

Blueprint Takes Layout to Next Level

POWERHOUSE SYSTEM LAUNCHED
AT BOWL EXPO TAKING OFF

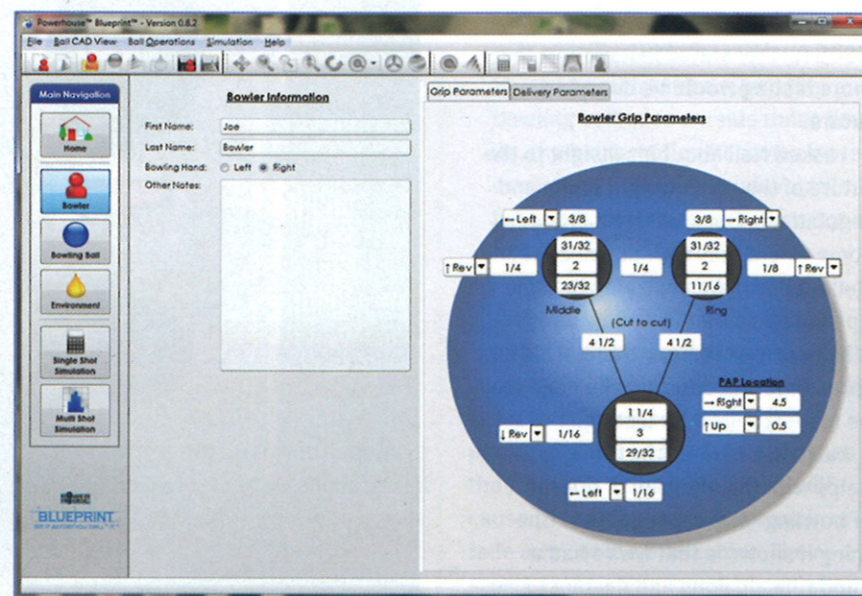
■ By Dennis Bergendorf ■

When pro shop operators take one look at the Powerhouse Blueprint layout system the response is often, "Wow!" And since its launch at the recent Bowl Expo, nearly 300 shops have signed up, with more asking for the free demo.

The most ambitious program of its kind, Blueprint lets the driller (or even the advanced customer) plug in all manner of specifications to get a realistic look at how a particular ball will perform after drilling. "The motto, or tag line, is 'Try it before you buy it,' and that's very accurate," says Powerhouse brand manager Rich Hanson.

Blueprint is the brainchild of a couple of audio engineers who just happen to be 200+ bowlers. Several years ago, after buying a ball or two that didn't quite perform as expected, they started thinking that if computers could do most of the work in designing things like airliners, why couldn't computers eliminate the guess work in laying out balls with exotic cores and space-age polymer covers, balls thrown by two million different bowlers on dozens of lane/condition combinations?

Both had experience in computer



aided design (CAD), so they went to work coming up with a program that would provide a see-through look at the core (before and after drilling) and could be rotated and turned (on screen), showing how dynamics changed when layouts changed. But those changes don't involve physical drilling (and possibly plugging). In other words, you get a myriad of layout possibilities before you even put the ball in the press.

Enter Kevin Walter, a friend of the developers and who is now the propri-

etor of an FEC in Fishers, Indiana—and a 230-average bowler with a strong tournament pedigree. He helped the engineers put into computer language the dozens of values needed to make the system work. For instance, what's called "rigid CAD modeling" was needed to establish core values—and every core has different values.

"I'm sure engineers [and PSOs] knew that core contours changed, because you're moving mass properties around when you drill," says Hanson. "Where those contours changed to,

we just didn't know for sure."

