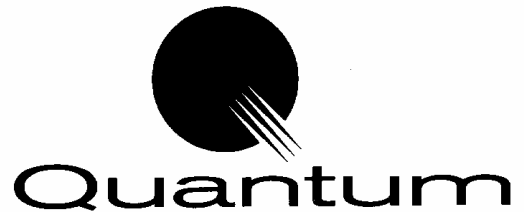


Information Sheet

Quantum Leap - Black Sand

Specifications

3-component design with a
2-part compound core
Highly Reactive Cover Stock
320 Grit Sanded finish
Hook Potential: 19 - 11(dull/shiny)
Typical Length: 3.5
Typical Backend: 10.5
Center/Cover Heavy: 1.7
Track Flare Potential: 10+



Reaction Characteristics

Quantum Leap - Black Sand combines BTV's latest coverstock development and the Quantum mushroom core to create the most consistent and forgiving ball available on the market today.

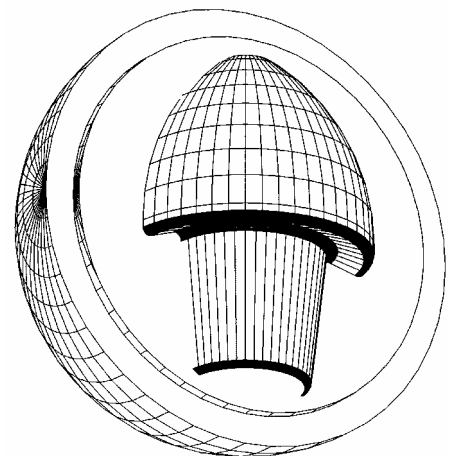
Most reactive coverstocks on the market today tend to emphasize a bowlers release inconsistencies by overreacting, especially on dry conditions. Quantum Leap's new cover material minimizes these effects and stays on line even when the ball is not thrown perfectly. Additionally, this coverstock is less sensitive to lane conditions on impact. Its versatility makes Quantum Leap a ball that can be used over a wide range of head oil conditions, creating a strong change in direction down the lane with an aggressive entry into the pocket.

When combined with Quantum's patented core design, for dynamic integrity in all weights, Quantum Leap produces a heavy rolling, strong hooking action unparalleled in the market today.

Drilling Information and Ball

Surface Preparation

All weights of the **Quantum Leap** can be drilled using the techniques developed for two-piece balls. See Brunswick's "Seven Popular Layouts" for detailed drilling information.



Information Sheet

Quantum Leap - Black Sand

Additionally, since the Quantum Leap is shipped with a factory 320 grit dulled surface, several steps can be taken to meet specific lane or bowler characteristics. BTV engineers recommend the following steps to alter the performance characteristics of the factory finish:

1) To make the Quantum Leap less aggressive than the factory finish follow these steps;

- 1) Wet sand the ball with 600 grit wet/dry paper using a ball spinner.
- 2) Smooth the surface out using an orange automotive rubbing compound or a 600 to 800 grit bowling polish.

This will get the ball a little further down the lane before it starts to hook, but will maintain a very strong backend reaction.

2) If the ball is still too strong after following procedure 1, alter the surface by following these steps;

- 1) Wet sand the ball with 600 grit wet/dry paper using a ball spinner to remove the shine from procedure one.
- 2) Wet sand the ball with 1000 grit wet/dry paper using a ball spinner.
- 3) smooth the surface out using a white automotive polishing compound or a 1000 to 1200 grit bowling polish.

This will get the ball much further down the lane and reduce over-reaction when the backends are very dry or when there is very little carry down, maintaining the strong backend.

3) If the ball continues to react too aggressively after procedure 2, the following can be done;

- 1) With the surface already prepared with the polishing compound as above, further polish the ball using a high gloss non abrasive polish.

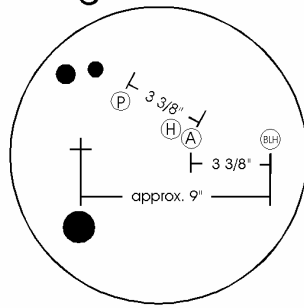
This will make the ball as under reactive as possible but still will be useful for players with strong releases or for use when the lanes are extremely dry.



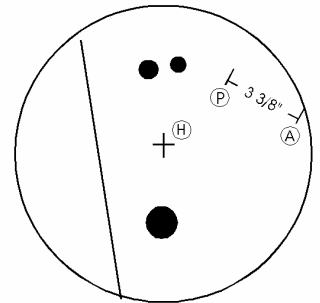
SEVEN POPULAR LAYOUTS

MAXIMUM
TRACK FLARE
HIGH
REACTIVITY

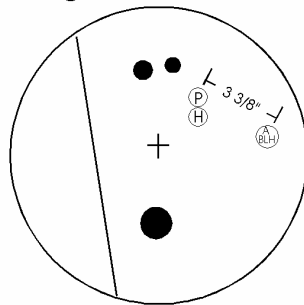
1-Leverage Pin with 9" hole



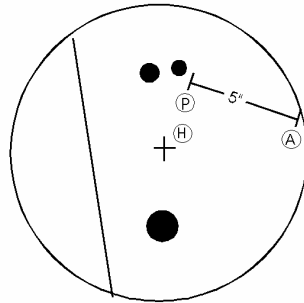
2-Leverage Pin-heavy spot toward grip center



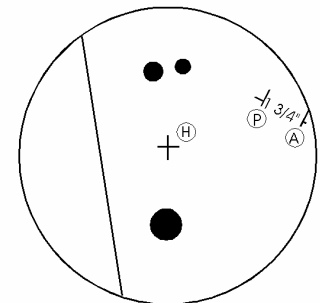
3-Leverage Pin with Axis hole



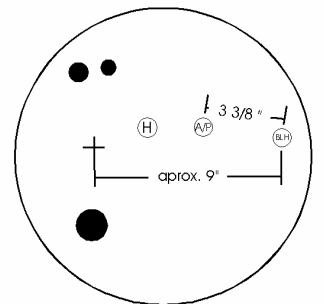
4-Positive label shift



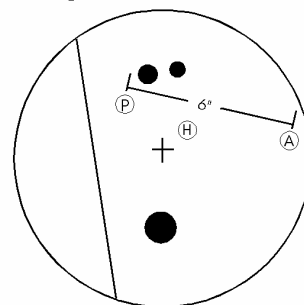
5-Pin between Axis and Leverage



6-Axis Pin with 9" hole



7-Negative label shift



MINIMUM
TRACK FLARE
LOW
REACTIVITY

(P) = Pin

(H) = Heavy Spot

(A) = Axis

(BLH) = Balance hole