

FEATURING AGGRESSIVE BACKEND REACTION!

TOUR
BOSS™
TITANIUM



COLUMBIA 300

Columbia bowls the world over.®

www.columbia300.com



Stabilizer
Core

Pin

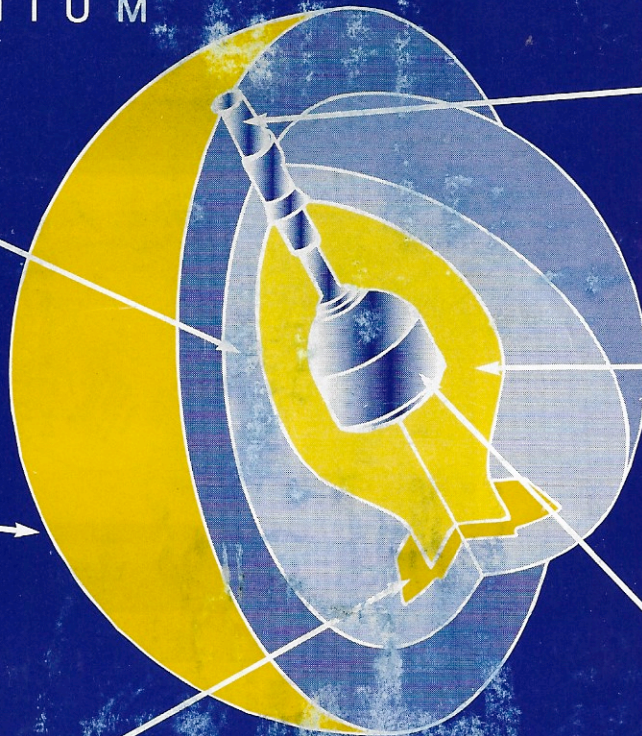
Flare Core



SUPER-FLEX™ RESIN II

Energy
Block

Titanium
Ceramic
Core



This drill sheet is designed to be used as a quick reference chart for determining the optimum drill pattern by matching specific bowling styles to specific lane conditions.

FA N E C O N D I T I O N S



Pin positioned 4 1/2" and Cg 3" from PAP. X-hole on PAP to 1/2 positive or less

Pin 2" - 4+ with 2 - 3.5 oz. top wt

Pin positioned 4" and Cg 2" from PAP. X-hole on PAP to 1/2 positive or less

Pin 2" - 4+ with 1.5 - 3.5 oz. top wt

Pin positioned 3" and Cg 1" from PAP. X-hole on PAP to 1/2 positive or less

Pin 2" - 4+ with 1.5 - 3 oz. top wt



Pin and Cg positioned 4" from PAP. X-hole located 2" past PAP to 1/2 positive

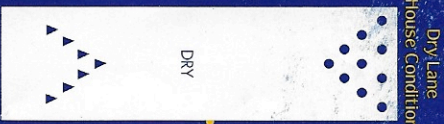
Pin 1" - 3+ with 2.5 - 4 oz. top wt

Pin and Cg positioned 3 3/8" from PAP (leverage). X-hole located 2" past PAP to 1/2 positive

Pin 1" - 3+ with 2.5 - 4 oz. top wt

Pin and Cg positioned 3 3/8" from PAP (leverage). X-hole located 2" past PAP to 1/2 positive

Pin 1" - 3+ with 2.5 - 4 oz. top wt



Pin positioned 5 3/4" from PAP. and Cg located at 1/2 positive, 1/2 finger wt.

Pin 0" - 2" with 3 - 4+ oz. top wt

Pin positioned 5 1/2" from PAP with Cg located at 1/2 positive, 1/2 finger wt.

