Summary of Findings

- Eight of the nine sources who commented expect IPG Photonics Corp. (IPGP) to maintain or expand its leading position in the fiber laser industry for at least the next six to 12 months.
- IPG’s success stems from its early-to-market position, high-quality products, superior technology and vertically integrated business model.
- Pricing is not a major driver for companies adding or expanding laser technology into their manufacturing process. Selecting the right tool for the job is much more important. Still, one source said GSI Group Inc. (GSIG) has been lowering its prices and could take share from IPG.
- Competitors will need some time to reach the level of IPG’s quality and technology. Once this is achieved, IPG’s share is expected to be eroded by Trumpf GmbH, GSI, Coherent Inc. (COHR), Rofin-Sinar Technologies Inc. (RSTI) and SPI Lasers UK Ltd.
- IPG’s business model of producing all its own parts, including diodes for its lasers, is considered a competitive advantage. However, Trumpf and Rofin also are vertically integrated and are expected to offer tough competition in the future.
- Two systems integrators expressed concern that IPG’s recent purchase of JP Sercel Associates, a laser VAR to the fine-processing market, could place IPG in direct competition with its VAR customers for end users.

Silo Summaries

1) SYSTEMS INTEGRATORS
Four of these five sources expect IPG to maintain or grow its market share during the next six months. Pricing is not a factor for most customers; therefore, discounting is limited. The dissenting source said IPG will lose share to GSI, which has reduced its prices to more competitive levels. Two VARS said IPG’s recent move into the integration side of the laser business could alienate its current customers and eventually result in lost business. One OEM disagreed, saying IPG’s recent purchases were of niche players. Trumpf, Rofin, GSI and SPI represent IPG’s main competition.

2) INDUSTRY SPECIALISTS
These three sources do not expect IPG’s market share to erode in the next six to 12 months. Competition is increasing and eventually could erode some of IPG’s share and margins, but one source said competitors face an uphill battle in matching IPG’s quality and technology. Until then, the source said IPG’s margins are secure. Discounts are not a major sales driver.

3) COMPETITORS
Both sources expect industry margins to hold, and one expects IPG to maintain its market share during the next six months. Although competition will reduce prices while encouraging innovation, one source said price takes a backseat to efficiency and problem solving in end users’ laser system choices. Unseating an incumbent company is not an easy task because of the long sales cycles. Companies like Trumpf and Coherent represent IPG’s primary competition.

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Research Question:
Are large, industrial fiber laser manufacturers eroding IPG Photonics’ market share and margins?
IPG Photonics Corp.

Background
Blueshift’s initial research in early August revealed that IPG Photonics’ market share growth would continue but could be slowed by large, well-known international companies offering their own fiber laser solutions, such as Rofin-Sinar Technologies, Rofin-Sinar’s Nufern, Fraunhofer-Gesellschaft, Trumpf and JDS Uniphase Corp. (JDSU). Increased competition also could lead to a reduced margins for IPG.

CURRENT RESEARCH
In this next study, Blueshift assessed whether increased competition was leading to less share and lower margins for IPG Photonics. We employed our pattern mining approach to establish sources in four independent silos, comprising 10 primary sources (including one repeat source) and three relevant secondary sources focused on the industrial laser industry:

1) Systems integrators, VARs and OEMs (5)
2) Industry specialists (3)
3) IPG competitors (2)
4) Secondary sources (3)

Next Steps
Blueshift will continue to monitor the fiber laser market’s increasing competition and the related effects on IPG’s market share and margins. We also will research Europe’s declining capital budgets and their influence on the fiber laser market and on IPG specifically, for which 30% - 38% of revenue stems from Europe. Finally, we will determine if IPG’s purchase of VARs will reshape its sales and its relationships with VAR clients.

