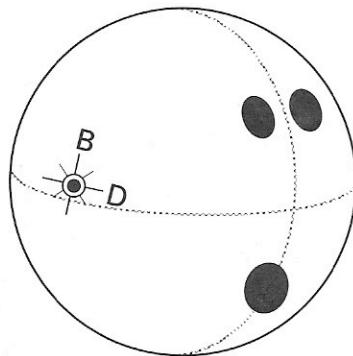
Choose a ball CG-in or CG-out in the A, C, D or E area. Place G at 12 o'clock to center of driller's clock. Measure 3" from the center of the driller's clock through the letter A. This is the center of the span. If an extra hole is needed to meet ABC specifications, drill at 6" from the center of the grip through the CG.

*Reaction:* Smooth arcing roll. Good for Wet/Dry.

*Length:* 5    *Backend:* 2    *Flare Potential:* 4"

#### Recommended Lane Conditions:

Heads	Pines	Backend
Light to Medium	Light	Dry to Medium Carry Down

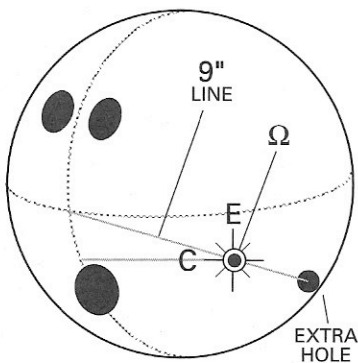


## LEFT HAND

Select a ball that is CG-in or CG-out in the B, D, E or F area with 2.50 oz. or less of top weight. Place B at 12 o'clock. From the center of the driller's clock, reverse the bowler's positive axis point coordinates to find the center of the grip. This drilling could require an extra hole to meet ABC specifications. Drill the extra hole to the left on a line from center of grip through the center of gravity at 8".

# FULL ROLLER

## LEFT HAND



Select a ball that is CG-in. Draw a line through C 3 1/2" long. This point becomes the top of the bowler's thumb hole. From this point, draw a 90° line up to establish the bowler's center line of grip (the large pin should be to the right of the grip). This drilling could require an extra hole to meet ABC specifications. To find the extra hole location, draw a line 9" long from the center of the grip through the pin.

#### Extra Holes:

When determining the location of the extra hole remember that a hole 5" away from the center of grip will remove some top weight. A hole 7" away from the center of the

# DRILLING TECHNIQUES

## RIGHT HAND

### R3B

Choose a ball CG-in or CG-out in the D, E, F or G area. Place B at 12 o'clock to center of driller's clock. Measure  $2\frac{1}{2}$ " from the center of the driller's clock through the letter D. Measure  $5\frac{1}{2}$ " from this point through the letter F. This is the center of the span. If an extra hole is needed to meet ABC specifications, drill at 6" from the center of the grip through the CG.

*Reaction:* Early roll with strong backend move.

*Length:* 4 *Backend:* 6 *Flare Potential:* 3"

#### Recommended Lane Conditions:

Heads	Pines	Backend
Medium	Light	Moderate Carry Down

### R3E

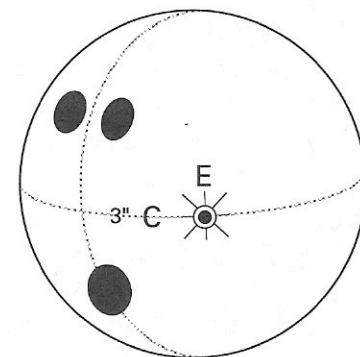
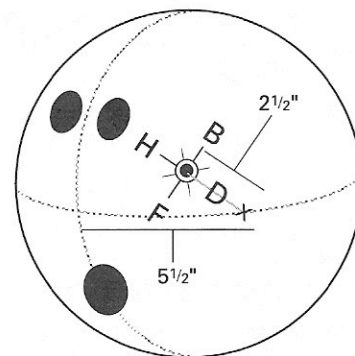
Choose a ball CG-in or CG-out in the A, C, G or H area. Place E at 12 o'clock to center of driller's clock. Measure 3" from the center of the driller's clock through the letter C. This is the center of the span. If an extra hole is needed to meet ABC specifications, drill at 6" from the center of the grip through the CG.

