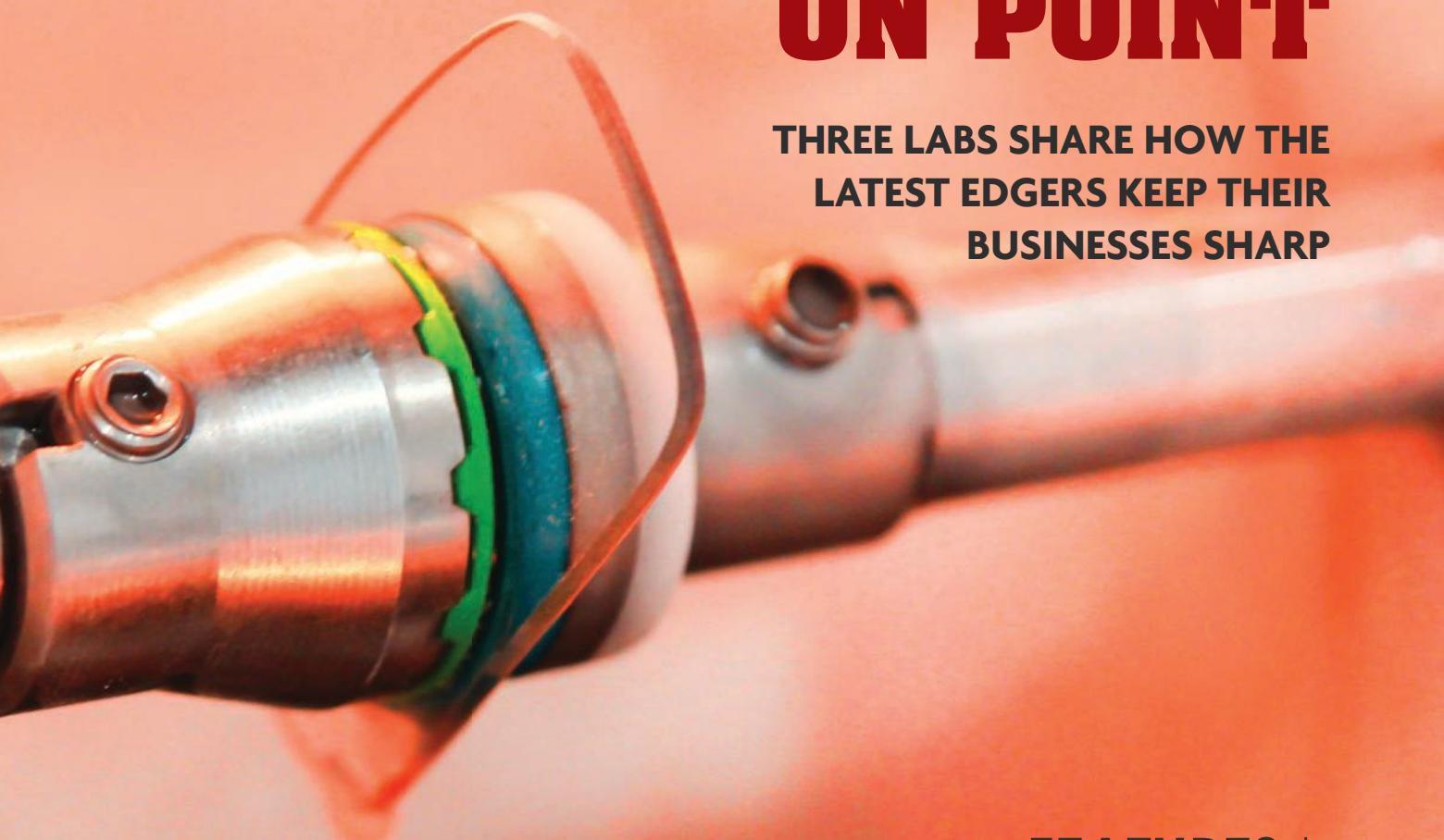


# LabTalk

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## EFFICIENCY ON POINT

THREE LABS SHARE HOW THE  
LATEST EDGERS KEEP THEIR  
BUSINESSES SHARP



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**FEATURES**

HOLIDAY MARKETING

WHAT'S OEE?

LAB HALL OF FAME

# EDITOR'S LETTER



It may be cliché, but this time of year is known as the “season of giving.” And, one of the best gifts we can share with one another can’t be found in the local mall.

I’m talking about knowledge, of course. Knowledge is arguably the greatest gift of all because, to use another cliché, knowledge is power. I found myself thinking about this in September, during the VCA Lab Division Hall of Fame induction ceremonies. It had been a few years since I had last attended the event, and I wasn’t exactly surprised to see that the 2017 class of inductees (see page 24) included a number of industry leaders who had been kind enough to share with me their knowledge of all things optical back in

the 1990s when I was still a “rookie” in the field.

I can’t imagine where I’d be without their generosity, and I’m sure I’m not the only one who has benefitted from the expertise of these industry leaders, and many others.

For better or worse, we attempt to share our knowledge—as well as that of other industry experts—with each of you with each and every issue of LABTALK. Not all of our issues are Hall-of-Fame-worthy, but we hope they at least stimulate thought and serve as a catalyst for innovation.

Thanks for reading, and enjoy the issue,

—Brian P. Dunleavy

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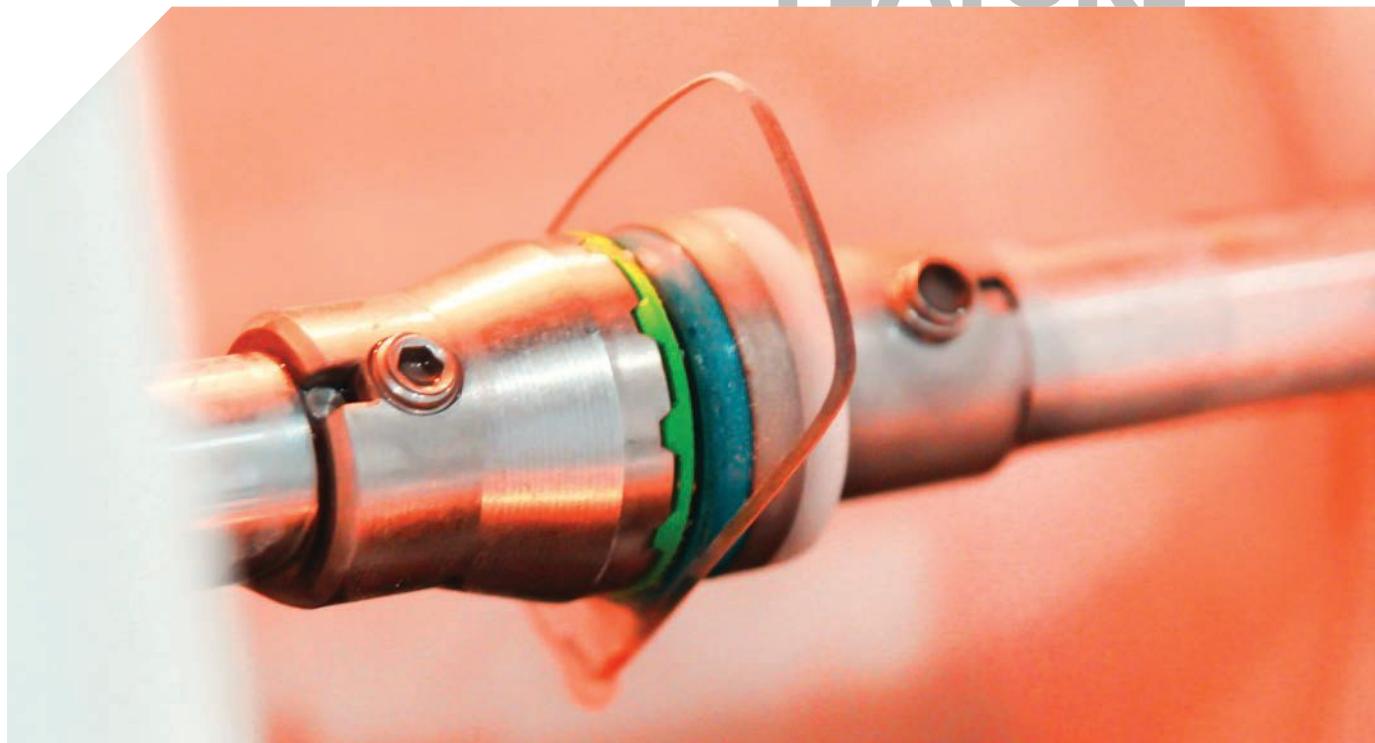
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## EFFICIENCY ON POINT