Silos

1) SYSTEMS INTEGRATORS, VARS AND OEMS
Four of these five sources expect IPG to maintain or grow its market share during the next six months. Pricing is not a factor for most customers; therefore, discounting is limited. The dissenting source said IPG will lose share to GSI, which has reduced its prices to more competitive levels. Two VARs said IPG’s recent move into the integration side of the laser business could alienate its current customers and eventually result in lost business. One OEM disagreed, saying IPG’s recent purchases were of niche players. Trumpf, Rofin, GSI and SPI represent IPG’s main competition.

President of a laser manufacturing company using IPG products
IPG is the recognized leader and does not need to compete on price; its market position is firm for the near term. The source’s secondary laser provider offers similar pricing. The fiber laser makers themselves are less likely to compete on price than are the finished equipment manufacturers like Mazak Optronics Corp. and Bystronic Inc.

“There’s competition, but no one’s going to topple IPG in a hurry. Not in the near term anyway.”
“We have two providers right now, and we buy a few more from one than the other.”
“It’s pretty important to have a secondary provider, not for lower price but for the right tool.”
“We don’t go by pricing. Usually the laser is a small portion of the product cost itself. If you have a task at hand, you pick the best tool for it rather than go with the cheapest.”
“Usually the two are pretty close, not far off base at all. I’m not seeing either of them getting aggressive to win us over. It won’t work. The finished machine makers, the Mazaks, are more inclined to compete on price.”

President
Laser Manufacturing Company
“I expect those makers will start a bit of a price war if they haven’t already. I just haven’t seen it.”

“I look at what went on with sealed CO₂ lasers [in terms of competition]. Once upon a time they were new and more reliable and maintenance-free, and that’s the stage I see fiber lasers in. They’ll become more reliable than flash-lamp-driven technologies. The way fiber generates that light is better.”

**Vice president of sales for a die-cutting, printing and laser systems company that uses IPG lasers**

IPG is the clear fiber laser leader and will expand its market share during the next six months. IPG’s VAR and OEM relationships will not be affected by its recent purchase of JP Sercel, which is a small niche player. IPG continues to offer VARs and OEMs strong support, on-time delivery and a quality product. More competitors in the low-power fiber laser field are getting into the market, but the source is not interested in any of them. Small laser manufacturers are too risky in terms of product quality and the ability to stay in business. The OEM is similarly indifferent to high-power giants Trumpf and Rofin because IPG’s product is superior and Rofin’s prices are too high.

- “In terms of market share, I think IPG is going to keep growing. They’ve developed lasers with different wavelengths and pulse strengths that work for different applications in the electronics industry, welding and heat treating. They have really taken over the industry and are going to continue to grab market share in the industrial sphere.”
- “We’ve worked with IPG since they came on the market, and I’ve been in the laser industry for 22 years so I’m very familiar with all the players out there. IPG is ahead of all the competition. There are companies similar to IPG, but no one is as good. For example, a company wanted to sell us [a laser product] that is water-cooled, and along with that you need a $10,000 system for water cooling. A lot of companies don’t want to mess with that. Meanwhile, IPG has one that is air-cooled, so you don’t need those extras. Technologically, it is just better.”
- “IPG fiber laser is more of a solid-state device, unlike those of some of the competitors. That means the maintenance on it is about as low as you can get. With the others, you need a skilled maintenance person on staff, and every time he opens the cabinet, they have to worry that he’s going to break something.”
- “We have no interest in a secondary fiber laser manufacturer. We are very satisfied with IPG.”
- “People were anticipating [IPG’s acquisition of JP Sercel]. IPG had amassed a lot of cash, and earlier they had bought a German systems integrator. The purchase was of small niche players, so I don’t think it’s going to affect most OEMs. Really, the only competitors in the high-power market are Trumpf—which makes disc lasers—and Rofin, and the latter’s product is more expensive. I imagine they might have one or two customers [defect], but I don’t think it will make much of a difference.”
- “There are a lot of small players creeping in at the lower-power level—a whole pile of other fiber laser suppliers. But they are likely more expensive because they’re not creating at the volume that IPG does. A small company just can’t do that. And even if they were cheaper, it’s still risky. Fiber is like a small town, and there is not an incentive to buy from a small manufacturer. It’s dangerous: You need to be able to trust the quality of the product, and you want to buy from someone you know is going to be around.”
- “The weaknesses of competitors includes power level. IPG can make a 20-kilowatt laser; I believe Rofin just goes to 3 kW. The only company that’s a competitor in the high-power market is Trumpf, a German company that makes disc lasers. They are selling more units in the States [than in the past]. They offer total systems, so some companies who buy the whole system get some of their lasers that way.”

