PROTOLABS

DIGITAL QUOTING PLATFORM

WHAT'S CHANGING FOR INJECTION MOLDING?

Enhancements to Quoting, Manufacturing Analysis, and Ordering

Our new digital manufacturing platform is an all-new experience that is more intuitive and modern than its predecessor in nearly every way. The goal? To make quoting and buying parts with us as easy as possibly while further reducing the time it takes to get those parts, and ultimately, products to market.

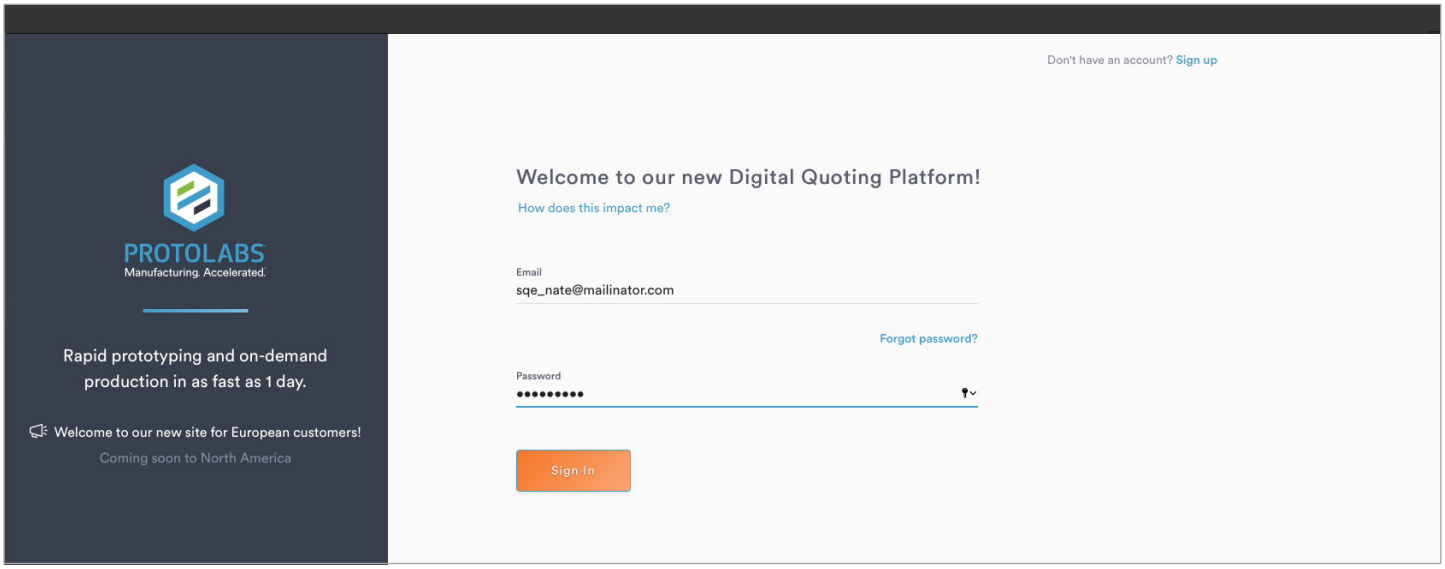
And since change isn't always easy, we want to walk through some of the big differences and enhancements that you'll see when uploading your CAD models, requesting quotes and manufacturing analysis, and ordering parts for **injection molding**. Let's get started.

SIGN IN / SIGN UP

My Account will no longer be available with the launch of our new platform. But don't worry, you'll be able to sign in using your existing email and password. All previously placed orders will be available in **Order History** and quotes placed from 30 days prior to the new platform launching will be visible in **Project 0**. If you have uploaded or ordered previously but hadn't set up a password, you'll be asked to create one at registration. Again, all orders ever placed and all quotes placed from 30 days prior to launch of the new platform will be visible.

When you're signed into Protolabs, you'll find it's a clean and modern interface containing information around material management, including forms for customer-supplied materials. It's easy to search for parts, plus you can organize current and archived projects.

In addition to material management the platform contains options around tool ownership, from basic rights to full ownership of the molds. Tool ownership is a key element in our move toward on-demand manufacturing (ODM), but more on that later!



UPLOAD

As mentioned, in order to upload a CAD file within the new platform it's necessary to have an account at Protolabs, if you don't already have one. Also, any reorders for molded parts from past tools are possible, as long as those tools are still usable.

