

AMERICAN JOB SHOP MANUFACTURING

THE COMPETITIVE LANDSCAPE

LATEST INFORMATION
INDUSTRY INSIGHTS
WHO TO WATCH
HOW TO REACT

REPORT BY **PAPERLESS PARTS**



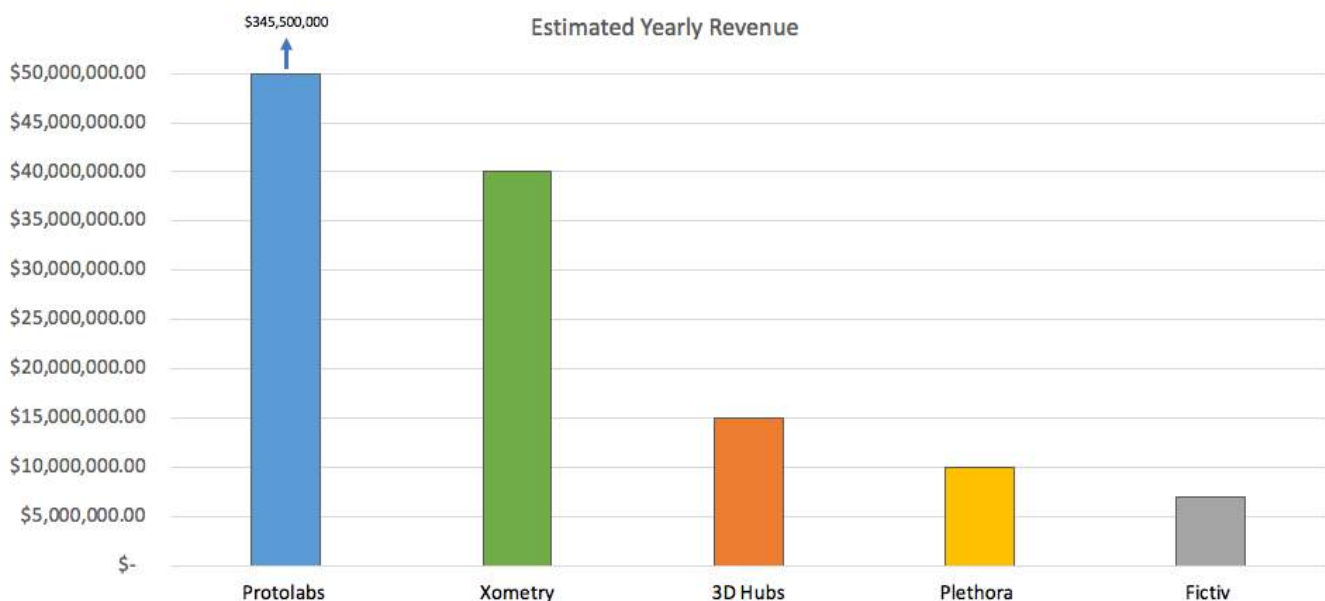
2018 Q3



INDUSTRY SUMMARY

The custom part manufacturing industry is changing. American job shops face new threats. This report will help shop owners identify risks and take advantage of new trends.

- Product development cycles are shorter
- Part buyers go to the internet for fast quotes and short lead times
- Buyers expect quotes in hours and parts in days without a conversation
- Top part manufacturers are investing in building web based software quoting, ordering, and design feedback tools to connect with buyers on the internet
- One of the first to use these tools was Protolabs, who now has \$400M+ in revenue
- Fast growing part sourcing networks Xometry, 3D Hubs, and Fictiv use custom online quote and ordering tools
- Digital quotes and online ordering are key to new custom part revenue



HOW DO YOU COMPARE?

