

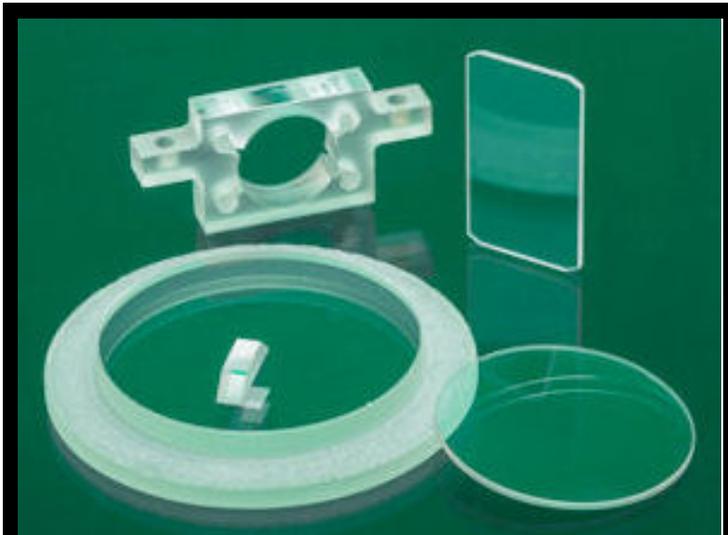
a touch of Glass

Brought to you by your glass experts at **IRD** glass

September 2015

Subscriber,

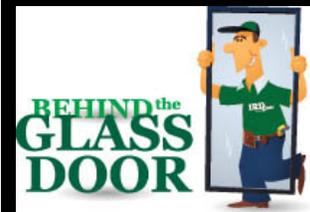
This month we're excited to announce new capabilities at our Alexandria, MN division, IRD Ceramics!! Take note and let us know how we can help you and your company!



Impressive new capabilities in processing sapphire, spinel, and other super-hard materials are now available at IRD Ceramics.

Exciting, new precision optical capabilities at IRD Ceramics

At IRD Ceramics, we're excited to roll out our new, state-of-the-art double-sided lap and polish system. This impressive new technology is already showing significant



**Michelle deCastro,
IRD's National Sales Manager**



Many of you have met or at least spoken to Michelle deCastro, IRD's new National Sales Manager. We're very pleased to have her on our sales team!

Michelle joined the IRD

increases in capabilities and throughput capacity. Optimized for super-hard materials - sapphire, spinel and zirconia to name a few – this technology is producing very flat, parallel, and smooth plano optics $\varnothing \leq 102\text{mm}$, 0.5 to 5 mm thickness. Typical flatnesses of $\lambda/25$ - $\lambda/5$ wave have also been achieved, with the potential to achieve $\lambda/10$ wave and <5 nm RMS in certain cases. Amazing results have been produced from 76mm x 76mm rectangles, 101mm diameters and much, much smaller. Any shape is available, and IRD Ceramics has had dramatic success manufacturing polished sapphire hemispheres.

Key to IRD Ceramic's new success with this new technology is a single machine that's quickly changed from lapping to polishing, controllable speeds and pressures, and the ability to cool the plates during processing. These key differences offer consistent, reliable and repeatable quality with potential cost savings to customers. Collectively these features, along with the precise needs of your production part, speak solidly for another look and your companies' consideration. Contact John Rutledge at 320-759-2216 or jdr@irdceramics.com for more information or to discuss how our new capabilities may benefit you. IRD Ceramics is ITAR registered, and ISO 9001:2008 certified.



IRD's Open House and Golf Tourney is another great success!

A big thank you to everyone who attended this year's 13th Annual IRD Glass Open House and Golf Tournament! Once again we had a huge turnout for our open house. It was great to see old friends and have the opportunity introduce our facility to those that haven't visited before. Many tours were given throughout the morning offering insight into the capabilities we offer. Later a great lunch buffet was enjoyed before sending the golfers off for the afternoon.

14 teams played some serious (or not) golf in our great Minnesota weather. Narrowly winning First Place honors

team a year ago in August and has since been visiting customers and attending trade shows across the country. She comes to us with a Masters in Glass Science, a BS in Optical Engineering and a BA in Japanese Language. Her experience and can-do attitude have proven to be a great asset. Michelle's a real go-getter. She's attended trade shows from San Jose to New York, and visited customers from Orlando to Vancouver. If you haven't yet had the opportunity to meet her, stop by and introduce yourself at an upcoming show. Michelle has an extensive materials background, lots of answers to your manufacturing concerns and great ideas for manufacturability. She's a great problem solver and asset for discussing your next project! The best ways to reach her are at 914-400-6492 or michelle.decastro@irdglass.com



UPCOMING TRADE SHOWS

was accomplished by Jason Manning and his team IRD Glass machinists. Second Place was stolen by Dirk Kvale and his team from 3M and Honeywell. You know who you are! Todd Anderson and his team from Prima Laserdyne proudly walked away with third place.

Greens fee donations of \$10 per golfer were collected and matched by IRD. A generous donation of \$1,040 was made to the Litchfield Food Shelf. Thank you to everyone for their support and helping to make our event a great success! Mark your calendars to join us next August so you won't miss out on the fun!



News & Updates

• August 2015

IRD Glass is growing and staffing up to meet increased demand. We've added management and engineering personnel and 13 new production floor support people - all to assist with making sure our customers receive the quality and service they deserve. You'll notice the changes and we welcome your feedback! Let us know how we're doing and what we can do for you and your company.

• Early Spring 2015

It's been a busy season for trade shows! IRD exhibited at Photonics West in February. April we were at Am Con, Design of Medical Devices, Aerodef and Ceramics Expo. May found us in San Jose at CLEO. There's still time to catch us though. Look for our upcoming shows in the far right column. Stop by and see us. There's a lot going on at IRD to talk about!

• February 2015

In February IRD celebrates the addition of Gerard Crosby, a key addition to our new product cell.

• October 2014

Installation of our newest Speedfam 16B Double-sided Lapper

• August 2014

WELCOME to Michelle deCastro, IRD Glass' new National Sales Manager! Yay! Please contact Michelle with your glass

IRD Glass will be showing at these events in 2015/2016. Be sure to stop by our new booth to say hi!

**Optifab
Booth 1324
Michelle deCastro
Showing**

October 13th - 15th, 2015
Rochester, NY

**MD&M - Mpls.
Booth 1563
Ron Antos and John
Rutledge Showing**

November 4th - 5, 2015
Minneapolis, MN

**Photonics West
Booth 4025 North Hall**

February 16th - 18th, 2016
San Francisco, CA

The logo for IRD glass, featuring the letters 'IRD' in a bold, green, sans-serif font, with a circular graphic element behind the 'D' that resembles a lens or a sphere. The word 'glass' is written in a smaller, lowercase, green, sans-serif font to the right of 'IRD'.

**CUSTOMER
COMMITMENT**



**WE'RE
HERE WHEN
YOU NEED
HELP MOST!**

needs michelle.decastro@irdglass.com



Laughing My Glass Off!

"Bad day at the course," a guy tells his wife. "Charlie had a heart attack on the third hole."

"That's terrible!" she says.

"You're telling me!" the husband replies. "All day long, it was hit the ball, drag Charlie."

Credit: Kevin Kinney

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