But what's really useful here is you can now upload multiple parts in a single step. And you can now manage uploads in groups so you can clearly distinguish various parts and their revisions—effectively giving you project management capabilities. You can even share uploads with colleagues, which is part of the **Forward Quote** functionality.

Specific to CAD uploads for injection molded parts, the overmolding and insert molding options are more accessible. Also, mold life is clearly communicated between prototyping and ODM, and there's a clear visualization if you're choosing multi-cavity tooling.

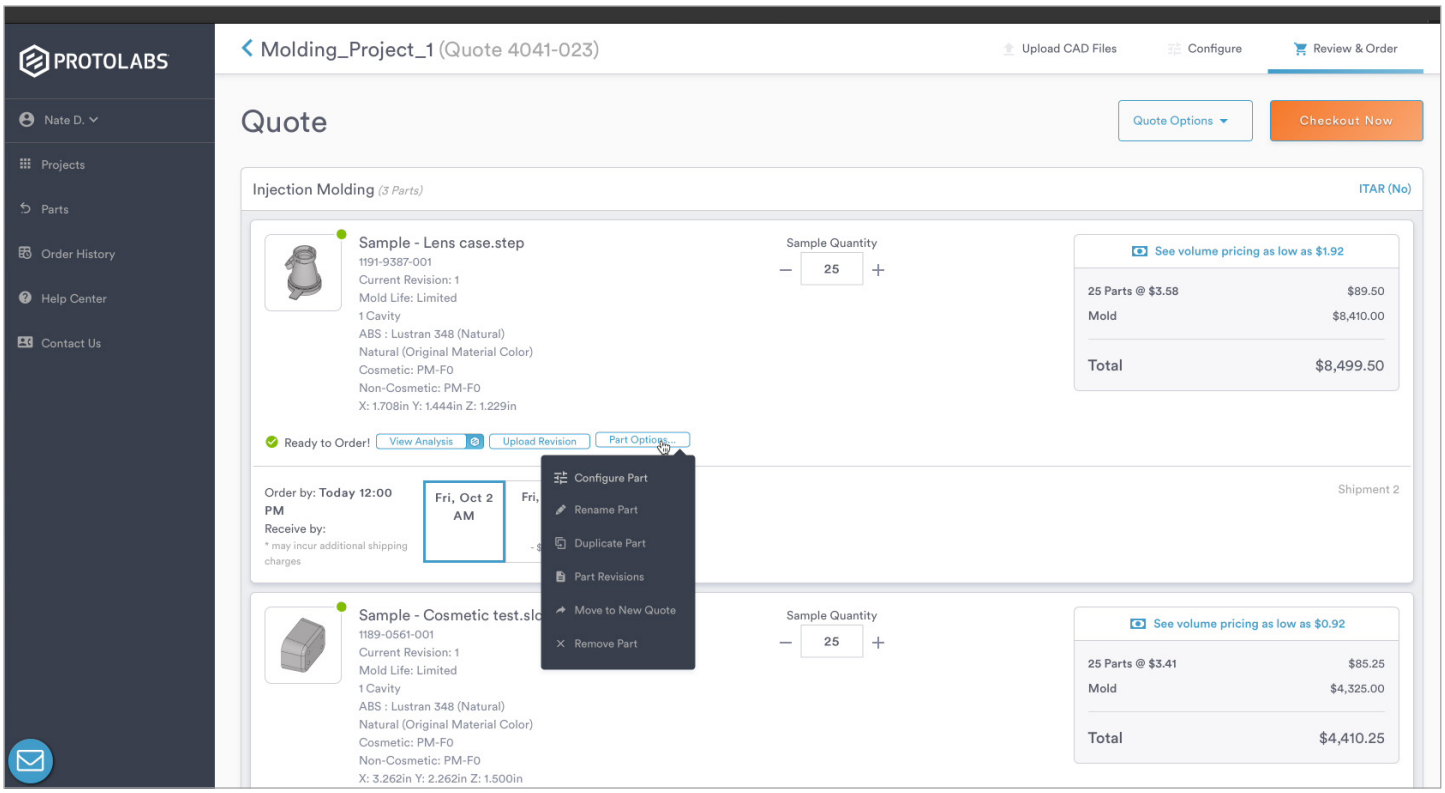
ACCEPTED FILE FORMATS

- IGES (.igs)
- STEP (.stp)
- SolidWorks (.sldprt)
- PTC Creo (.prt)
- Parasolid (.x_t and .x_b)
- ACIS (.sat)
- AutoCAD (.dwg, 3D only)
- Autodesk Inventor (.ipt)
- CATIA (.CatPart)
- Compressed folders (.ZIP) can contain any combination of the above model file types