THREE LABS SHARE HOW THE LATEST EDGERS KEEP THEIR BUSINESSES SHARP

By JULIE BOS

**B**ehind optical prescriptions and finished pairs of glasses is one common denominator—a team of human beings working to deliver timely, accurate vision solutions to the patients who need them. With all the complexities involved in the lens manufacturing process, however, many laboratories struggle with optimizing process efficiency and minimizing waste.

That's why in today's manufacturing environment, using the most modern, cutting-edge finishing equipment, is as vital as ever. With the ongoing evolution in technology, even equipment that's only five years old may be an unwitting culprit in holding your lab back.

To learn more about how labs are gaining tremendous value—and moving ahead—through the latest, most advanced finishing equipment on the market, we went right to the sources. Here, three labs share their finishing success stories.

### Select Optical

Select, which is based in Columbus, Ohio, installed the National Optronics QM-X3 edger earlier this year. The QM-X3 (the "QM" stands for "Quality Manufacturing") is designed to "bridge the gap" between industrial 5-axis edgers and 3-axis tabletops and, according to the manufacturer, it is up to 30 percent faster than other tabletop edgers currently on the market. It features a fixed, dual-diamond blade design (designed to eliminate the need to frequently change blades) and remote diagnostics offering immediate technical support and current software updates.

**Efficiency gains witnessed:** "Compared to our previous system, the National Optronics QM-X3 edger is not only quicker, but also more accurate on sizes," said Stephen C. Darrah, General Manager at Select. "As a result, we've seen improved throughput.

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Since [installing] this equipment, we've also benefited from added production capability, one run-on size and nice sharp bevels. By having the National Optronics QM-X3 edger online with our other edgers, we have seen increased production by a couple of hundred jobs per day."

According to Darrah, system uptime has also improved.

**With online troubleshooting, we're able to see what's going with the edger and can fix certain issues online," he added. "Now we can order parts without having to wait for a technician. The process is seamless and, in most cases, production is not stopped. All of this means that we've been able to cut back on downtime and we've seen greater productivity. Having the option to do software updates online has also helped speed up the edger's production time. , ,**

**Other performance improvements:** "We've seen many improvements, including less breakage and increased throughout," Darrah explained. "We've only had the equipment a short while, so it's too soon to put a number on it, but we've definitely seen savings. Finishing quality has also improved. The nice sharp bevels that the edger consistently cuts results in the lenses being less likely to come out of the frame, along with less breakage."

### Expert Optics

Shorewood, Illinois-based Expert Optics added the new Schneider HSE Modulo Automated Edger to its production line recently, and the lab's Director of Operations, Bob Pommier, and Finish Manager, Tyler Pommier, told LABTALK that the new system has

### TIPS ON KEEPING FINISHING WORK IN-HOUSE

As we all know, many optical shops and physician's offices have their own finishing labs, which can support much of their regular business. Yet even in these situations, there's still a role for wholesale laboratories to play. If you'd like to continue supporting small optical shops who have their own finishing labs, here are several tips we learned from our three source labs:

- **Become their supplier.** Make it known that you're happy to supply them with uncut lenses. This may save them time and trouble, while ensuring that your relationship stays intact.
- **Be the expert on difficult jobs.** Encourage them to use your lab for difficult jobs that can't be finished on their existing machinery. Many customers that do their own edging primarily do it on common frame types, which leaves an opportunity for your lab to step in for complex ones, like specialty frames, complicated edge types and bevel placements.
- **Poise yourself as their "backup" lab.** Let them know you can process all their finishing work when their equipment is down or when their staff is ill or on vacation. This can give great assurance to smaller optical labs who have little buffer in their schedule and their staff list.
- **Stay in touch.** When an optical shop or physician's office lab decides not to stick with edging, they'll be looking for an outsource partner to take on that finishing work.

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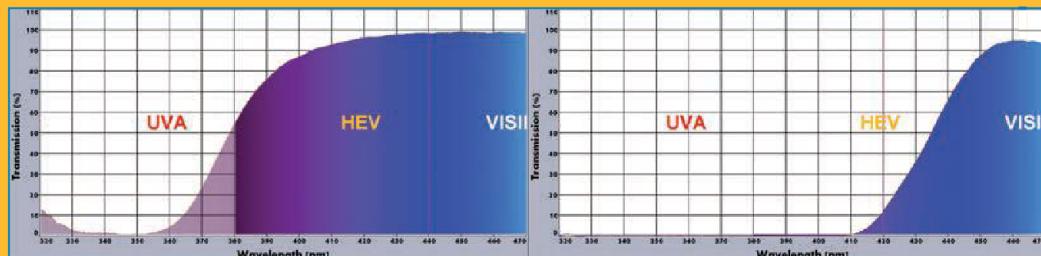
Kodak Total Blue Polarized Lenses shown above.

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significantly expanded their finishing capabilities and increased efficiency. Schneider describes the HSE Modulo as the “first high-speed, double-spindle edger” designed for “fully independent edging of the left and the right lens,” either on-the-block or blockless. The edger features two separate multi-axis systems and it offers “high rigidity and precise tool clamping” for maximum throughput.

**Efficiency gains witnessed:**

**“According to the Pommiers, the HSE Modulo’s automation has significantly increased the lab’s “capacity to edge more jobs with the same staff,” which allows experienced employees “to do other things in the lab that contribute to other efficiencies.” They describe the machine as a “workhorse” that can quickly handle difficult jobs “so we can better serve our clients.””**

In addition, with its multiple edge type capability, the machine is an all-in-one edger for Expert, as it can handle edge types and high base curve jobs that previously were routed to several different edgers in the lab. The “milling-style roughing” of the HSE Modulo also greatly reduces slippage and increases throughput,” the Pommiers added. Finally, the machine’s block-less capability “has been a true game-changer” for Expert. Now, instead of having to “manually spot a lens, have it blocked for edging and then edged,” the lab can now send lenses through the HSE without spotting or blocking, taking two steps out of the process, which saves time and money. All of these benefits result in what the Pommiers call an “excellent ‘first-time-fit’ rate.

## TIPS ON KEEPING FINISHING WORK IN-HOUSE (CONT'D)

- **Ensure that your quality stays top-notch.** It’s always important to keep turn times low and make sure that lens quality stays consistently at its best.
- **Check your price points.** Monitor your pricing to ensure it stays competitive with other area labs, to keep these smaller labs from looking elsewhere.
- **Invest in the latest machinery.** By having more sophisticated edging capabilities than what’s being used in small optical shops is key to filling in the gaps and recapturing some of this business.