Click or Copy this link to your browser for part Files

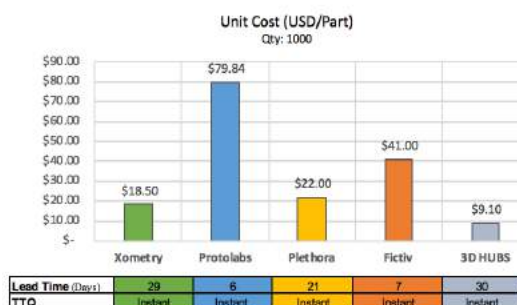
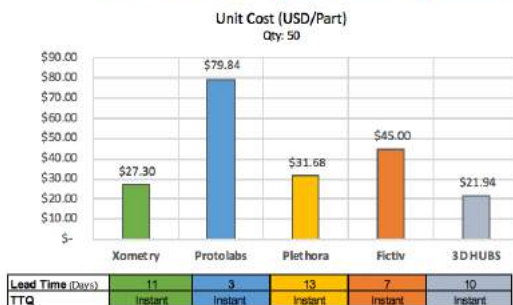
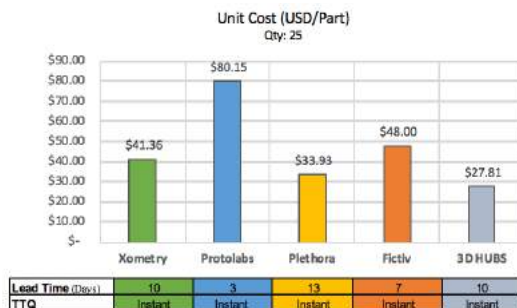
<http://www.paperlessparts.com/sampleparts>

Price them in your shop to compare

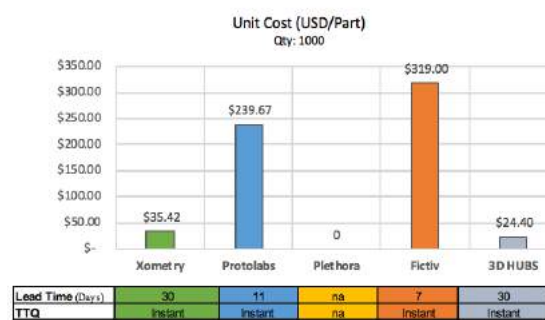
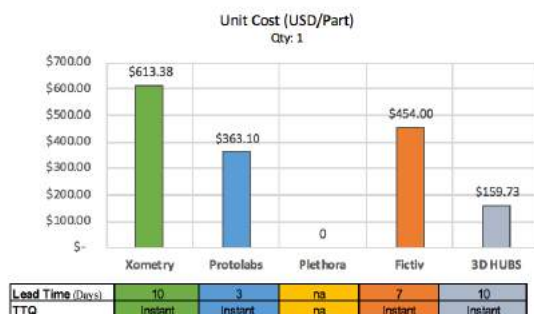
TTQ (Time to Quote)



Part 1 Simple_b: CNC Aluminum 6061-T6



Part 2 Arch_b: CNC Aluminum 6061-T6



ProtoQuote®
CNC Machining Quote

Prepared for: Lawrence Witherspoon
Quote Number: 1259390
Quote Date: 8/22/2018
Part Name: simple_b
Extends: 2.557 in x 2.572 in x 0.325 in

Thank you for the opportunity to quote your parts. We look forward to working with you on this project. If you have any questions, please contact us at 877.479.3680.

1 Confirm or Modify Specifications and Review Pricing

Material:

Machining Method: ☒ Mill ☐ Lathe Lathe is not available for this geometry

Quantity: **1 Part(s) @ \$357.02 ea. \$357.02**

Finish:

Manufacturing Time:

Total USD: \$357.02
currency calculator

2 Manufacturability Analysis

Need your parts by August 24?
Select 1-day manufacturing time and check out using overnight shipping within 5 hrs 3 mins.

You must select a manufacturing time before continuing.

Protolabs Quoting Interface

Protolabs' quoting engine produces an automated digital quote with the ability to complete orders online through a credit card or PO.