PART CONFIGURATION

There are a number of new elements within the quote configuration that speed up and simplify the process. For example, it's now possible to rename parts as you go through revisions to the design. You can also easily duplicate your part order should you need it in various colors. This previously had to be done on request, so this really speeds up the process. Also, if there are several part quotes in a project and one is holding up the order, it's possible to remove that part and create a separate order with it. This helps ensure you get all parts created and shipped as quickly as possible, while making use of the batch-quote functionality.

Revision control is easy as everything is tracked and stored, so earlier design versions are accessible. There's clarity on the design decisions, too, with the Forward Quote functionality allowing visibility for multiple users. Collaborators can adjust turn time, materials, finishing, and other options to see the real-time pricing impact.



What's more, an engineer can do all the technical work then pass it on to their purchasing department to complete the order.

Finally, there is support available to assist you in the technical quote configuration. This is accessible at sign in and consists of a Help Center, Tool Tips, and Live Chat.

MANUFACTURING ANALYSIS

The manufacturing analysis functionality in the new system is a more comprehensive tool, but it's more modern and easier to use. There's more transparency with your parts, and more communication so you know exactly the status of your parts.

One of the key changes is color indicators. Your parts can have many statuses as they progress through the configuration, analysis, review, and approval stages. Each of these statuses has a corresponding color code. Ultimately, the goal is to get your parts to the 'Ready to Manufacture' status, which is Green.

Needs Configuration. All newly uploaded parts begin with a white status. These parts need to be configured and, if necessary, sent for analysis.

Manufacturing Analysis in Progress. Parts with a gray status are currently being analyzed by our team to identify manufacturing limitations, lead times, and pricing. You'll receive an email from us when all the parts on your quote are ready for review.

Ready for Manufacturing. Green status parts have completed analysis and quoting, and do not require additional review or approval. You may checkout once all parts on a quote have reached this status.

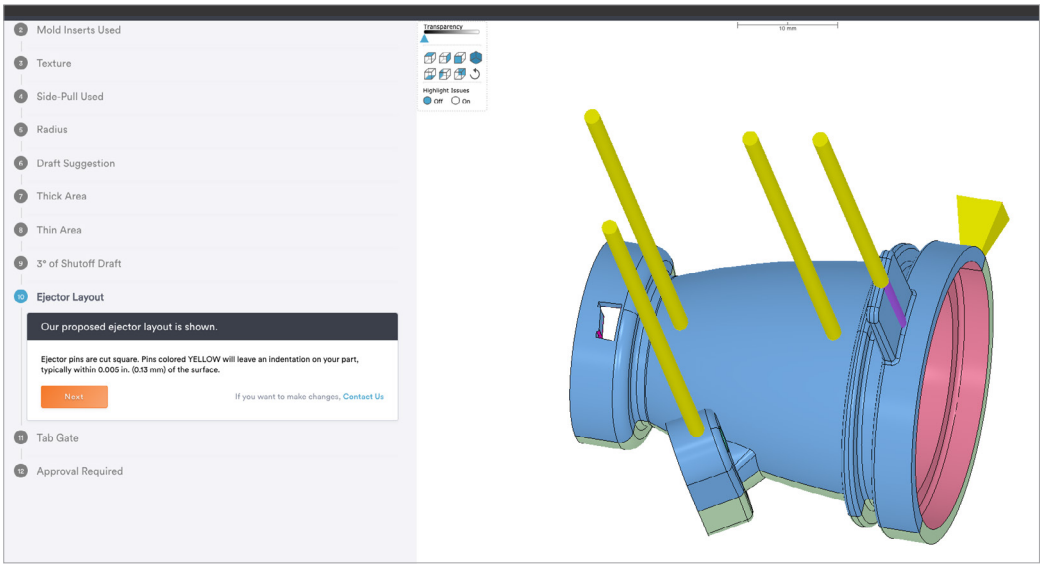
Review and Approve. Parts with a yellow status are almost ready for manufacturing. We just need you to review the manufacturing analysis to approve advisories, accept gate and ejector layouts, and/or choose your threading options. Once approved, your parts will change to green status.

