Straight Up and Level-Headed About Lasers

Some Straight Shooting on How to Improve an Almost Perfect Product

By Steven Ferry

This article is part of our continuing series on building systems and the preferences of AWCI contractor members. In the final analysis, no one knows a system better than the contractors who roll up their sleeves every day and get dirt on their hands at job sites around the country—so we interviewed several for their honest feedback. Because we’re asking foremen and supervisors to “name names,” they are rewarded with anonymity for their honesty. And, considering that as few as 12 and only as many as 25 or so contractors are interviewed, we want all readers to know that the findings in this article are not statistically relevant and are not meant to represent any kind of trend—it’s just the opinions of a small sampling of the industry. This may not be an in-depth, definitive study, but it does serve as a barometer for those who are interested. Advertisers are not involved with this in any way; all the responses are genuine and not swayed by any outside influences.

When 33 contractors were interviewed around the country about which laser manufacturer’s equipment they preferred to use, Spectra-Physics came up the clear market leader, with Topcon in second place. Obviously, all companies mentioned had those who swore by them for one reason or another, and overall, the satisfaction with the level of the technology demonstrated by all companies was very high. Self-leveling and remote-control features that have been introduced in recent years, as well as highly portable, battery-operated lasers, have filled gaps, making working with lasers much more convenient and easy to use—certainly an improvement over the slow-freight water levels of yesteryear, and stringing lines every 12 feet.

One Midwest contractor reckoned, “We have achieved a 35 percent increase in production through the use of lasers. They pay for themselves pretty fast, and besides, you get a really level ceiling with them.”

In fact, almost 20 percent of those surveyed thought lasers were as good as they needed to be. “It’s amazing what they’ll do,” said one contractor from California. “We used to have to set a beam over a dot on the floor to shoot a vertical line for plumb. A second guy would have to be at the other end to check it, so you could then manually adjust the line. Well, they now have a laser that lets you set up your laser and then you yourself can go to the other end and pull the beam over. That makes it a one-man job, which halves labor costs right there.”

Why They Like What They Like

The two most common reasons for liking a particular vendor were satisfaction with performance over the years, and having the functionality they wanted from their equipment.

Comments of interest about specific
brands included one from a Californian Spectra-Physics fan, who claims, “They don’t go out of calibration so easily, and they create a finer, longer span of equal plane. Our remote-control Topcon shoots a fine beam, but on the other side of a wall, shoots a wider line that becomes less level the longer it is. It’s also easier to see Spectra-Physics’ lines.”

A Floridian agreed with this view: “Spectra-Physics’ light beams don’t seem to be as distorted at a longer distance.”

“All makes are self-leveling,” notes another Californian, “but LCI tends to level out faster and is more accurate—it holds its calculations or calibrations longer than the other brands.”

For one contractor from Pennsylvania, what makes the key difference was that “Hilti offers a five-day turnaround time, guaranteed, on their own laser repairs. We’ve experienced as much as eight weeks turn-around time on other companies’ lasers. I am less concerned about the bells and whistles on these lasers as the turn-around time if they go down. Hilti has the competition beat by miles on this point.”

Unwanted Bells and Whistles

This lack of concern for the latest gadgets was echoed by several others, who wanted to see greater durability instead. “They’ve got more bells and whistles on them, which makes them more complicated and more serviceable for repairs. This should definitely be improved,” commented a Texan.

“Maintenance on these lasers,” complains a North Carolinian, “is expensive. Any small treatment that you give Spectra-Physics harms them, and it shouldn’t.”

Another from North Carolina agreed: “Spectra-Physics need to be a little harder to break!”

“They really need to be more sturdy,” added a Kansas contractor.

“HAL Beamer is the best for durability,” comments a contractor from Arkansas. “Spectra-Physics has the simple laser that we need, but it isn’t reliable.” He goes on to explain why bells and whistles aren’t what he needs: “Topcon has the most features, and it works perfectly for our more intelligent employees. But with the quality of the labor we have in the industry these days, the simpler the machine, the better. We have transient employees and a high turnover. If Spectra-Physics didn’t keep breaking down, they would be perfect.”

Before anyone decides to skip Spectra-Physics machines for fear they will self-destruct in the lightest of winds, a quick review of all the comments will show that Spectra-Physics had as many people praising its products for their durability (“They’re rugged and take a lot of abuse,” according to an Ohioan) as complained of their lack of durability. So it’s really a wash.

The majority of those interviewed said that the Spectra-Physics laser is the only laser they’ve ever used. They’ll keep buying that brand because they’ve always been happy with the laser’s performance and features. Overall, the Spectra-Physics laser was voted most durable, best quality and the most user-friendly, Good, swift service was another advantage to owning a Spectra-Physics laser.

On another subject, if manufacturers of portable, battery-
operated lasers could work out how to prevent them “walking away so easily,” they’d make one Texas contractor very happy.

The Green Light

If some areas still need some improvement, there is one that is a “go” in terms of addressing the issues contractors are experiencing. In bright light, red beams are only visible for the first 20 or 30 feet. Twelve out of 33 contractors mentioned this problem. While Spectra-Physics may have been the first to come out with a laser that could shoot horizontal and vertical lines, Topcon is the company that is the first out of the gate with a solution to the bright-light barrier: word of mouth has spread around the country about Topcon’s “green beam” of light—several contractors are already using the product and letting others know how happy they are with the results. As one Washingtonian put it, “Topcon’s green beam is thinner and brighter, so you can see it farther, even in bright light situations.”

On the subject of beam visibility, a Vermont contractor would be happier if his battery-operated lasers could cover distances of 200 or 300 feet.

There is one other aspect of beams that a Floridian wants to see addressed: “If you shoot a bright-enough line to be seen 400 feet away, it is a thick line of say half an inch, at 50 to 100 feet distance. In a critical measurement, that leaves you wondering which side of the line you are going to take.” That’s a good question that the manufacturers can plumb for an answer.

It would be hard not to find any product where price wasn’t an area of concern. Three contractors were concerned about it. One from Virginia who noted, “Manufacturers are continuously adding new features, but a lot of these aren’t really necessary. Perhaps it would be better if they could be a bit simpler and less pricey”

A good suggestion was provided by a contractor from Florida: “Some of the accessories could use some modifications, such as the wall brackets for self-leveling the acoustical ceilings. We have to adjust the laser up and down on the brackets, yet they don’t have any increments on them. The laser cards have increment lines on them, so we set the card on the angle and keep adjusting the laser up and down until we find the mark. If the platform itself had a mark, we could just lower it down to a better proximity instead of the hit-and-miss we do now.”

A contractor from California would like to know how to shoot angles with lasers. “There is some way to do it with mirrors, but I have never met anyone who knew how. If manufacturers could fix it so one could rotate the beam to a specific degree and know that beam was at a true angle, it would be very useful.”

There will always be ways of improving the product and easing the application even further, but when it comes to lasers, users are sitting pretty. If there is one message for change that does come through, though, it is that manufacturers should produce a sturdy, few-frills, lower cost option that will do most—but obviously not all—the things that contractors want when they are in the field, looking for laser-precise measurements.

About the Author

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