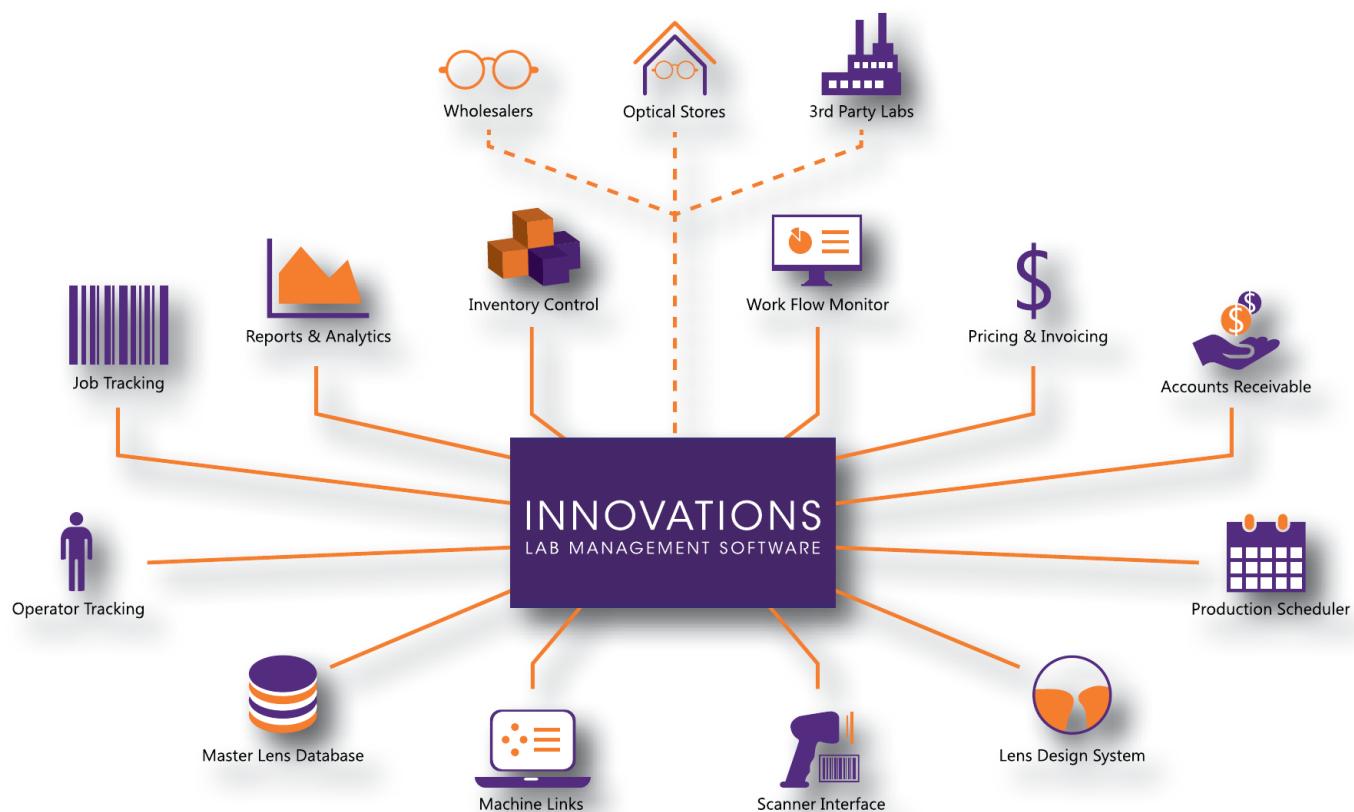
**Other performance improvements:**

**“Our cost savings comes from labor and consumables,” said Bob. “Fewer labor... Fewer labor hours are needed to prepare a job to be edged in the HSE. Without need for a lensometer and manual blocking, we’re able to save eight hours of labor per shift. Being able to produce more jobs per hour with the HSE means fewer labor hours needed to run other, more labor intensive edgers. This adds up to another eight hours saved per shift. The cost savings continue because we no longer need edging blocks and pads.””**

# INNOVATIONS

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From left to right, Coburn's Exxpert HDM-8000 Drill, HPE-8000 Edger and HAB-8000 Tracer/Blocker.

The Pommiers noted that the HSE has improved "all facets of our finishing quality," by producing a clean finish in both unpolished and polished form and placing a uniform safety bevel on all lenses. They told LABTALK that slippage with the machine is almost non-existent, and that that it can accommodate multiple edge types, high powered jobs, and high base curve jobs "with relative ease, increasing the amount of work we can automate."

### Lenses Only

Lenses Only, which operates out of three retail storefronts and two ophthalmology dispensaries in Connecticut, installed Exxpert Lens Edgers from Coburn Technologies in each of its five locations, according to co-owners Tom Gonthier and Steven Abbate. That the system is available in multiple sizes and capacities is perfect for Lenses Only, which has



The HSE Modulo Automated Edger from Schneider.

different needs at each location. Exxpert edgers feature an "integrated, accelerated long-life milling technology," which eliminates axis twisting, and a wide range of bevel options, according to Coburn.

**Efficiency gains witnessed:** Gonthier and Abbate told LABTALK that the best thing about their edgers is that "we only have to put the lens in there once." Indeed, with their auto-lensometry feature, the machines perform "accurate and precise tracing and blocking, providing full versatility from just the one cut," they said. If the job is prepped correctly, it is correctly finished at the push of a button.

**"In my previous shop, I was using competitive finishing equipment that was about five years old," Gonthier noted. "Compared to that system, our Coburn equipment is cutting lenses in at least one-third of the time. We can also do more intricate things, like rimless glasses and other intricate shapes, which could often require as much as one to two hours each. Yet with this machine, we can get it all done in about 20 minutes."**

**Other performance improvements:** Since installing the Exxpert lens edgers, Lenses Only has seen significant labor savings; workload that previously took three to four employees can now be done with only one to 1.5 employees, the owners explained. All of the edgers are capable of processing 100 pairs per day. Because the labs are now doing this work in less time, with fewer people, with far fewer reworks—about half as much as with the systems they replaced—Lenses Only is saving about \$3,000 per month, on average, in production costs.



*Unlike other tabletop edgers, National Optronics' QM-X3 features the engineering and cutting-edge technology used in industrial edgers, setting new standards for productivity, robustness and price.*

"Years ago, in my older labs, we had a remake rate of about 10%, but with modern machinery, most labs are able to cut that down to about 6% to 7%," Gonthier said. "In our shop with Exxpert lens edgers,

we're running way below that—about 2.9%—which is about half of the industry standard.

"Furthermore, we're able to turn jobs faster," he continued. "What might take another optical shop two to three weeks to deliver a pair of glasses, we're getting that same pair done in about one to three days. We can also do same-day service on lens replacements, while the customer waits in our office. So if people need lenses only, and they don't want to be without their glasses for two to three weeks, we can utilize our machinery and scan their frames and collect all the information to order the lenses. When the lenses arrive, the customer can bring their glasses back and we'll cut and fit the lenses while they wait. This is a service not many labs offer, yet it's a service customers love. That's one reason we're different and why we're growing so fast—about 30% year over year. Having the latest machinery makes all the difference." ■

