

THE BJI COVERSTOCK CHART

NUMEROUS INDUSTRY TESTS have indicated that the most important factor in determining ball reaction — apart from an individual bowler’s unique physical attributes and on-lane performance — is the ball’s coverstock. And one of the most important factors in determining how a coverstock interacts with the lane surface and the oil pattern applied is the finish of the cover, i.e., what Abralon finish is used, whether and what polish is used, etc. Thus, an understanding of both coverstocks and coverstock finish variances is absolutely imperative to optimal scoring.

In this regard, the accompanying chart should prove helpful in breaking down when to use certain coverstocks and surface finishes. Using this chart, the apt reader might make a more informed ball selection the next time he or she is on the lanes, trying to find that “magical” reaction.

For ease of reading and ready application, the chart is arranged in an “If ‘X’ oil pattern, then ‘Y’ ball” format. Oil patterns have been arranged simply according to three variables: volume, length and ratio.

VOLUME refers to the average units of oil spread across the lane.

LENGTH refers to how far oil is applied down the lane, from the foul line to the end of the pattern.

RATIO refers to the average ratio of oil in the center of the lane to oil farther toward the gutters. A “walled” ratio, therefore, stands in contrast to a “flat” (1:1) ratio, and a “moderate” ratio falls somewhere in-between.

Based on which oil pattern is on the lane, a bowler must match coverstock and surface finish. Here, recommendations are give according to Abralon finish numbers because Abralon is, by-and-large, the industry standard today. The given numbers can be easily converted to other popular surface finish products using the appropriate product chart or by consulting a certified pro shop professional.

Finally, speaking of consulting a certified pro shop professional, it must be noted that these recommendations are mere possible/potential guidelines for the average bowler. Every bowler’s game is different, and so by no means is this meant to form a comprehensive summary of coverstocks and coverstock finishes. Please speak with your ball driller about adjusting surfaces to your individual game (which may differ in ball speed, rate of revolution, axis rotation and tilt, etc.), and — most of all — experiment.

LOW VOLUME, SHORT LENGTH, WALLED RATIO
LOW STRENGTH REACTIVE SOLID OR PEARL
4000 ABRALON
MODERATE-HIGH POLISH/BUFF AS NEEDED
LOW VOLUME, SHORT LENGTH, MODERATE RATIO
LOW STRENGTH REACTIVE SOLID OR PEARL, OR MEDIUM STRENGTH URETHANE
2000/4000 ABRALON
MODERATE-HIGH POLISH/BUFF AS NEEDED
LOW VOLUME, SHORT LENGTH, FLAT RATIO
LOW STRENGTH REACTIVE SOLID OR MEDIUM STRENGTH URETHANE
2000/4000 ABRALON
MODERATE-HIGH POLISH/BUFF AS NEEDED
LOW VOLUME, MEDIUM LENGTH, WALLED RATIO
LOW-MEDIUM STRENGTH REACTIVE SOLID OR PEARL
2000/4000 ABRALON
MODERATE-HIGH POLISH/BUFF AS NEEDED
LOW VOLUME, MEDIUM LENGTH, MODERATE RATIO
LOW-MEDIUM STRENGTH REACTIVE SOLID OR PEARL
2000/4000 ABRALON
MODERATE-HIGH POLISH/BUFF AS NEEDED
LOW VOLUME, MEDIUM LENGTH, FLAT RATIO
LOW-MEDIUM STRENGTH REACTIVE SOLID OR PEARL
2000/4000 ABRALON
LOW-MODERATE POLISH/BUFF AS NEEDED
LOW VOLUME, LONG LENGTH, WALLED RATIO
MEDIUM-HIGH STRENGTH PEARL
2000/4000 ABRALON
MODERATE POLISH/BUFF AS NEEDED
LOW VOLUME, LONG LENGTH, MODERATE RATIO
MEDIUM STRENGTH REACTIVE SOLID OR PEARL
2000/4000 ABRALON
MODERATE POLISH/BUFF AS NEEDED
LOW VOLUME, LONG LENGTH, FLAT RATIO
MEDIUM STRENGTH REACTIVE SOLID, PEARL, OR PARTICLE PEARL
1000/2000/4000 ABRALON
LOW-MODERATE POLISH/BUFF AS NEEDED