**President of a custom manufacturer of metal fabrication machinery**

IPG is in no danger of losing its market position, but this custom manufacturer is less concerned with the laser technology than with the equipment and buys from Amada America Inc., which uses JDS technology. Amada is especially competitive in service. The high capacity/output of high-powered lasers has created a competitive edge for U.S. manufacturers that can deliver quickly and with low or no shipping costs. The source expects start-ups to create smaller-
footprint, lower-cost lasers in the near term, which will be best suited to small shops. The housing and the alternative energy industries are poised to boom, and both will generate demand for lasers.

- IPG will hold steady at least, for the next 12 months anyway. This industry’s not going away.”
- “We’re an Amada house and bought a lot of their first-off units. We’ve been a customer of theirs a long time, and they’ve got JDS technology inside.”
- “I didn’t choose JDS. It’s just the mere fact that Amada chose them for their high-powered lasers.”
- “I don’t care that it’s JDS or IPG; I care that it’s Amada. Each day a laser is down, you lose money, and the way things are now, you can’t afford to annoy one customer. Amada has a great belief in customer service; if a machine goes down, they’re here in half a day at the latest. I’ve had competitors close their doors because a laser maker no longer supports the machine. Amada supports its 20-year-old machines.”
- “I don’t see any discounts. If anything, they’re more aggressive on firm pricing. There’s not the long lines to buy technology. People are waiting to see, with the economy. And there are much better and easier machines available now. With fiber lasers there are no lenses to burn out; it’s more user-friendly and faster.”
- “The customers right now are slicing and dicing that bottom line. They’ll leave you in the dust for a quarter.”
- “I expect the Mazaks, for example, to make better use of this technology.”
- “[High-power fiber lasers] have leveled the playing field. The machine shops in our area are doing well against Asia because the more you can get done for the same price, the more advantage we have. With these machines, you can put in a block of aluminum and close the door and push a button, and it’s as close to a finished product as you possibly can be. So now you’ve got a machine in [our region] competing with one in China with the same cutting time and no delivery. That’s where $4.50 in shipping helps us.”
- “There’s going to be an increase in business, definitely. My friends in the housing industry are telling me they’re looking forward to a strong couple of years, and a lot of things are going to be needed like appliances and ductwork, which will use up the manufacturing capacity. They’ll use fiber optic lasers to cut stainless steel.”
- “Alternative energy is going to boom too, which is great for the … market. We’ll see a lot of work over the next two years that’s perfect for lasers.”
- “One thing the manufacturers also do is figure out some way to finance these machines because right now bankers aren’t lending money.”

> **President of a Massachusetts-based industrial laser company**

IPG eventually may lose market share and primarily to Trumpf, which is making a good case for disc lasers and, like IPG and Rofin, is vertically integrated in terms of diode manufacturing. GSI and Rofin also could bite into IPG’s pie over time. However, Rofin seems stuck in an R&D phase. Also, quality has become more important than price among end users, specifically in China. That could translate into unfounded IPG sales if China waits for these other companies to catch up. Secondary sources are not necessary from an end-user standpoint.