Revisions Required/Unable to Manufacture. Unfortunately, we are unable to manufacture parts with a red status. Please review the manufacturing analysis advisories to learn how you may modify your part design to match our manufacturing capabilities. Or contact us to review with our application engineers.

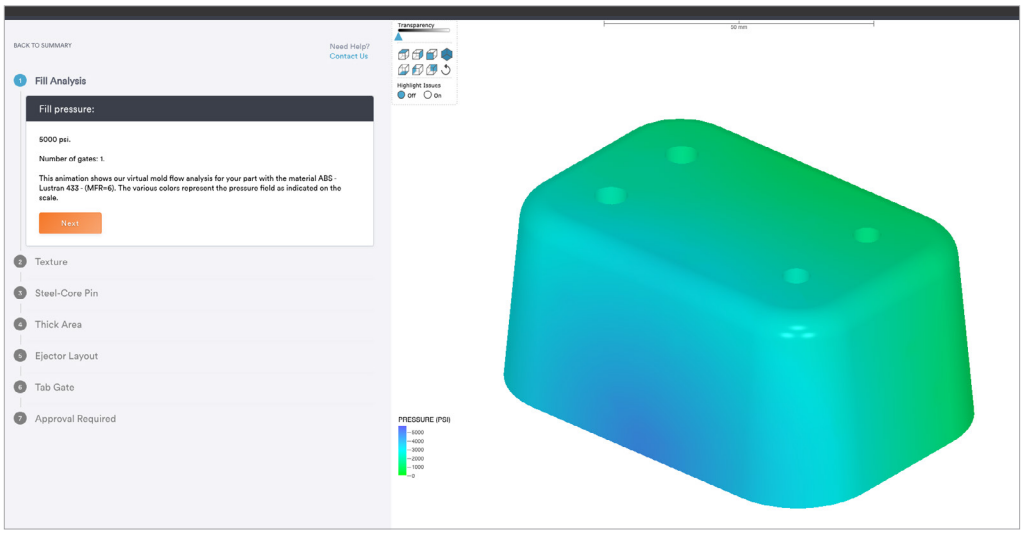
Expired Quote. Parts with a black status have expired pricing. Please resend for quoting.

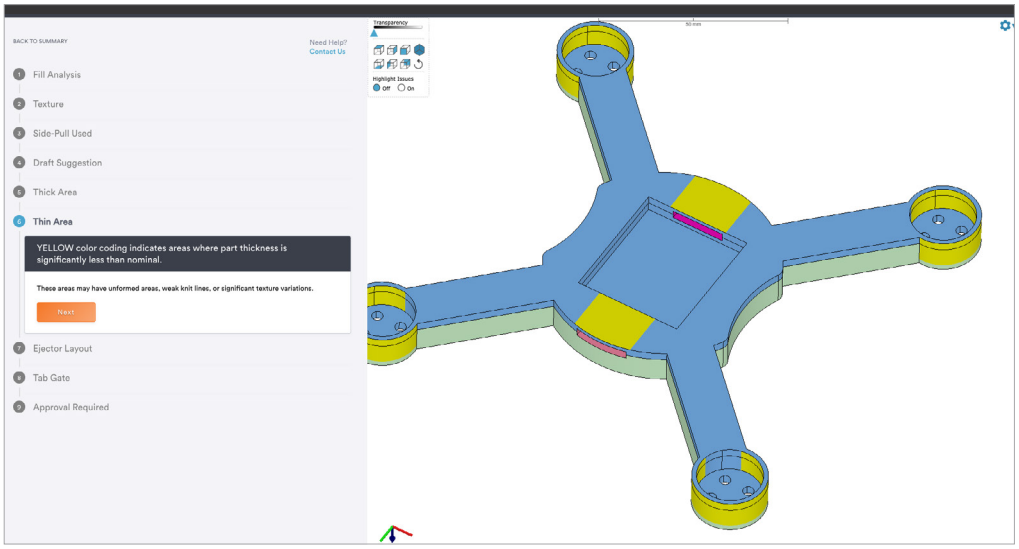
Part analysis in the new system categorizes the issues that need addressing so that the process of part design can be more easily managed, for example under texture, radius, or gate. Also, all parts within a quote group are easily visible and accessible so multiple modifications are more easily managed.