MEDIUM VOLUME, SHORT LENGTH, WALLED RATIO	HIGH VOLUME, SHORT LENGTH, WALLED RATIO
LOW STRENGTH REACTIVE SOLID OR PEARL, OR MEDIUM STRENGTH URETHANE	LOW-MEDIUM STRENGTH REACTIVE SOLID OR PEARL
4000 ABRALON	2000/4000 ABRALON
MODERATE-HIGH POLISH/BUFF AS NEEDED	MODERATE POLISH/BUFF AS NEEDED
MEDIUM VOLUME, SHORT LENGTH, MODERATE RATIO	HIGH VOLUME, SHORT LENGTH, MODERATE RATIO
LOW STRENGTH REACTIVE SOLID OR PEARL, OR MEDIUM STRENGTH URETHANE	LOW-MEDIUM STRENGTH REACTIVE SOLID
2000/4000 ABRALON	1000/2000/4000 ABRALON
MODERATE POLISH/BUFF AS NEEDED	NO-LOW POLISH/BUFF AS NEEDED
MEDIUM VOLUME, SHORT LENGTH, FLAT RATIO	HIGH VOLUME, SHORT LENGTH, FLAT RATIO
LOW-MEDIUM STRENGTH REACTIVE SOLID, OR MEDIUM STRENGTH URETHANE	LOW-MEDIUM STRENGTH REACTIVE SOLID OR PARTICLE, OR MEDIUM STRENGTH URETHANE
2000/4000 ABRALON	1000/2000/4000 ABRALON
LOW-MODERATE POLISH/BUFF AS NEEDED	NO-MODERATE POLISH/BUFF AS NEEDED
MEDIUM VOLUME, MEDIUM LENGTH, WALLED RATIO	HIGH VOLUME, MEDIUM LENGTH, WALLED RATIO
MEDIUM STRENGTH REACTIVE SOLID OR PEARL	MEDIUM-HIGH STRENGTH REACTIVE SOLID OR PEARL
2000/4000 ABRALON	2000/4000 ABRALON
MODERATE-HIGH POLISH/BUFF AS NEEDED	MODERATE-HIGH POLISH/BUFF AS NEEDED
MEDIUM VOLUME, MEDIUM LENGTH, MODERATE RATIO	HIGH VOLUME, MEDIUM LENGTH, MODERATE RATIO
MEDIUM STRENGTH REACTIVE SOLID OR PEARL	MEDIUM-HIGH STRENGTH REACTIVE SOLID OR PEARL
2000/4000 ABRALON	1000/2000/4000 ABRALON
MODERATE POLISH/BUFF AS NEEDED	MODERATE POLISH/BUFF AS NEEDED
MEDIUM VOLUME, MEDIUM LENGTH, FLAT RATIO	HIGH VOLUME, MEDIUM LENGTH, FLAT RATIO
MEDIUM STRENGTH REACTIVE SOLID OR PEARL	MEDIUM-HIGH STRENGTH REACTIVE SOLID OR PEARL
2000/4000 ABRALON	1000/2000/4000 ABRALON
LOW-MODERATE POLISH/BUFF AS NEEDED	NO-LOW POLISH/BUFF AS NEEDED
MEDIUM VOLUME, LONG LENGTH, WALLED RATIO	HIGH VOLUME, LONG LENGTH, WALLED RATIO
MEDIUM-HIGH STRENGTH REACTIVE SOLID OR PEARL	HIGH STRENGTH REACTIVE SOLID, PEARL OR PARTICLE
2000/4000 ABRALON	1000/2000/4000 ABRALON
MODERATE POLISH/BUFF AS NEEDED	NO-LOW POLISH/BUFF AS NEEDED
MEDIUM VOLUME, LONG LENGTH, MODERATE RATIO	HIGH VOLUME, LONG LENGTH, MODERATE RATIO
MEDIUM-HIGH STRENGTH REACTIVE SOLID OR DULL PEARL	MEDIUM-HIGH STRENGTH REACTIVE SOLID OR DULL PEARL
1000/2000/4000 ABRALON	500/1000/2000/4000 ABRALON
NO-LOW POLISH/BUFF AS NEEDED	NO-LOW POLISH/BUFF AS NEEDED
MEDIUM VOLUME, LONG LENGTH, FLAT RATIO	HIGH VOLUME, LONG LENGTH, FLAT RATIO
MEDIUM-HIGH STRENGTH REACTIVE SOLID OR PARTICLE PEARL	MEDIUM-HIGH STRENGTH REACTIVE SOLID, DULL PEARL OR PARTICLE
1000/2000/4000 ABRALON	500/1000/2000/4000 ABRALON
NO-LIGHT POLISH/BUFF AS NEEDED	NO-LOW POLISH/BUFF AS NEEDED