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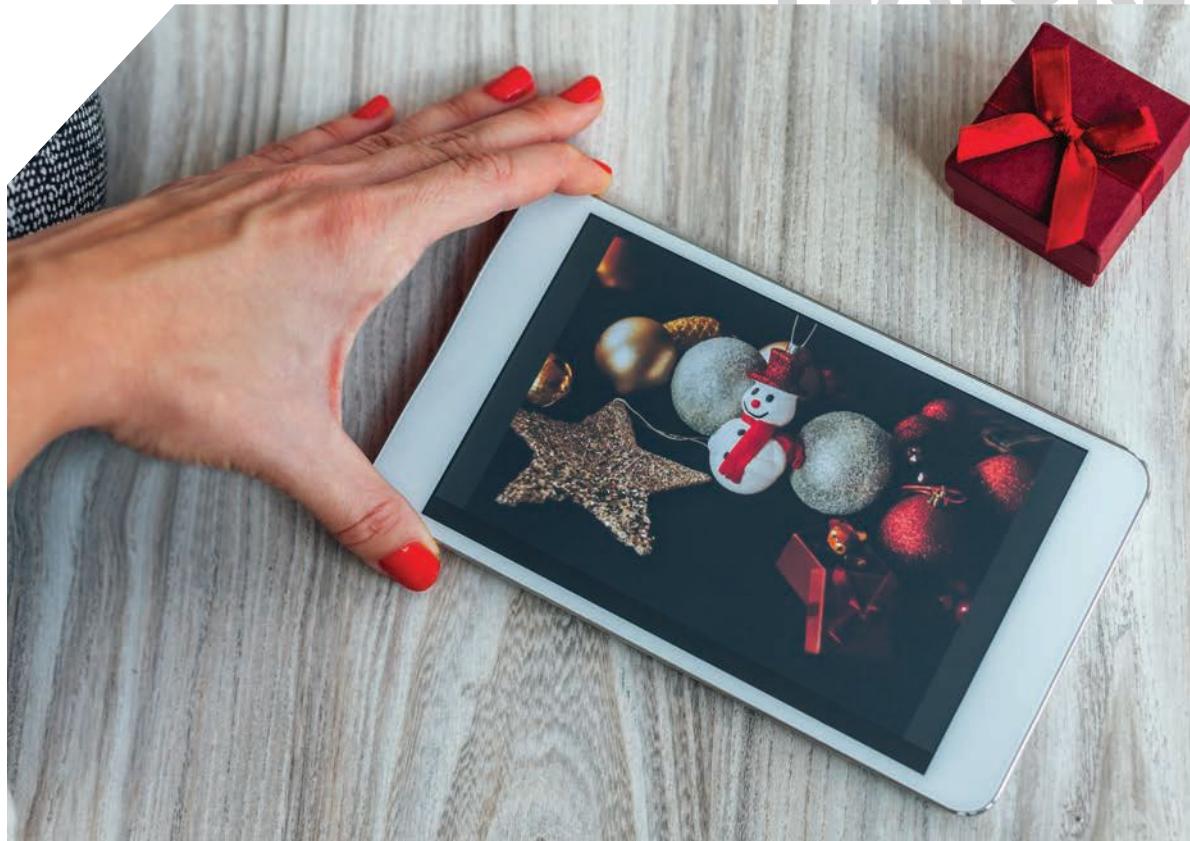
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## FEATURE



# Happy Holidays

## Get Ready for a Profitable Christmas Season

By PHILLIP M. PERRY

A robust economy and a resulting surge in consumer spending should make this Christmas season among the most profitable in years. At the same time, optical dispensaries need to come up with attractive price points and compelling sales messages, because shoppers will be doing more than their usual amount of comparison shopping.

"Consumer confidence remains high," says Bob Phibbs, a retail consultant based in Coxsackie, NY ([retaildoc.com](http://retaildoc.com)). "And we are now on the other side of the election, so that uncertainty is behind us."

Furthermore, shoppers are not expected to be preoccupied with other expenses. "Employment is

surging ahead, and interest rates and gas prices remain low," points out Al Meyers, a retail innovation consultant at Kalypso, Cleveland ([Kalypso.com](http://Kalypso.com)). "As a result, there's no reason we shouldn't have a halfway decent holiday season." So how can your lab help prepare your customers for what should be a competitive Holiday Season.

### Trim Prices

Before ringing too many holiday bells, though, retailers need to realize that shoppers will be bargain-hunting. "The nation has been experiencing many high-profile store closings," says Phibbs. As a result, consumers will be expecting retailers to reduce prices. "It's going to be harder to communicate

compelling messages beyond discounting."Just as challenging as a product supply glut is a rapid growth of e-commerce at the expense of brick and mortar stores. Aggressive promotions by online retailers will put more downward pressure on prices. "Retailers are going to have to come up with promotions that shoppers can't get on the web or from Amazon," says Dave Ratner, a speaker and consultant on retailing based in Agawam, Mass. ([daveratner.com](http://daveratner.com)).

## Package Deals

What to do? Ratner advises retailers beating the price-watchers at their own game—and wholesalers can do the same. He advises assembling packages of related merchandise that offer eye-catching (pardon the pun) discounts while boosting your average ticket sale.

"In all of your promotions you should try to do kits," says Ratner, referring to such grouped merchandise. "You will be a lot more successful selling batches of related merchandise than selling add-ons to a base item."

Ratner likens this approach to that of package deals in the travel industry and the "luxury" offerings of car dealers. You also might offer discounts for the purchase of two or more items of the same kind. Because this increases rather than trims revenues, it's a much wiser move than offering discounts on a per-item basis.

## Not Price Alone

Avoid making the mistake of competing on price alone. You must differentiate yourself by communicating an exclusive reason to use your services over others. Just as important as the presentation of package deals is drawing in the right customers.

One of the best ways to do that is the use of social media. Ratner points specifically to Facebook, where businesses can send messages to targeted customers and potential customers. "You can buy Facebook ads that target people within five miles of your [business]," he says. "And the costs are so much less than the old days of print ads and mailers."

And speaking of targets, how about aiming at local organizations that can do your marketing for you—or at least help substantially? "Make deals with your local schools, churches or other organizations," says Ratner. "Do promotions that will appeal to their members, and give the organizations a cut of the sales. They will end up promoting your merchandise for a cut of the profits."

If you develop a compelling sales message, trim your prices, and promote package sales to targeted shoppers, the result will be a profitable Christmas season. "You have to know your customer," says Phibbs. "That takes a lot of work. But what other choice do you have?" ■

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# Who's down with OEE?

## A Metric for Monitoring Machine Performance

By ROBERT MINARDI

**M**onitoring individual machine performance is like counting calories. We all know we should do it, but few of us really enjoy it or put much thought into it.

Let me begin with an analogy. There are three main dietary macronutrients: protein, carbohydrates and fat. Each of these have their place in a balanced diet and each contain calories. I'll assume we all know what a calorie is, or at least the concept. Now, imagine if I told you I was going on a diet, and the goal for my daily intake was 2000 calories. Sounds reasonable, right? But what if I told you I was only going to count my protein intake towards my daily caloric goal? You should be making a strange face right now, because that doesn't make sense. If I eat foods with either of the other two macronutrients, they're going to contain calories that need to be accounted. (By the way, if anyone can find a legit

diet where I don't have to count the calories in Chubby Hubby ice cream, please, contact me as soon as possible.)

While this seems obvious, this strange accounting is essentially what we do when we base our equipment performance exclusively on a daily production number. It's hard to look at a single number at the end of the day and determine why our machines performed the way they did. For example, what does running 130 jobs on machine X really mean? Is that the whole story?

Let me introduce you to a metric called OEE, which stands for Overall Equipment Effectiveness. It considers three factors: availability, performance and quality. It's a little tricky and should be used judiciously, but it's also a great tool for getting the most out of your equipment.

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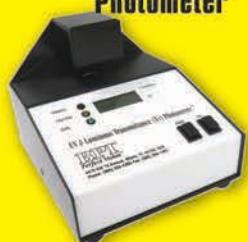
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Let's take a look at the formula and its components. For our example, we'll use an automated freeform lens generator. I'll keep the units for the calculations in hours or fractions of an hour, but you can use minutes if you prefer.