- “There’s no question: IPG is the leader.”
- “IPG does have a cost that is difficult for competitors to match. Trumpf is the exception. Trumpf has managed to position disc lasers as a fiber laser equivalent. … It has some attraction in terms of energy efficiency and beam quality, so Trumpf is who IPG is looking at as serious competition.”
- “IPG will have to lose market share at some point. It may maintain market share now, but it may lose as these other folks … like GSI [start to manufacture in the United States, China and the United Kingdom].”
- “The market for fiber lasers will increase over the next six months. There are many new applications of fiber lasers, and in terms of the adoption curve, more people are willing to invest and that will make [overall] prices continue to come down, albeit slowly. … IPG will react to it decently. They usually do.”

> **Rofin and Trumpf have their own diode manufacturing. Their volumes of lasers can increase [market share], and they can realize the costs benefits like IPG but I don’t know how long that is going to take. IPG is in a really enviable position from that standpoint.**

**President, Massachusetts-based Industrial Laser Company**
“Rofin and Trumpf have their own diode manufacturing. Their volumes of lasers can increase [market share], and they can realize the costs benefits like IPG but I don’t know how long that is going to take. IPG is in a really enviable position from that standpoint.”

“There’s a need for more competition. Rofin and GSI have high-quality lasers, and Trumpf has the disc laser. … Rofin and GSI will be successful with their products because they have a history of [successful] execution … in their other product areas. … They [also] have good R&D.”

“Rofin is a big company with a lot of marketing, but they are way behind in terms of the product. I don’t know how long it will take them to catch up, but it may be awhile.”

“Then you have the Chinese Wuhan [Golden Laser Manufacturing Co.] that’s claimed it will introduce fiber lasers. … It’s not clear at what power level. It may be at 2 kW or as high as 4 kW.”

“Why IPG is investing in JPSA and the equipment side is a mystery to me. … Frankly, I don’t think it’s a wise move. They can end up alienating their customers [which will] view IPG as a real competitor. Margins on machines are not as good as they are on the laser source component. It’s a different sale too.”

“They are just looking to grow the business [with J P Sercel]. That demand is already being fulfilled. There are many, many suppliers of machining in the laser business … so it’s not clear what they are doing.”

“There is one technology that should be watched: That’s direct diode technology. With a fiber laser you have diodes … that excite the active medium that generate the laser beam, but … there’s at least one company, TeraDiode [Inc.] in Massachusetts, that is combining these diodes to create a beam that has efficient quality for cutting like a fiber laser … but it also has twice the electrical efficiency. IPG has invested in some R&D in direct diodes.”

“Fiber laser technology has an appealing story that’s woven around it that has caused it to gain market share much faster than most people anticipated. … The demand for fiber lasers in sheet fabricating equipment has grown quite fast … even in China, where historically the capital cost is the main driver in a purchasing decision.”

“The Chinese are becoming more quality-conscious than price-conscious. … They are becoming a lot like Western manufacturers in taking the wait-and-see approach. They know … the technology is not easy to produce, and that it will take some time for a good product.”

“There has definitely been a slowdown in capital expenditure purchases in Europe and, for that matter, in the U.S. and other parts of the world. Certainly China has seen a reduction as well … and that has impacted everything: fiber lasers, carbon lasers, etc. … but it hasn’t impeded R&D. R&D has progressed tremendously over the past four years to help prepare companies to debut products when the market’s right.”

Vice president of sales and marketing for a custom laser systems integrator

GSI has drastically reduced its pricing within the last two months, effectively drawing this source’s business away from IPG. GSI and IPG prices once differed by as much as 15%, but GSI has closed that gap to a 5% difference, particularly for its 200-kW and 300-kW lasers, and air-coolant and water-coolant lasers. That, along with IPG’s and GSI’s similar beam qualities and comparative competition from SPI, deterred this source from recommending one company over another. IPG is at risk of losing share from integrators if it is indeed looking to expand into their market.

“We don’t partner with one particular company. … We try not to show any personal bias toward a laser company. … As far as fiber lasers, most of the machines we [customize] are stent and steel cutting, 200 to 300 [watt] fiber lasers and the companies we work with, specifically for that, are GSI, IPG or SPI. These are the three main guys. Eight out of 10 times we use them.”