Pin 0" - 2" with 3 - 4+ oz. top wt

Pin positioned 5" from PAP with Cg located at 1/2 positive

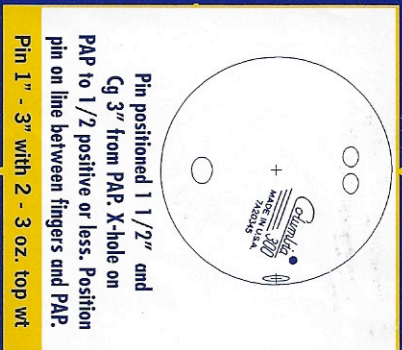
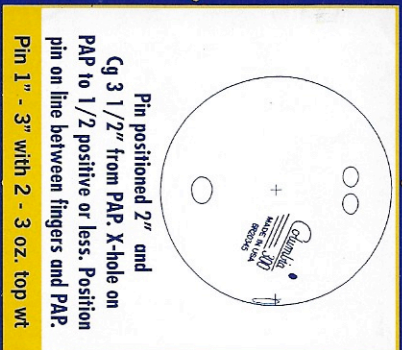
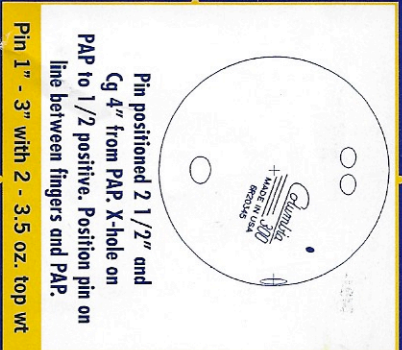
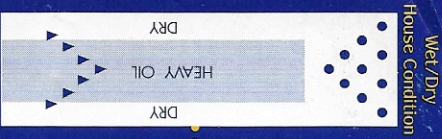
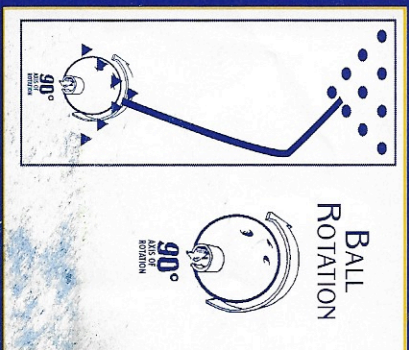
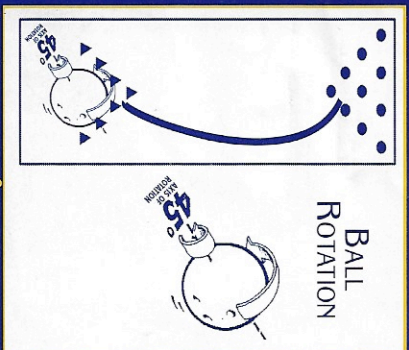
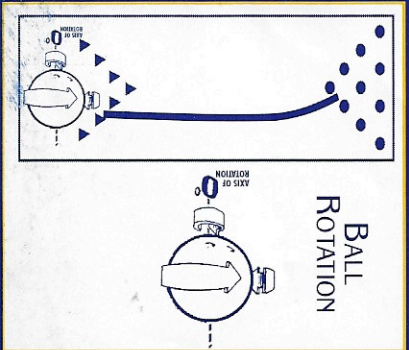
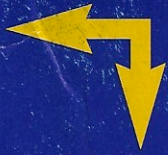
Pin 0" - 2" with 3 - 4+ oz. top wt

All diagrams assume Positive Axis Point is 6" over from center of grip • PAP = Positive Axis Point • See back page for more information

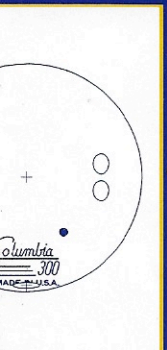
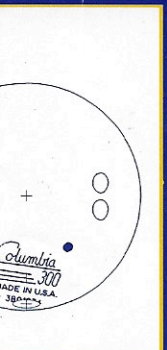
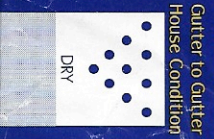
Top Weight & Pin Selection

Roll Pattern

Match your roll with a common lane condition to select a drill pattern.



C O M M O N



RG Measurement Chart

	X-Axis	Y-Axis	Differential
TOUR BOSS™	2.510	2.545	0.035
BOSS™	2.473	2.512	0.039
PRIMAL RAGE™	2.570	2.635	0.065

Compared to the Boss, the TOUR BOSS retains more energy through the middle part of the lane. The bottom "Energy Block" creates a stronger move at the breakpoint for a more aggressive backend reaction.

Why Titanium?

The extraordinary performance characteristics of titanium have been well documented over the last few years in sporting good products i.e. golf club shafts and heads, tennis rackets, fishing rods and reels, etc. Columbia 300 has made a revolutionary breakthrough by incorporating the strength of titanium with the density and hardness of ceramics. The TOUR BOSS'S titanium ceramic core is more dense than traditional aluminum oxide ceramic cores enabling it to deliver lower RG numbers, maximum turns for the bowler, and more hitting and carrying power at the pocket. No doubt, other balls will try to utilize titanium in their future cores, but none will have the benefits and features of titanium that is made in the form of ceramic.

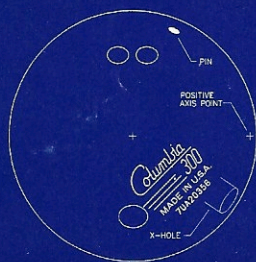
Surface, Surface, Surface

Always keep in mind that the outer surface of the ball is versatile and can be easily polished or sanded for a later or earlier ball reaction. For more hook on oily lanes, sand with 400 or 320 grit sandpaper. For extra length and more finish on the backend, the surface can be polished. The BOSS is finished at the factory with wet 600 grit sandpaper and compound finish. This can be duplicated at the pro shop by sanding to 600 grit and then polishing with 600 grit Degree™ finish using only light hand pressure.

Things to Remember

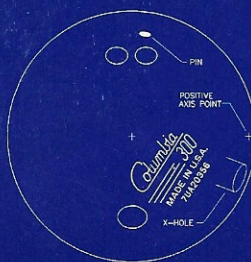
1. Any of the drillings can be drilled back to negative side-weight for earlier roll and less backend.
2. Cg is defined as center of gravity (found near the Columbia 300 label).
3. PAP is defined as Positive Axis Point.
4. Recognize that all illustrations shown are for right-handers. Reverse for left-handers.
5. DO NOT DRILL ANY HOLES DEEPER THAT 2 3/4" TO AVOID HITTING THE TITANIUM CERAMIC CORE.

Drillings for Pin Out 4-6". Top Wt. 1.5 - 3 oz.



Heavy Oil

Pin 4 1/2" from PAP.
cg 4" from PAP
and 1 1/2 - 2" below
center of grip.
Position X-hole over
6" and 2 1/2" down.



Medium Oil

Pin 5 1/2" from PAP.
cg 4 1/2" from PAP
and 1 1/2 - 2" below
center of grip.
Position X-hole over
6" and 1 1/2" down.