## Availability

The formula for OEE is as follows:

$$\text{OEE\%} = \text{availability} \times \text{performance} \times \text{quality} \times 100$$

In this equation, availability is defined as the amount of time your equipment actually runs, in relation to how long it's supposed to run, as depicted here:

$$\text{Availability} = \frac{\text{Actual Run Time}}{\text{Scheduled Run Time}}$$

or

$$\text{Availability\%} = \left[ \frac{(\text{Total Production Time} - \text{Scheduled Downtime}) - \text{Unscheduled Downtime}}{\text{Scheduled Run Time}} \right] \times 100$$

The formula for the availability percentage for this data would look like this:

$$\text{Availability\%} = \frac{(8.5 - 1.0) - (0.33 + 0.17 + (0.25 + 0.08))}{7.5} \approx 0.89 \times 100 \approx 89\%$$

Notice the scheduled run time (denominator) is 7.5 and not 8.5. That's because breaks and lunches are scheduled. If you have a company meeting, or scheduled maintenance on a given day, you'd remove that from your "scheduled run time" as well because the equipment isn't supposed to be running. All other downtime is considered unscheduled. The purpose of calculating your equipment's "availability" is to discover why it isn't running when it should be. A log should be kept with a short blurb explaining each instance of one minute or more of downtime.

## Performance

Performance is the speed the equipment runs in

Table 1 below provides an example of how to document equipment "availability:"

Variable	Amount	Reason
Total production time	8.5 hours	Because the boss says so
Scheduled downtime	1.0 hour	One 30-minute lunch and two 15-minute breaks
Unscheduled downtime	20 minutes	Generator had a diamond break (one third of an hour or 0.33 hours)
Unscheduled downtime	10 minutes	Accumulated downtime due to swarf needing to be cleaned out of collet (one sixth of an hour or about 0.17 hours)
Unscheduled downtime	15 minutes	Accumulated downtime due to coolant low pressure error (one quarter of an hour or 0.25 hours)
Unscheduled downtime	5 minutes	Conveyor belt jammed and had to be cleared (one twelfth of an hour or 0.08 hours)

relation to how fast it was designed to run. It answers the question: "When the equipment runs, is it running as fast as possible?"

$$\text{Performance} = \frac{\text{Actual Run Rate}}{\text{Ideal Run Rate}}$$

$$\text{Performance\%} = \left[ \frac{\text{Total Count}}{\frac{\text{Scheduled Run Time}}{\text{Ideal Run Rate}}} \right] \times 100$$

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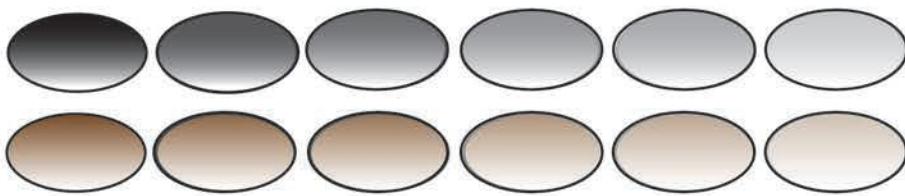
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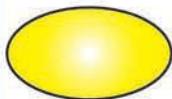
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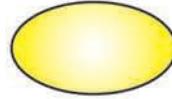
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Table 2 shows the performance of our freeform generator:

Variable	Amount	Description
Total count	152 parts	All parts produced including defects
Scheduled run time	7.5 hours	From “availability” calculation
Ideal run rate	22 per hour	Ideal output in same units as “run time” (in this case hours)

In this scenario, performance would be calculated as follows:

$$\text{Performance} = \frac{\left(\frac{152}{7.5}\right)}{22} \approx 0.92 \times 100 \approx 92\%$$

Now let's take a step back here, because this is the tricky part. OEE is meant for equipment with constant cycle times—for example, a machine that stamps out widgets of equal specifications. Most machines in an optical lab don't run like this. Freeform generators vary their speed based on things like material, cylinder power, prism, etc. A 0.25D SV in CR-39 will take less time than a polycarbonate digital progressive with a -5.00DC near zone. At least on the equipment I've worked with.

Also, we run work “first in, first out,” so we can't batch up jobs with similar attributes and run them all at the same time. We do a continuous flow of unique jobs with unique cycle times, which we can't easily account for. So, what do we do? We can fudge it a bit by using the fastest known rate for our ideal run rate and keep in mind that it's just an estimate. Alternatively, I'd recommend you do a time study every few months across material types and lens designs to gauge machine performance.

## Quality

Ironically, performance in the form of machine

speed is the variable many tend to focus on. We often ask ourselves, “How can we make our machine run faster?” The reality is, it's the variable we can do the least about. The machine is optimized for performance when it comes from the manufacturer and there's no re-tooling or adjustments we, as operators, can make to increase its speed. All we can do is make sure the machine is fed and produces quality work. Which leads me into the final OEE variable: Quality is simply the number of jobs that were good on their first pass, in relation to the total produced.

$$\text{Quality\%} = \left[ \frac{\text{Good Count}}{\text{Total Produced}} \right] \times 100$$

Table 3 records the quality performance of our generator:

Variable	Amount	Reason
Breakage	1	Lens too thin
Breakage	1	Incorrectly scanned; cut wrong power into lens
Rework	4	Not finished due to diamond break; had to rerun jobs
Good Count	146	Jobs that were not defective or in need of rework
Total Count	152	Total jobs produced

Calculation of quality in the above example would look like this:

$$\text{Quality\%} = \frac{146}{152} \approx 0.96 \times 100 \approx 96\%$$

## Final OEE

Putting all three of our variables together, we end up with the following:

$$\text{OEE\%} = (0.89 \times 0.92 \times 0.96) \times 100 \approx 79\%$$

I know what you're thinking: “What the heck? How did we end up with a 79% overall OEE if we're in the 90% range for the individual categories?” That's just the way the math works out. It sounds low, but to put it in perspective, 85% is a world-class number; with 60%

to 65% being typical. From our example, we can see that “availability” is where we need some work. If we relied on our daily production number exclusively for that piece of equipment, all we’d know is that it didn’t produce as many jobs. Now we know exactly why.

I know what you’re thinking: “What the heck? How did we end up with a 79% overall OEE if we’re in the 90% range for the individual categories?” That’s just the way the math works out. It sounds low, but to put it in perspective, 85% is a world-class number; with 60% to 65% being typical. From our example, we can see that “availability” is where we need some work. If we relied on our daily production number exclusively for that piece of equipment, all we’d know is that it didn’t produce as many jobs. Now we know exactly why.

On a side note, don’t fall into the trap of “robbing Peter to pay Paul.” What good is high availability if your quality is poor or vice versa? You don’t want to trade quality for production, as in the example below. In this case, we took steps to boost availability, so the equipment ran longer, but the quality score dropped. The net gain in OEE came at a price of more breakage!

$$\text{OEE\%} = (.97 \times .92 \times .90) \approx .80 \times 100 \approx 80\%$$

Admittedly, this metric shouldn’t be used all the time. There’s a lot that goes into it. Until OEE is baked into the LMS, I recommend calculating OEE on new or underperforming equipment to get the most benefit. Also, it’s very much an individual metric. Meaning, you can’t compare a generator OEE to a polisher OEE. Nor can you compare your machine’s OEE score to another machine; even if it’s the same make and model. This metric is for comparing a machine’s overall effectiveness to itself and constantly working towards improving it.