“Between these three [IPG, GSI and SPI] it becomes difficult to recommend one over the other.”

IPG and GSI are very similar when it comes to beam quality … and the prices are very close. IPG is a big player. They have a niche and manufacture [in-house]. Because of that, we have worked with them a lot but … [competitors] have effectively worked on their prices to bring them down … especially a company like GSI, whose lasers are a lot like IPG’s.

VP of Sales & Marketing
Custom Laser Systems Integrator
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“GSI was one company that was priced competitively higher to IPG and SPI, but GSI has really reduced their prices in the last two months.”

“There used to be a 15% pricing difference, and now they are very comparative ... a 5% difference. GSI had some reasons. ... They eventually found another supplier.”

“It boils down for us which laser is the easiest to use and to integrate.”

“It’s very difficult to compete with the Indian and Chinese markets because they have lasers—not as good but pretty up there—to compete ... and they’re very low on price compared to what we offer.”

“Motion control, beam delivery and a bunch of components [go into integration pricing]. A laser, frankly, is a quarter of the price of the whole system. ... IPG is already priced low, so I know there is only so much of a discount they can offer to help us in [the Chinese and Indian] markets.”

“With IPG ... we have not felt the need to expect discounts from them.”

“It’s very important to me that I am working with a company that has no conflict of interest with my business. There’s been talk that IPG is going to be expanding not only as a supplier, but they may also become integrators. I hear they are extremely interested in expanding their business scope into laser systems integration.”

“Any opportunistic laser company will see [IPG’s integrator expansion] as a serving point and will ... pitch their lasers to these other integrators.”

2) INDUSTRY SPECIALISTS

These three sources do not expect IPG’s market share to erode in the next six to 12 months. Competition is increasing and eventually could erode some of IPG’s share and margins, but one source said competitors face an uphill battle in matching IPG’s quality and technology. Until then, the source said IPG’s margins are secure. Discounts are not a major sales driver.

Expert on the subject of high-energy lasers, Los Angeles area; repeat source

European suppliers are looking to the U.S. market in terms of fiber laser manufacturing as investment capital in Europe continues to slow. This continues to jockey IPG to a dominant position. Still, Rofin-Sinar is a highly aggressive competitor. IPG stands to lose long-term market share if another company manages to vertically integrate control of its own pump diodes—and thereby lower prices—to IPG’s level. Until then, IPG will dominate most industries with the exception of the defense sector, where lowest prices do not always win government contracts geared toward fiber laser weaponry.

“Investment capital is a little hard to lay your hands on today. Anyone is going to have a hard time catching up to IPG. ... But that depends on how the world economy unfolds. Right now manufacturing growth is sliding off across Europe, so that’s going to drive suppliers to look to the American market ... which, albeit slow, is doing better than most. [But] that’s not really good news for anybody [in the fiber laser market].”

“The reason why IPG has the advantage is because they make their own pump diode. When someone else gets to the point that they control their own pump diodes ... they’ll be able to drive costs down. It’s not hard. It’s like if you build your engine, then you can keep you car cheaper to the customer.”
IPG Photonics Corp.

- “The drive for fiber lasers has always been to get it down to a dollar a watt. That’s the goal every company is trying to do right now.”
- “The more control a company has of the parts that go into the laser, the better control [that company] will have of the price [and the overall market].”
- “Rofin-Sinar is an aggressive company. They bought Nufern, so they have an excellent source of fiber in their favor.”
- “DOD-directed [Department of Defense] energy technology is a niche business. It’s a pimple on industrial business. It really has no leverage ... on corporate [market] performance. [However, any potential market effect] all depends on what happens Jan. 1—whether [Congress’ sequestration process] is going to overhaul half a [b]illion dollars from the defense budget.”