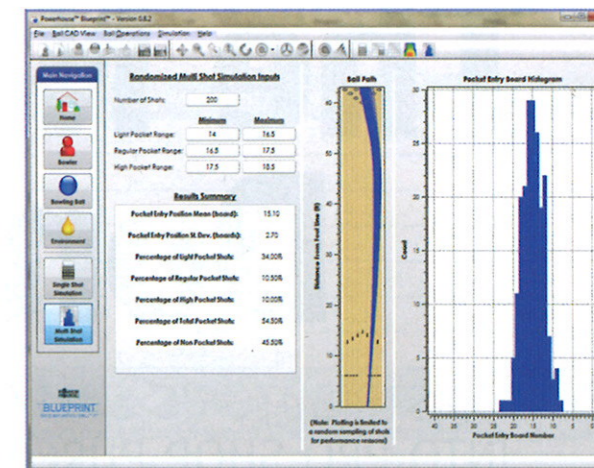
Blueprint shows those changes—and then some. After entering the data (including desired layout), the screen presents a 3-D image with holes superimposed over the ball's core. Mass properties are highlighted, and as layout changes are made, these properties actually move, just like with a real ball. "I was amazed the first time I saw the mass change," admits Hanson. Axis migration and track flare also change—and are shown on screen.

But it goes far beyond that. The operator can plug in lane types and oil patterns to see how the ball will work, given the bowler's parameters (league average, speed, rev rate, etc.). Blueprint will predict how often the bowler (based on skill level) will hit the pocket, and at what entry angle.

One very satisfied customer is Kenny Robertson, whose Track 916 was drilled by Alex Handback at Mc-

Corvey's #12 in Kenner, Louisiana. He'd been disappointed in several balls, in part because his slow speed makes him very rev-dominant. Some balls were too aggressive, but tame layouts sometimes left too many corners. "Blueprint allowed me to manipulate the core to where I reached the happy medium," he says.

On screen, Handback tweaked flare lines, to get more separation down lane. "We were trying to keep the ball from burning up, and to get the finish point in the back," he explains. The final layout was pin above the big finger and the thumb just above the MB. "The ball doesn't jump and it doesn't squirt," says Robertson.



Handback didn't have Robertson's parameters, so the two had to go to the lanes, with video equipment, to determine speed, RPM, rotation angle, tilt and loft. It took more than an hour, and that could be a problem for Blueprint. The PSO is going to spend some time getting accurate numbers. But that's a one-time investment. The specs and parameters are stored for retrieval with a single mouse click.

Another concern is that Blueprint is proprietary. It works only with balls from the four Ebonite brands. "I just don't see the other manufacturers providing us with [sensitive] core and coverstock data," admits Hanson.

But he does see it as a strong marketing tool—for the shop. "The confidence of the customer will go up that they are getting the reaction they want. The word will get out that this guy has the ability to pinpoint the layout and reaction before actually drilling it."

Handback agrees. "It's been exciting to see all the outcomes... before drilling. And the customer seems to be excited," he says.

Hanson believes Blueprint is the wave of the future. "Once the customer sees that ball reaction, why would they go anywhere else? It could very well become necessary for a successful shop."

TEST DRIVING BLUEPRINT

Having a ball drilled with the Blueprint system can be an eye-opening experience. I found that out when Kevin Walter and I laid out, and drilled, a Track 718-A.

We started with getting my parameters, using BowlersMAP: 16 MPH, 275 RPM, 7° tilt, 35° rotation and 6' of loft (plus PAP). We then entered that, along with the ball name, lane surface and oil pattern (characteristics of these three are already programmed in).

We started with the layout I tend to like (pin right above the ring, with MB about an inch right of the thumb). Blueprint told us the ball wouldn't do much. We moved the pin left, then

right, then down. We tried different MB locations. All showed a pocket percentage of under 60% and an entry angle of less than 4°.

And finally, we tried 70/20 dual angle with 4 1/2" pin 2" above the ring finger, with MB 1/2" right and slightly above the thumb. Eureka! 67% pocket percentage and over 4° entry angle. That doesn't sound like much, but after drilling, the ball was impressive, with a very strong move off the THS pattern and solid continuation.

Would I have put the pin two inches above the ring finger on my own? Probably not. But with Blueprint's urging, I took a gamble, and it appears to have paid off.