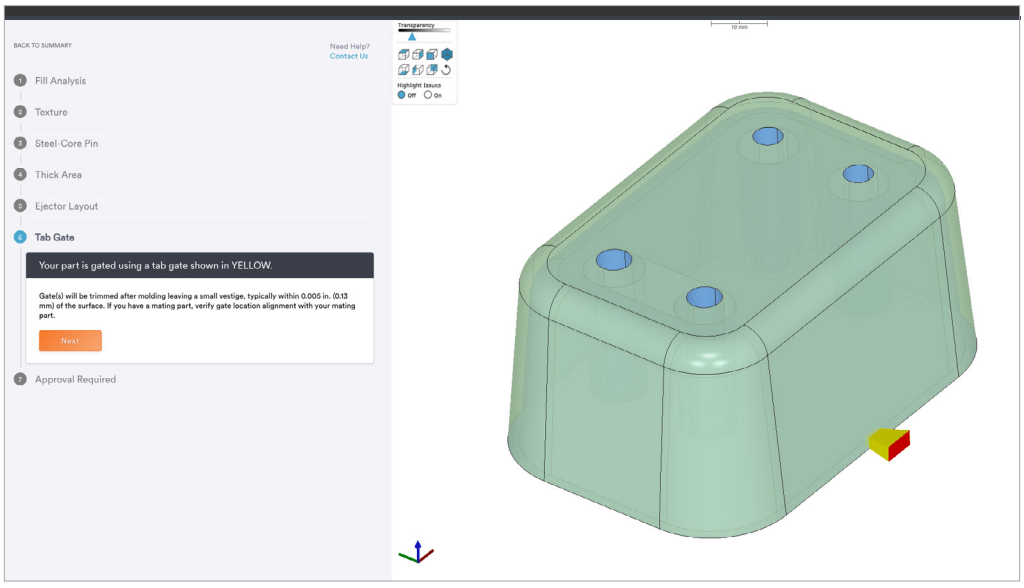
It's worth noting that gate and ejector layout needs to be approved during the analysis stage to prevent conflictions and delays when ordering. All information around these approvals are registered in the system, even down to who gave the approval.



It's really simple to navigate between the parts. There's no clicking in and out of quotes to view different parts, with all advisories and next steps visible and accessible.