Photons engineer and university professor, Florida

IPG’s ability to secure intellectual property and serve the high-power industry niche, combined with the relatively low cost of engineering and producing such products, helps keep its gross profit margins high compared with other, more specialty-oriented competitors. Overall, the market itself is likely to remain as it is for the next six to 12 months. That said, competition is up within the fiber laser market, and IPG’s share could be slowly eroded by large companies and, perhaps more so, smaller companies with competitive technology, such as IMRA America Inc., NP Photonics Inc., Raydiance Inc. and Leoni AG’s (ETR:LEO) FiberTech.

- “IPG is ... within a particular niche, which is high-power. Although I don’t want to say it’s a simple area to work in ... it doesn’t require any terrific engineering in making the lasers operational in other areas. ... High power is just about a raw photon. ... They’re also locking up intellectual property, and that means there are fewer players in the same market. The money that goes into making it is also not that big, which is why their gross profit is so large.”
- “Other companies like IMRA have made themselves known by making ultrafast lasers. ... There was a patent lawsuit between IPG and IMRA not too long ago. ... IMRA lost.”
- “IPG has built a reasonably strong patent portfolio and, as a result, it can make it difficult for other companies ... to move into the fiber laser space.”
- “In the next six to 12 months, I would expect the market for fiber laser to nominally be the same. I don’t see anything happening within the industry that is going to radically change the demand of fiber lasers, nor do I see anything that would usurp the technology and replace the nominal growth. ... Many companies are buying lasers that have scientific application and dollars coming from research or defense. How those budgets change plays an important role. ... You also have to take a look at the industrial organizations buying the technology. ... That growth is very modest.”
- “The fiber laser market is certainly getting much more competitive. The reason is that the lasers are easy to make and easy to package. Years and years ago, you really needed to have a lot of technical ability to build lasers that were robust and durable. ... Fiber lasers just because of the inherent nature of the fiber itself—the glass fiber is in fact the laser itself—means all of the mechanical issues to operate in the fiber commercial area have gone away. Companies like Nufern are developing technology.”
- “There is a conglomeration of other, smaller companies out there that are competitive. ... These are some of the companies that are literally developing the next generation or the newest technology that is going to be employed in these fiber lasers. Then you have the traditional fiber laser companies, like Coherent and [Newport Corp.’s/NEWP] Spectra-Physics. They’re the older laser companies, but what sort of fiber-based laser products they are developing is unclear. That may be because there are IP issues that IPG has locked in.”
- “German companies like Trumpf use lasers pretty extensively toward automobile manufacturing and any other industrial manufacturers that can cut pieces of metal or for welding. That tends to be a big [market] driver. The other area [of demand] is the medical arena.”
- “Fiber lasers will generally be the preferred laser type for most commercial applications. Why? This is because fiber lasers can be sort of coiled so that their physical footprint or size can be small and compact. That’s No. 1.

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Photons Engineer & University Professor
No 2: The mechanism for exciting the laser by using a semiconductor pump can be reasonably efficient. ... The energy consumption can be relatively low. And No. 3: The multiplicity of ways to get the fiber laser to operate ... will be very important in the future."

Sales director for an automotive, aerospace and medical industries manufacturer
This company has not purchased directly from IPG, but acknowledges it as the leader in fiber laser technology, with no near-second challenger. Custom manufacturers will buy based on end-user requirements and reducing the cost of jobs over time. Discounting will not trump the right tool for the work and is more likely from finished equipment makers.

- “The brands of equipment we buy are Bystronic and Trumpf. They’re proven to us, and when you spend a couple of million dollars, you want to stay with the technology leaders. Mazak makes a nice laser as well; that’s an up-and-coming brand.”
- “I’ve not been in a position to buy directly from IPG. But we go to tool shows once a year with the owner and some engineers to see what’s newest. I can only say I hear of competition to IPG. I don’t see anyone taking anything away from IPG. We’ll see at FabTech in a few weeks if that’s changed, but I don’t think so.”
- “Sure, there’s some discounting going on, by guys like Bystronic and Trumpf. Nothing too serious, and nothing that would make or break a deal.”
- “We do a lot of research before we buy something, and we buy the right one. That’s something you’ll find in this industry. Saving money doesn’t necessarily save you money if it isn’t the right tool.”
- “Custom manufacturers will also buy based on what the customers are asking for. There again we’re motivated by the right tool for the job.”
- “Not everyone is willing to invest this kind of money, but it’s our niche. Normally on the laser work we can offer that we’re reducing machining costs on parts, which reduces the customer costs tremendously.”