Remember an OEE score is just another number. The power of this metric isn’t in the final score, but the factors that create it. ■

*Robert Minardi, ABOAC, has been in manufacturing for almost 25 years. He's a certified Lean Six Sigma Black Belt with a background in quality control.*

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# LABTECH

## Zeiss Invests Over €300 Million in Jena High-Tech Site

Zeiss has announced that it will invest over €300 million in a new integrated high-tech site in Jena, Germany, the city where company founder Carl Zeiss first set up shop in the 1846. In line with the plan, the company will bring together its existing sites in Jena by 2023. To do this, Zeiss will acquire partially unused premises from Schott, which it will renovate and use to construct a new facility for its second largest site worldwide. Jena is an integral part of Zeiss's global investment strategy and is the next in a string of international projects aimed at expanding, modernizing and realigning sites that Zeiss has been implementing in locations such as Germany, Europe and Asia

since 2011, the company said in a statement. Several weeks ago, the company announced plans to invest €30 million in the Zeiss Innovation Hub at the Karlsruhe Institute of Technology (KIT), which will engage in close collaboration with institutions such as Friedrich Schiller University, Ernst Abbe University, the Ilmenau University of Technology, other local universities of applied sciences and institutes such as those that are part of the Max Planck Society, as well as partner companies and local suppliers. Construction on the site is scheduled to begin in 2019 following the accompanying construction and consultation procedures; it will largely be complete by the end of 2023.

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# SPOTLIGHT ON...



*The Directors' Choice winner and Hall of Fame inductees (left to right): Jim Goerges, Mark Mattison-Shupnick, John Art, Bill Hefner, Marty Bassett, Lorinda Fraboni, Jeff Lahr (accepting for father Lawrence), Drake McLean and Joe Vitale.*

## VCA LAB DIVISION HOLDS HALL OF FAME INDUCTION DINNER

LAS VEGAS—The Vision Council's Lab Division honored its own here September 13th during its 18th annual Hall of Fame induction ceremony and banquet at the Treasure Island Hotel and Casino.

This year, Marty Bassett, President and CEO of Walman Optical received the Directors' Choice Award, while John Art, President, Interstate Optical; Lorinda Fraboni, IS Development and Operations Manager, Walman Optical; Jim Goerges, President/Owner, Precision Tool Technologies; William H. Heffner, III, President/CEO/Founder, FEA Industries; Lawrence L. Lahr, Vice President Emeritus, Eye-Kraft Optical; Mark

Mattison-Shupnick, Director-Education, Jobson Medical Information (and *LABTALK*'s esteemed colleague); Drake McLean, President, Dietz-McLean Optical; and Joe Vitale, Technical Support Manager, Essilor, were each inducted into the division Hall of Fame.

In presenting the Directors' Choice, McLean noted that the Bassett's "achievements go beyond his role as [leader] at Walman. Indeed, Bassett has also served in numerous leadership positions with in the Vision Council, and was instrumental in the growth and expansion of its "Think About Your Eyes" campaign. In addition, Bassett has been involved in numerous

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# SPOTLIGHT ON...

charitable activities in his local community, including work as a volunteer ski instructor with the Courage/Kinney Institute, which assists students with disabilities.

Meanwhile, during the Hall of Fame ceremony Lawrence L. Lahr's son Jeff made the acceptance speech on behalf of his father, who was unable to travel to Las Vegas due to health issues. He said that his father was "thrilled" to be an inductee, and that the honor had "brightened his spirits." He added that, when his health permits, his father still comes into the lab every morning, and that in February he will be celebrating his 60th anniversary with the company.

John Art was introduced by his brother, and business associate, Rob, while Yvette Carranza, of Digital Vision, Inc. (DVI) inducted her long-time friend and fellow Optical Women's Association

(OWA) member and leader Fraboni. Fraboni plans to retire in 2018, but her legacy in the optical industry includes her work to create more leadership opportunities for women within the field. In fact, Carranza credited Fraboni with helping dozens of women into leadership positions through her work with the OWA.

Jared Goerges inducted his father Jim into the Hall of Fame. Jim noted that his underlying philosophy with Precision Tool Technologies was to "try to make our customers' lives better with [everything] we do." Rick Norwood, of Norwood Vision, introduced Hefner, who told the audience that "there is nothing better than being [an] independent" lab.

Mattison-Shupnick, who was inducted by Leslie Gardner, President, Advanced Digital Eyewear and his former colleague at Sola Optical, credited the optical industry with "changing his life," and urged the audience to celebrate the industry. "This industry allows us to grow with others and take our own path," he noted.

Zach McLean introduced his father Drake, who lauded the optical industry for its culture of "inclusion" and for a sense of "camaraderie that goes over and above competition. Michael Vitale inducted his brother Joe into the Hall of Fame to close out the evening. Both brothers have, of course, been involved in the industry, in various roles, for decades.

Among the many Lab Division initiatives discussed earlier in the day, during the Division Meeting at the Sands Exposition Center across the Strip from Treasure Island, the marketing and communications consulting services member benefit was highlighted. Tailored specifically to optical labs with Dan Bailey, of [danbailey.com](http://danbailey.com), Lab Division members can participate at a discounted rate and learn about marketing strategy, website assistance, logo creation and social media planning. To learn more, visit: <https://www.thevisioncouncil.org/members/lab-division>. ■



*Jobson's Mark Mattison-Shupnick is inducted into the Lab Division Hall of Fame.*

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# LABTECH

## Coburn Technologies Introduces New Cobalt Lens Generators

Coburn Technologies has introduced its newest lens generators to the next generation of Cobalt products--Cobalt NXT and NXT+.

The Cobalt NXT is the successor to Coburn's current large-format free-form generator, the Cobalt DS. Together with the Cobalt NX generator which was launched in March, the Cobalt NXT represents Coburn's next-generation platform for lens surfacing.

Cobalt NXT has the capability to be upgraded to a fully automated machine for labs looking to completely automate their free-form processes. The quality of the lenses produced with the Cobalt NXT is far superior to that of the Cobalt DS. Cobalt NXT is designed for processing all indexes of lenses (1.498 to 1.74). With engraving built in the machine, the need to purchase additional equipment is reduced, thus saving costs. Manual calibration is still available for those customers wanting to still control this process, but for those who want an automated machine, Cobalt NXT comes built with automatic calibration for faster and more efficient lens processing. Cobalt NXT comes with increased speeds and higher throughput than the Cobalt NX allowing labs to process jobs faster.

"With the Cobalt NXT, we have expanded the basic fundamentals of our very popular Cobalt DS, while shrinking the footprint to better fit the needs of the



market. Cobalt NXT now allows the production volume of a larger lab to fit into the spacing of a smaller lab," said Alex Incera, President of Coburn Technologies.

Cobalt NXT is also automation ready. This machine, known as Cobalt NXT+, is built with the same footprint and top cover design as the Cobalt NXT, but takes it one step further offering full automation for your generating process. NXT+ comes with a pick and place system and conveyor, eliminating the need for an operator to load and unload lenses. [For more information, please visit www.CoburnTechnologies.com.](http://www.CoburnTechnologies.com)

## Vision Ease Adds to High-Performance Photchromic Line with New Brown Lenses

Vision Ease has expanded its photchromic color options with the launch of Photchromic Brown, the latest in its line of no-compromise lenses.

The new color complements the company's existing Photchromic Gray lenses so customers now have more options that meet consumer demand for superior performance. The first styles immediately available in brown are SFSV and D28 Bifocals in polycarbonate. Future availability will include D35 Bifocals and 7x28 Trifocals.

Vision Ease has tested the new lens' performance against wearer comfort benchmarks. Like their gray counterpart, Photchromic Brown lenses offer comparable clarity and exceed the national brand on activation, total darkness and fade-back comparisons. The brown lenses also block 43 percent of indoor blue light and 94 percent of outdoor blue light. [For more information, visit www.visionease.com.](http://www.visionease.com)



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# LABTECH

## Luxexcel Receives Equity Investment

Luxexcel, developer of the first 3D printer of ophthalmic lenses, has received an equity investment of €4 million (\$4.7 million) from Innovation Industries, a Netherlands based Venture Capital fund.