Quick Facts:

- Digital quoting interface for machining, molding, and 3D printing
- Interactive design for manufacturability feedback
- Proposed revisions to the buyer's uploaded model
- Potential buyers value the flexibility of pricing options and online checkout that minimize the need for interaction to quickly place an order



ONLINE CHECKOUT

Credit Card & PO



CAD PLUGIN

Within Quote Interface



400,000,000

Annual Revenue



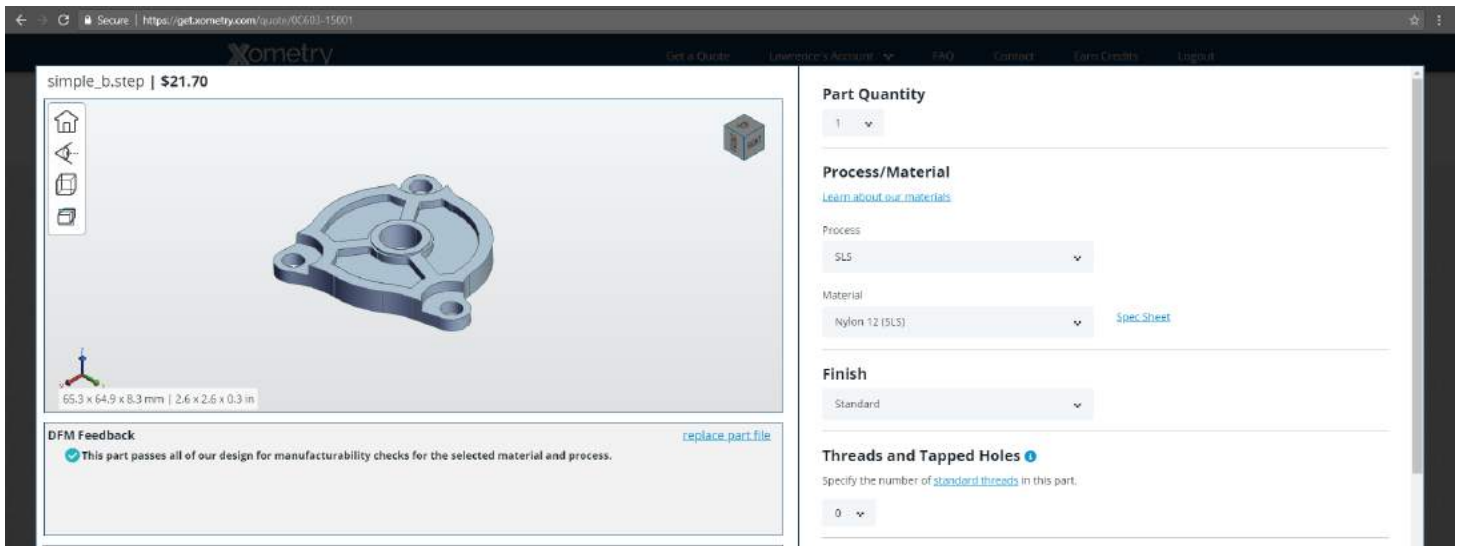
3,100,000+

Parts Manufactured Per Month



800,000 SQ.FT

Size of Facility



Xometry Quoting Interface

Xometry is a web-based sourcing network for on-demand custom manufactured parts.

Quick Facts:

- Xometry's business model revolves around controlling the customer relationship and reducing transparency between buyer and job shop
- Xometry is focused on driving prices down by increasing competition within their network
- By pitting shops in their network against one another, the business will go to the shop with the lowest price, a no-win situation for job shops



ONLINE CHECKOUT

Credit Card & PO



CAD PLUGIN

Within Quote Interface



40,000,000

Annual Revenue



500,000+

Parts Quoted by Site



60,000 SQ.FT

Size of Facility

3D Hubs

(Private Funding: EQT, Balderton)