3) IPG COMPETITORS
Both sources expect industry margins to hold, and one expects IPG to maintain its market share during the next six months. Although competition will reduce prices while encouraging innovation, one source said price takes a backseat to efficiency and problem solving in end users’ laser system choices. Unseating an incumbent company is not an easy task because of the long sales cycles. Companies like Trumpf and Coherent represent IPG’s primary competition.

Marketing director for a California-based company manufacturing ultrafast laser technology
IPG’s quality products and widespread brand recognition are expected to help sustain its existing share and margins, at least within the next six months. Competitors’ aggressive prices are not guaranteed to reduce IPG’s margins because end users—at least in the precision manufacturing world—are more concerned about efficiency. This is where IPG’s recent purchase of JP Sercel could help its market share. End users prefer to have a secondary source as a backup plan if primary sources encounter supplier issues. Primary and secondary suppliers’ products must be interchangeable.

- “The reason why IPG commands big markets is due to reliability. They have the [trusted] brand and the name. How can they keep up their margins? ... They just have to keep building better [products]. That’s been their bread and butter: continuous cutting and heavy equipment.”
- “IPG’s major competition is the Trumpfs and Coherents of the world. They offer a broad range of lasers to people who can [in turn] create systems and create solutions.”
- “Secondary sources are desirable to the extent [the laser products] are interchangeable ... if it’s just a matter of a laser and the ability to stick into another systems for it to work. ... Only then would it be desirable to have multiple sources because [these products] are not the easiest things to make.”
- “You look at IPG and you can see the market demand is growing. ... I don’t know ... whether they are unseating other technologies, but the pricing always depends on value. We don’t really play into a commoditized market. We often find our customers are more

The reason why IPG commands big markets is due to reliability. They have the [trusted] brand and the name. How can they keep up their margins? ... They just have to keep building better [products]. That’s been their bread and butter: continuous cutting and heavy equipment.

Marketing Director
Ultrafast Laser Technology Manufacturer
concerned with whether we can solve their problems because they are pushing the limits [of their tools]."

- "Pricing has to have an adequate ROI [in this business], and it’s not the first question our customers ask."
- "We are finding with those customers we deal with that just fulfilling them with a laser doesn’t always help them. They are not experts with lasers, so they are looking for companies, like us, that are offering [laser-based, precision product] solutions. To that extent, IPG doesn’t currently offer this."
- "I don’t see that particular purchase [of JP Sercel] as threat competition for us, but ... it’s something to be wary about as we build our own brand."
- "It’s not easy to win customers because sales cycles are long and, for manufacturers, to get a complete line going and to switch customers from technology to technology is a hard sell."
- "We have a lot of business overseas in Europe and Asia."
- "There are reports that say manufacturing is improving, domestic manufacturing in particular. ... The National Academies [Press] just came out with a new report [on laser and photonics use] and are ... currently urging Congress to create a more concerted effort in fiber ... technology as a way to improve U.S. manufacturing [create products] that other companies cannot and then export the products. ... In Europe, there is more government involvement in this industry; they subsidize a lot of research. ... A lot of laser technology innovations are coming out of Germany and, to a lesser degree, France and Switzerland."

Director of a global research institute subsidiary, based in Germany
This company wants more competition to enter the fiber laser market because it benefits both research and manufacturing relationships. More competition also will level the playing field in terms of price and the overall promotion of the industry.