The investment enables Luxexcel to accelerate the next-gen development of its 3D printing platform for prescription lenses for use in Augmented Reality and Virtual Reality applications. Recently Luxexcel announced a €8.5 million (\$10 million) investment for its core activities in the ophthalmic industry (including participation from SET Ventures, Munich Venture Partners, PMV and KLA-Tencor).

According to the company, the first industrial grade 3D printing platforms are being installed this year in the U.S. and Europe. AR/VR applications currently in development include smart glasses that provide the user with real time information for professional and personal use, gaming applications including control consoles for drones (fpv), sensors and cameras integrated in eyewear.

"AR/VR applications have become a hot topic in the industry," said Hans Streng, Chief Executive Officer of Luxexcel. "We add the ability to 3D-print ophthalmic-quality prescription lenses to these applications. This enables the AR/VR headset manufacturers to offer fully personalized smart eyewear in an attractive frame design. The ability of our platform to 3D-print ophthalmic lenses in any shape or form and the possibility to embed new functionalities in the lens triggers entirely new dimensions in terms of user-experience and business opportunity."

"We believe that with the technology of Luxexcel it will be possible to combine AR/VR applications with RX eye correction, which is an essential component in bringing smart eye wear to the mainstream market," added Nard Sintenie, Founding Partner at Innovation Industries. "We are excited about leveraging the high tech network in the Netherlands to enable this unique breakthrough."

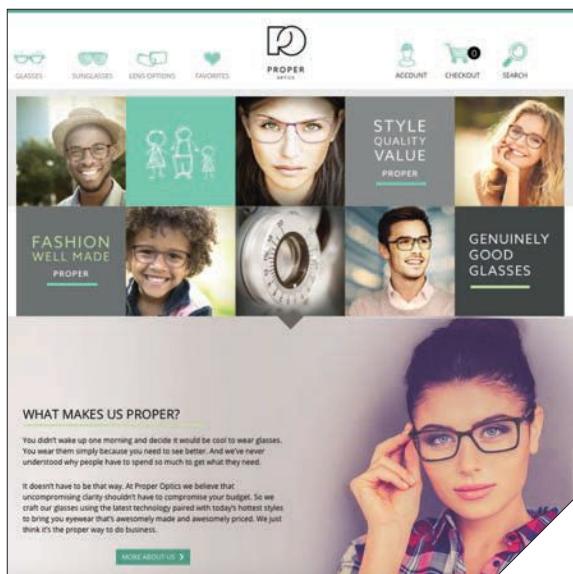
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## GSRx Launches Optical E-Commerce Site for Independents

GSRx, Inc., a lens and technology coating supplier, has launched ProperOptics.com, an optical e-commerce site created to provide independent eyecare practices with an online presence to capture more optical sales. ProperOptics.com said it will provide an additional opportunity for practices to sell to patients who leave the office without buying eyewear, as well as to online shoppers in their market.

"GSRx believes that optical patients are best served when they purchase eyewear from an independent practice," said Dave Jochims, GSRx's founder and CEO. "However, it's undeniable that over 30 percent of independent practice patients are buying their eyewear somewhere else, often from an online retailer. As a supplier dedicated to supporting independents, we have created an online option where the practice retains control over the quality of the product and captures the profits."



ProperOptics.com is an extension of GSRx's Proper Optics in-store dispensing brand, which offers complete eyewear packages designed to help keep independent practices competitive with brick-and-mortar and online retailers. Featuring 280 frame styles and a full range of lenses, coatings and treatments using today's best technology, Proper Optics' recommended list prices are up to 50 percent lower than equivalent branded product, while providing comparable profits to the practice, the company stated.

The web site will offer traditional single vision lenses, a broad range of materials, along with GSRx's proprietary Infinity Non-Glare and Prevablue coatings, polarization and Transitions. Patients will have the option to have their eyewear delivered to their home or to the practice. In either case, patients can visit the practice to have the eyewear adjusted. This will allow the practice to assure optimum eyewear performance and demonstrate the quality of their service.

Jochims emphasized that ProperOptics.com is only intended as a supplement to in-office dispensing. "We believe that patients will always get the best vision from eyewear that is measured, fit and dispensed by the expert staff of an independent practice," he said. "But if a patient does wish to shop online, ProperOptics.com gives practices the opportunity to maintain control and assure the best outcome."



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# LABNOTES

## Coburn Technologies Adds Arnold as Director of Lab Works

Coburn Technologies, Inc. has appointed Jason Arnold as its new Director of Lab Works for the US market.

As a seasoned veteran in the optical industry, Arnold will work closely with the US Sales team to drive revenue growth and continue market share gains in the lab market. He will report directly to Wayne Labrecque, Vice President of Sales.

"We are very excited to welcome Jason back to the Coburn team," said Labrecque. "As a former employee, he joins us with a great understanding of our products and offerings, allowing him to dive right into the job. We are very excited to see where Jason can take us."

Arnold re-joins Coburn to work as a driving force in the lab market with primary focus on Coburn's new developments in lens surfacing, coating and cleaning. Previously, Arnold held senior sales positions with Allergan Eye Care and Kowa American Corporation.

"I am pleased to be coming back to the Coburn sales team," noted Arnold. "Having experience in a variety of areas of the business already, I am very excited to now expand my expertise in the lens processing and lab markets. This is a very exciting opportunity."



## Transitions Confirms Dates for 2018 Academy

Transitions has confirmed the dates for Transitions Academy, its annual education and networking event, in 2018. The meeting will be held February 11th through 14th at the Walt Disney World Swan Hotel in Orlando. For more information about Transitions Academy 2018, visit to [www.TransitionsAcademy.com](http://www.TransitionsAcademy.com).



## Transitions Optical Announces New Consumer Influencers

To continue illustrating the role changing light plays in shaping our days and nights through its online and social media initiative, The Good Light Project™, Transitions Optical is partnering with influential Transitions® lens wearers. Unique influencers in the lifestyle, travel, healthcare and fashion categories will be using social



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# LABNOTES

content to share their stories and experiences, and encouraging others to Live the Good Light™. Combined, the new influencers have a social footprint of over 3 million people.

"We are very excited to be partnering with this diverse group of talented individuals in 2017 to help us continue to reach a younger demographic online where they are seeking information," said Patience Cook, director, North America marketing, Transitions Optical. "Our influencers will showcase their different lifestyles and how they live life more comfortably when they help protect their eyes from harmful blue light and UV rays with Transitions lenses."

Influencers include:

- Jamie Chung—Actress, fashion icon and creator of the What the Chung blog. In April, Jamie began serving as our Good Light Project ambassador and will continue to highlight how Transitions® lenses help her look and see her best in every light—whether she's indoors or out.
- Coco & Breezy—Fashion entrepreneurs and eyewear designers Corianna and Brianna, also known as Coco and Breezy, are the founders of a cutting edge sunglass brand based in New York City that aims to reach new fashion heights and introduce fashion connoisseurs all over the world to their unique sense of style and original accessories.
- The Girls With Glasses—Brooke White (singer/songwriter) and Summer Bellessa (model/ELIZA Magazine editor) met on MySpace as fans and supporters of each other's work, soon growing into good friends. Together they formed The Girls With Glasses, an online variety/talk show full of style, heart and motherhood.
- The Planet D—Dave and Deb are well-known travel personalities in both online and mainstream media. Their highly acclaimed website, ThePlanetD.com, won the 2014 and 2015 Gold Medal for Best Travel Blog by the Society of American Travel Writers. They've travelled to more than 100 countries on all 7 continents.
- ZDoggMD—Zubin Damania, MD is a physician, rapper and purveyor of the finest medical satire. He is an internist and founder of Turntable Health, a healthcare startup that aims to transform care from a transaction to a relationship. Under the pseudonym ZDoggMD, he creates videos as an outlet to find his voice and share his passion for improving healthcare for everyone.