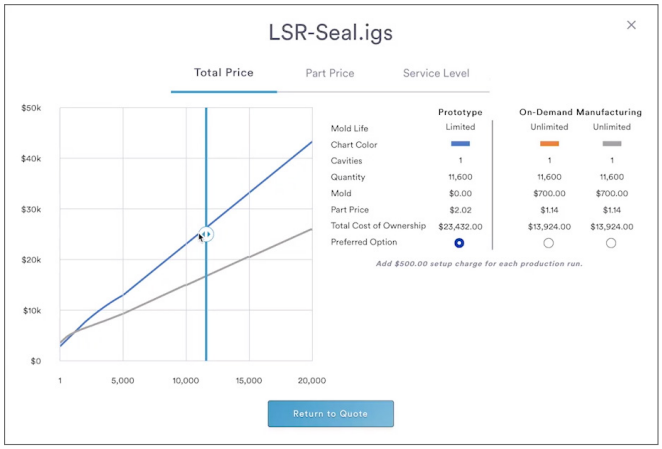






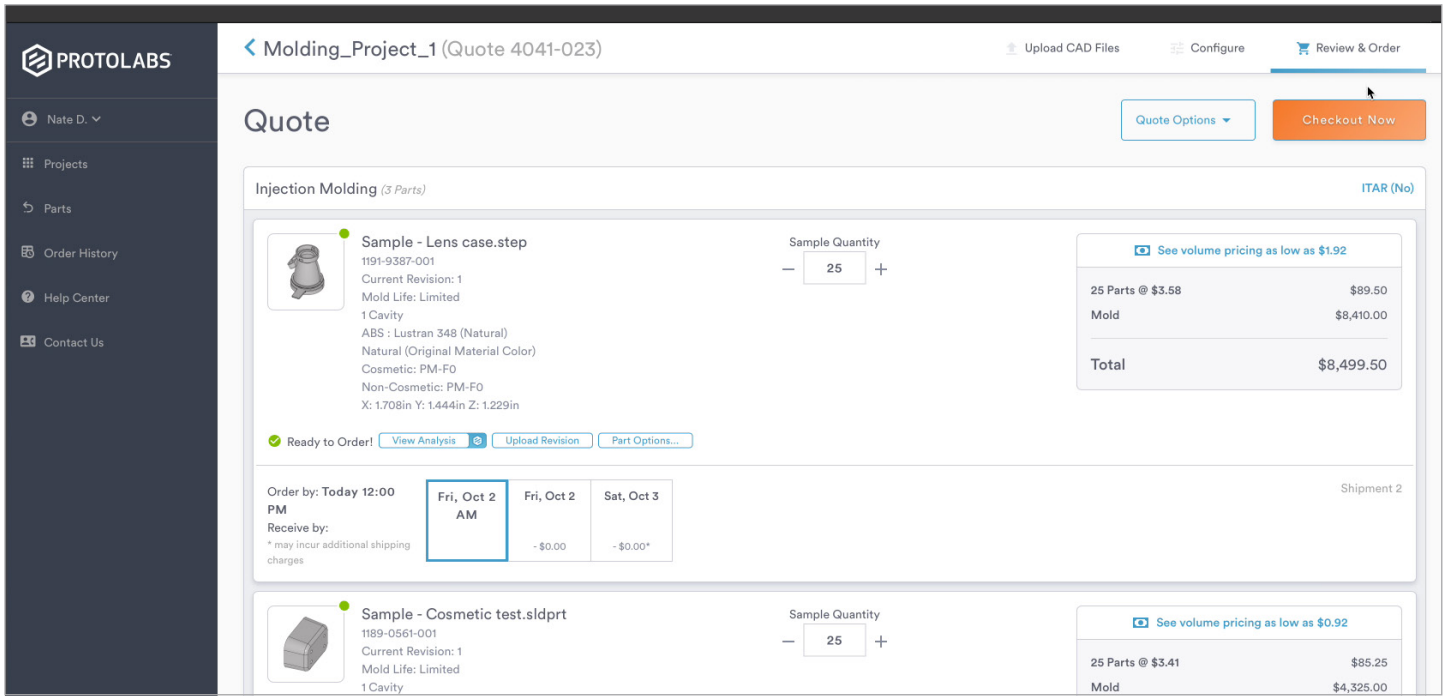
ORDER + CHECKOUT

The confirmation and ordering process includes a production part calculator. It's an easy to use, interactive price curve feature that shows cost variations dependent on mold life and part quantity required for prototyping or on-demand manufacturing (ODM). You simply select the point on the graph and it updates your order accordingly. This is an incredibly useful tool because you get live and exact pricing based on variables—all following approval of your parts—so pricing remains accurate.



The price curve feature also shows the interactive graph for up to 20,000 molded samples. If going for a much higher ODM volume, 500 samples will be shipped initially, but checkout will provide the ability for you to arrange the remaining parts' delivery. Mold life and tool ownership is key here, as there are now the options for up to 2,000 shots or for more, plus tool ownership on all ODM orders.

Also, it's now possible to choose a delivery date through the Receive By calendar functionality where you see the cost increase or decrease according to when parts are needed. This is a useful time-saving tool for cost management by providing immediate pricing transparency. We'll also break down shipment cost per part order, with no hidden charges at all.



Shipping outside the United States will require the completion of an ITAR questionnaire, but this is a simple task that our customer service team can support you with if needed.

It's really simple. Instead of four pages on the previous platform, now it's just four items on a single page. You can include your own reference number on an order and the page won't time out so you won't lose what you've inputted.

Finally, you'll be able to forward your quotes to colleagues. It means you can get multiple people to edit and confirm just prior to order.

PARTS RECEIVED

The format of all identifications have changed in the new platform—they'll appear differently on the label, specifically the part ID, quotation ID, sales order ID, production ID, shipment ID, and purchase order number. Also, if you've ordered a certified vendor material, it will be clearly labelled on the bag which certifications go with which parts. For ODM parts, when ordering you will be emailed a copy of your mold development process report to support your quality processes—another great feature of our ODM offering.

Those are the injection molding highlights and enhancements inside our new digital manufacturing platform. We hope you find it much easier and intuitive to quote and order parts with us.