- "More competition among the manufacturers of fiber lasers means better prices through cost reductions and/or new [and] improved laser concepts, which will help to further spread laser technology within the manufacturing industry."
- "The margins of the laser manufacturers must be still high; otherwise, there would not be new players. Since [our company] is working for both end users and the laser machine builders, it will be definitely good for our business."

Secondary Sources
Our first secondary source discussed IPG’s acquisition of JP Sercel as an attempt to play in the fine-processing market. The acquisition will allow IPG to directly sell to end users and may alienate VARs that currently are IPG customers. Also, IPG purchased new manufacturing equipment that will increase its diode output. Finally, the fiber laser market is expected to grow further as products become more efficient and produce fewer emissions.

Sept. 4 article from Industrial Laser Solutions for Manufacturers
IPG has purchased JP Sercel Associates, which is expected to expand its offering in the fine-processing, precision laser cutting, drilling, and micromachining of nonmetals market. The deal will add $4 million to IPG’s revenues and provide access to the $800 million worldwide fine-processing market. The acquisition also will give IPG a more direct access to end users, which could create some challenges with its current VAR customers.

- "IPG Photonics has agreed to acquire JP Sercel Associates (JPSA) for an undisclosed amount. The deal will expand IPG’s offerings of laser systems in fine-processing, precision laser cutting, drilling, and micromachining of nonmetals (glass, semiconductors, ceramics, etc.)."
- "JPSA specializes in advanced laser micromachining, micro cutting, scribing and laser lift-off for semiconductors, microfluidics, LEDs, thin-film solar panels, micro-electromechanical systems (MEMS), biomedical technology, and industrial automation applications."
IPG Photonics Corp.

- “The combination of JPSA’s specialized laser systems and the UV and short-pulse fiber lasers that IPG is developing now should allow us to deepen our penetration of the $800 million fine-processing market,” [said IPG CEO Valentin Gapontsev]. IPG’s extensive sales and service network will also help JPSA expand its global reach, he added. The deal will add approximately $4M to IPG’s revenues and subtract roughly $0.01–$0.02 from earnings/share for the remainder of 2012, but will be accretive to earnings in 2013.
- “Adding JPSA also will give IPG a more direct pipeline to sell to end users, particularly in Asian markets, which brings up an interesting paradox—acquiring a systems integrator might seem to negate IPG’s public promise to not compete directly with laser system OEM customers.”

Aug. 28 Semiconductor Today article
IPG has invested in new equipment to expand its production of laser diodes in order to meet increased demand.
- “Veeco Instruments Inc of Plainview, NY, USA has completed installation of a GEN2000 Edge molecular beam epitaxy (MBE) system at IPG Photonics Corp of Oxford, MA.”
- “Following IPG’s prior purchases of three GEN200 systems, the new GEN2000 system was ordered to expand its production of gallium arsenide (GaAs)-based lasers.”
- “It made sense to scale-up to a higher-capacity GEN2000 system to accommodate our needs for increased throughput,” comments Dr Alex Ovtchinnikov, VP-Components at IPG.”

Aug. 13 Technorati article
New innovations in fiber lasers have lead to a 300% production increase in the last two years. Improved cutting abilities and reduced CO2 emissions are behind the surge in the use of fiber lasers.
- “Laser technology has been growing by leaps and bounds in recent years, but the industry received a particularly exciting surge recently with new innovations in fiber laser technology. This is an industrial laser solution for manufacturers that is pushing the growth of solid-state laser cutting machines over the less-efficient CO2 lasers. In the last two years, production of these machines rose 300%.”
- “This is a major innovation for the manufacturing industry and already many builders are abandoning older units and adopting solid-state machines, which produce far less CO2 emissions and dramatically improve cutting abilities. The efficiency of the fiber laser is expected to benefit businesses in a wide variety of sectors, including material processing, telecommunications, and shipping logistics.”

Additional research by Dann Maurno, Diana Hembree and Marissa Yaremich

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