Throughout the year, consumers and eyecare professionals can find the influencers wearing their Transitions lenses on their social media pages. For more information, visit [Transitions.com/GoodLight](http://Transitions.com/GoodLight).

## Lab Division Meeting Materials Available

Materials are now available from the Lab Division Meeting, held in conjunction with Vision Expo West 2017. This year's meeting covered a broad spectrum of topics for members including a panel discussion on smart manufacturing and technical, legal and cyber security updates. For the materials including presentations, related files, and photos from the Lab Division Hall of Fame and Director's Choice Awards, visit <https://www.thevisioncouncil.org/members>.

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# Overheard at Transitions Academy

## *Finding the Style in Lenses*

By ROSE HARRIS , ASSOCIATE DIRECTOR OF PROFESSIONAL RELATIONS, TRANSITIONS OPTICAL

**A**t Transitions Academy 2017, we held a course called "Finding the Style in Lenses" to get people thinking of Transitions® lenses from more than just a health perspective. This course was all about the latest eyewear trends and how to make lenses part of the style story by pairing different options with fashionable frames to create a unique look. Attendees enjoyed the content so much that we decided to create new style materials to help educate other eyecare professionals. The new materials include the Lens Style Guide and a short training presentation.

Building on the content that was shared at Academy, the new resources have even more information to share with your customers.

### FRAMES

Eyeglasses are trending up, and so are unique frame styles. Edgy, oversized, brow-focused and aviators are just a few of the most popular frame styles mentioned. Your customers can recommend these frames to their patients and pair them with Transitions lenses for a personalized look indoors and outdoors.

### LENSES

Lenses also come in a variety of colors, coatings and tints and adding a different lens color can increase the style factor of any pair of eyeglasses. Transitions lenses are available in three distinct colors—gray, brown and graphite green—that can complement different frame styles as well as enhance the visual experience. A great way to create a unique look is to pair a Transitions® XTRActive® or Transitions® Drivewear® lens with a mirror coating. A flash-mirror coating will complement the different levels of tint offered by Transitions lenses.

### GET SOCIAL

Consumers often look to social media for style inspiration and tips. Providing resources for your customers to connect with their patients via social channels will encourage them to think more about lenses and style.

### STYLE THE OFFICE

Your customers should make sure their patients are encouraged to browse and explore their store by creating a clean, modern and interactive environment. One tip to share: Modernize display cases to enhance the style aspect of each frame. Implementing digital displays can also create a more modern look. Overall, encourage customers to make lens choice a conversation from the beginning.

### ACCESS THE STYLE MATERIALS

Launched during Academy and new for 2017, the Transitions® Connect program is where you can get access to all of the best resources from Transitions. The new style materials are all available for members to access, download and share at [TransitionsConnect.com](http://TransitionsConnect.com). As a connected representative you'll also enjoy fast-track priority access to other marketing and education tools, point-of-sale materials and easy online ordering as well as demo tools and free fits, and exclusive promotion programs designed specifically for connected representatives.

It all adds up to growth and success, for you and your accounts. ■

*Rose Harris is Associate Director of Professional Relations at Transitions Optical. For more information, contact her at: [rharris@transitions.com](mailto:rharris@transitions.com).*

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# How Will 3D Printing of Lenses Impact Labs?

By BRIAN P. DUNLEAVY

**I**t's too soon to say whether or not 3D printing of spectacle lenses will revolutionize lens processing as we know it, but the technology is no longer some pie-in-the-sky concept. It has officially arrived in the United States.

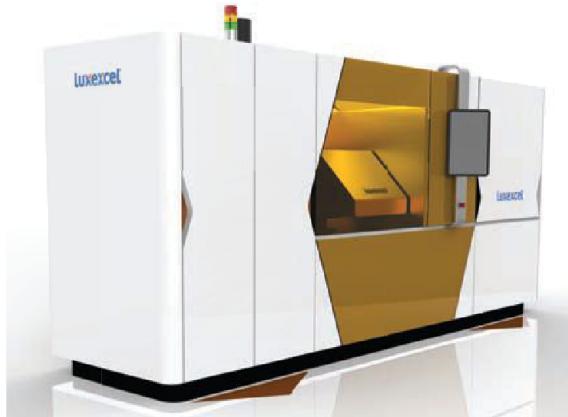
On November 1st, Winston-Salem, NC-based IFB Solutions went online with the new 3D printing platform developed by Belgian firm Luxexcel. The technology has been used in other fields for decades, and has been behind significant innovations in medical imaging, among other specialties. However, it is believed that Luxexcel's system at IFB will be the first to commercialize the 3D printing of ophthalmic lenses.

"We absolutely view 3D printing as breakthrough technology in the industry," Dan Kelly, chief operating officer for IFB Solutions, told *LABTALK*. "The ability to print specialty lenses with this technology will reduce the delivery time from weeks to hours. And, it can also reduce the thickness of the lenses which will reduce weight and make them cosmetically more appealing."

IFB processes more than 1,000 lens pairs per day, with many of them in the category of "specialty jobs," including slab offs, with the U.S. Department of Veterans Affairs as one of its biggest clients. According to Guido Groet, chief commercial officer of Luxexcel, this makes the lab a perfect fit for 3D printing technology. At present, Groet said, Luxexcel has focused its efforts—at least in the U.S. market—on developing its "Vision Platform" for use in the processing of specialty lenses quickly, accurately, efficiently and cost-effectively. It has made a conscious decision, he added, to stay on the sidelines of the "high-end and high-volume" market segments, at least initially. "We will be focused on producing lenses for those individuals with more complex vision challenges," Kelly noted.

From a processing perspective, the Luxexcel Vision Platform is essentially designed to replace several pieces of conventional lens processing equipment, including surfacing generators, blockers, tapers and polishers. It consists of industrial grade optical 3D-printers, lens-design software and workflow integration tools, which enable the production of ophthalmic lenses that meet all industry standards.

"With 3D printing technology, we can design and produce



*Luxexcel's Vision Platform 3D ophthalmic lens printing system, which has been installed in a U.S. lab, IFB, for the first time.*

specialty lens designs that more effectively address patient needs for vocational, lifestyle or special prescription requirements that cannot be produced with existing production technologies available today," said Michael Walach, President, Quest Vision Care Specialty Lab. "The benefits are enormous for the industry as well as for the planet, [because there is] virtually no waste. Of course, at this time, the 3D technology is in diapers, barely crawling. I can't wait to see where it will take us when it begins to walk or gallop. I believe that the Luxexcel 3D lens printing technology will not inhibit but, to the contrary, enhance and inspire lens designers' creativity."

IFB, which is the largest employer of individuals who are blind or visually impaired in the U.S., plans to have individuals who are blind or visually impaired operate the platform, for which it is paying on a per-use basis. The lab has been working with Luxexcel for more than a year and a half in beta-testing the technology and the lenses it produces. According to Kelly, Luxexcel staff were on-site at IFB starting in mid-September, training technicians and overseeing the install.

"We want to be early adopters for three key reasons," Kelly said. "First, we fully believe in the capability [of 3D printing technology] to transform this industry now and in the years to come. Second, as one of the largest independent labs in the country, it is a competitive advantage for us to be on the front edge of this emerging technology. And third, the technology is very well suited to our current business... and meeting rising demand for specialty lenses." ■

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