*Reaction:* Smooth arcing roll. Good for Wet/Dry.

*Length:* 5 *Backend:* 2 *Flare Potential:* 4"

#### Recommended Lane Conditions:

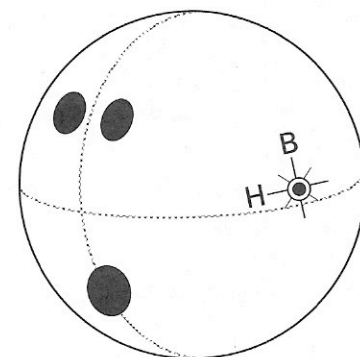
Heads	Pines	Backend
Light to Medium	Light	Dry to Medium Carry Down



# DRILLING TECHNIQUES

## RIGHT HAND

Select a ball that is CG-in or CG-out in the F, G or H area with 2.50 oz. or less of top weight. Place B at 12 o'clock. From the center of the driller's clock, reverse the bowler's positive axis point coordinates to find the center of the grip. This drilling could require an extra hole to meet ABC specifications. Drill the extra hole to the right on a line from center of grip through the center of gravity at 8".

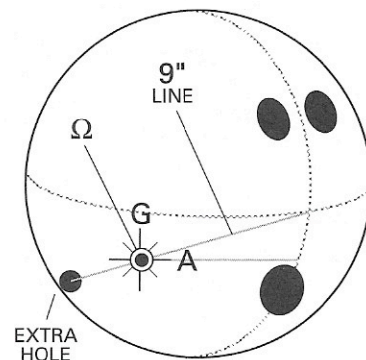


# DRILLING TECHNIQUES

## RIGHT HAND

Select a ball that is CG-in. Draw a line through A  $3\frac{1}{2}$ " long. This point becomes the top of the bowler's thumb hole. From this point, draw a  $90^\circ$  line up to establish the bowler's center line of grip (the large pin should be to the left of the grip). This drilling could require an extra hole to meet ABC specifications. To find the extra hole location, draw a line 9" long from the center of the grip through the pin.

grip will maintain the top weight. A hole 9" away from the center of the grip will add some top weight.



# Omega/R

## Reactive Resin™

### Why Pearlized Reactive Resin™?

The Pearlized Reactive Resin™ Shell will give the Omega/R more length down the lane with reduced friction and will enable this ball to store more energy in medium to light oil conditions. Normally with other balls to facilitate length down the lane, high radius of gyration cores are necessary.

### Core. What is so unique?

Based on the original Level 4 Core architecture, this redesigned configuration allows for maximum explosion of the core's low moment of inertia. This combination of veneer and core provides the maximum energy retention for medium to light oil conditions.

### **Ball Rating System:** *Defining hook in three (3) components.*

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- (1) Length of Breakpoint
- (2) Degree of Backend Reaction
- (3) Flare Potential

### Ratings:\*

- (1) Length (L) – 1 being earliest hook point to 10 being the latest hook point
- (2) Backend (B) – 1 being least amount of hook to 10 being the most hook potential
- (3) Flare Potential – Rated as expected inches of flare

*\*All ratings are relative to the Omega/R only and are not to be used to compare Omega/R to other balls on the market. The amount of oil on the lanes and the ball's surface roughness are the primary factors that govern a ball's breakpoint. Too much surface roughness or too little oil can cause a ball to make its translational hook move too quickly, thereby limiting the backend hook potential. For heavy oil conditions and heavy carry down, we suggest drilling the Omega LM Acryllium.*

### **Identification Points**

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☼ Driller's Clock

Ω Center of Gravity (CG)

X Positive Axis Point (PAP)

○ Small Pin

● Extra Hole

All drilling patterns can be used with Omega CG-in or CG-out. Make sure the small locator pin is always in line with the letter B.