Founded: 2013

Manufacturing: Outsourced

ITAR Certified: No

Instant Quoting: Yes

The screenshot shows the 3D Hubs web interface. At the top, there's a navigation bar with '3D HUBS' and 'MANUFACTURE PARTS' links, and 'How it works', 'Log out', and 'Exit' buttons. The main content area is divided into two steps: 1. 'Select a technology' with a dropdown menu showing 'CNC machining' (selected) and 'Injection molding'. 2. 'Upload files and configure parts' with a '1 Part Uploaded' status. Below this, there's a file upload section showing a file named 'simple_b_step' with dimensions '65.3 x 6.3 x 64.0 mm'. To the right, there's a 'Qty: 1' field, a 'show bulk pricing' button, and a price of '\$112.67'. Below the file upload section, there's a 'Materials' list with 'Aluminum' selected, and a 'Type of Aluminum' list with 'Aluminum 6061 (Standard)' selected. To the right, there's a 'Selected material' section showing 'Aluminum 6061 (Standard)' with a 'Learn more' link, and a 'Finish' dropdown menu showing 'As machined (Standard)'.

3D Hubs Quoting Interface

3D Hubs is a web based sourcing network focusing on 3D printing and CNC machining.

Quick Facts:

- Global network of 33,000+ 3D printers and 1000+ CNC machining centers
- Recently 3D Hubs has shifted their focus from 3D printing to the CNC machining market using the same online model
- Buyers do not know the identity of the jobshop, making 3D Hubs sourcing decisions upon lowest price



ONLINE CHECKOUT

Credit Card & PO



QUOTING FLEXIBILITY

Pricing, Qty, Lead Times, Materials



15,500,000

Annual Revenue



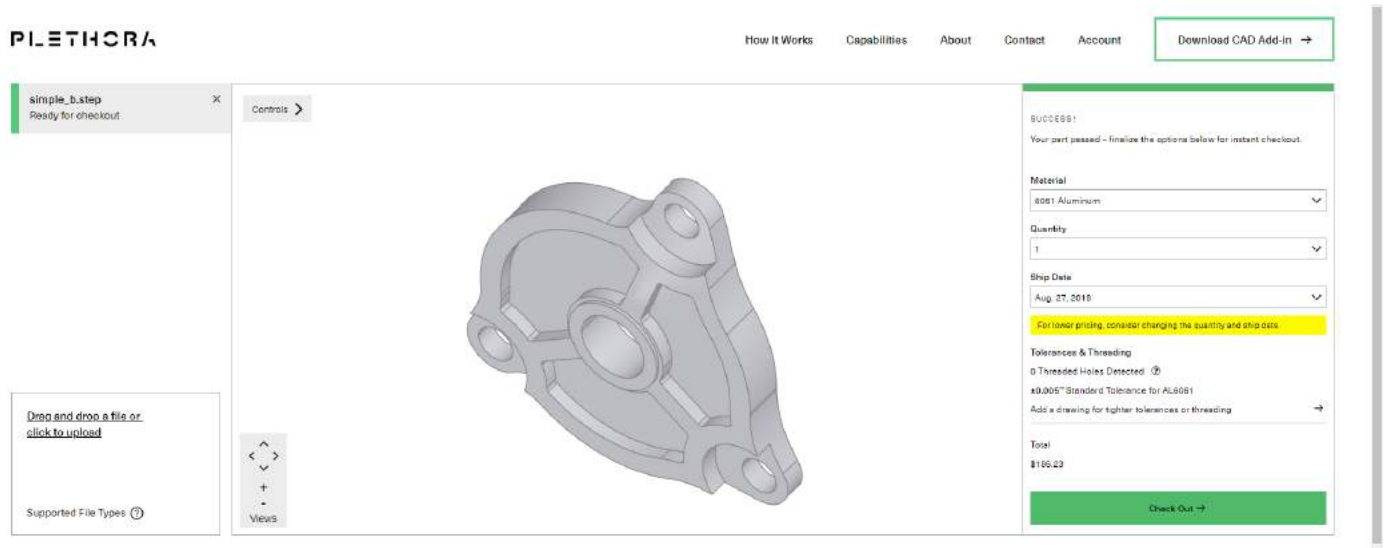
140 COUNTRIES

In Manufacturing Network



45+ EMPLOYEES

Size of Facility



Plethora Quoting Interface

Plethora's proprietary machining technology and in-house CNC machining makes short lead times and low pricing possible.

Quick Facts:

- Plethora automates front-end quoting and back-end machine programming
- Focused on becoming the amazon.com for custom manufactured parts
- Plethora drive prices and lead-times down through the use of technology and automation in their facility



ONLINE CHECKOUT

Credit Card & PO



CAD PLUGIN

Within Quote Interface



10,000,000

Annual Revenue



AUTOMATED FACTORY

Code, Filtering & Tooling



18,000 SQ.FT

Size of Facility

Fictiv

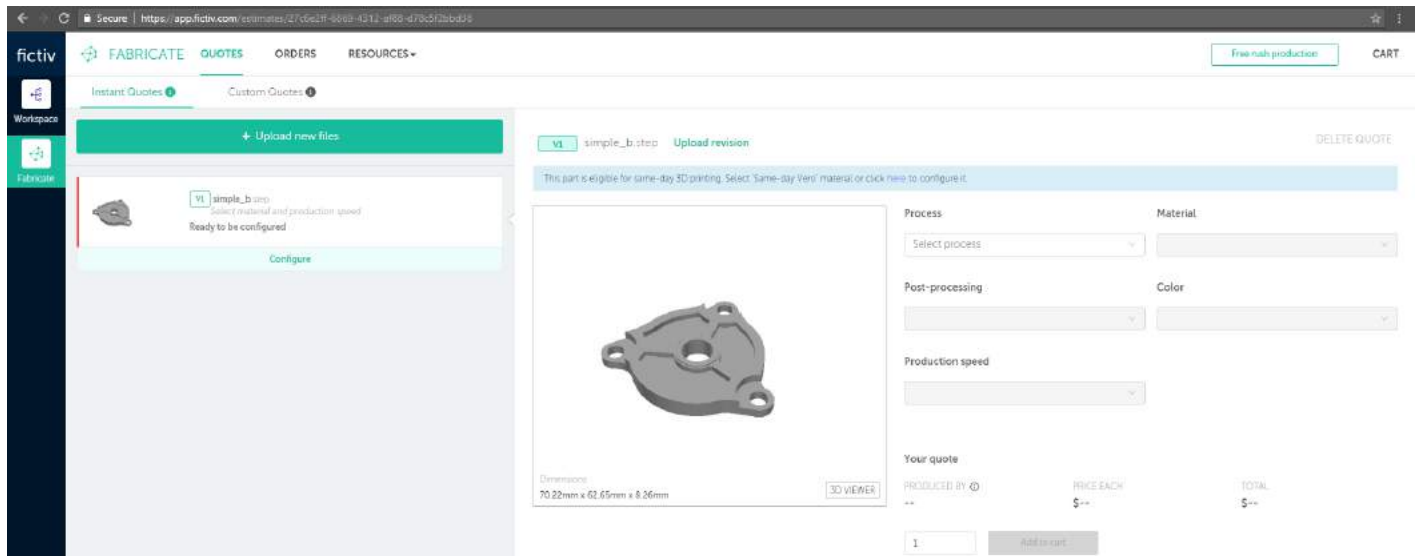
(Private Funding: Bill Gates, Accel)

Founded: 2013

Manufacturing: Outsourced (US/China)

ITAR Certified: No

Instant Quoting: Yes



Fictiv Quoting Interface

Fictiv is an online sourcing network that leverages a large supply base to drive prices down while owning the customer relationship.

Quick Facts:

- From prototype to production, Fictiv is seeking the lowest price
- In June Fictiv raised \$25M to start moving production to China in a step similar to mfg.com
- Introducing a network of inexpensive Asian manufacturers to buyers will hurt US job shops



ONLINE CHECKOUT

Credit Card & PO



CONTENT DRIVEN

Blog & Hardware Guide



7,500,000

Annual Revenue



AUTOMATED FACTORY

Algorithm Focused



OUTSOURCED

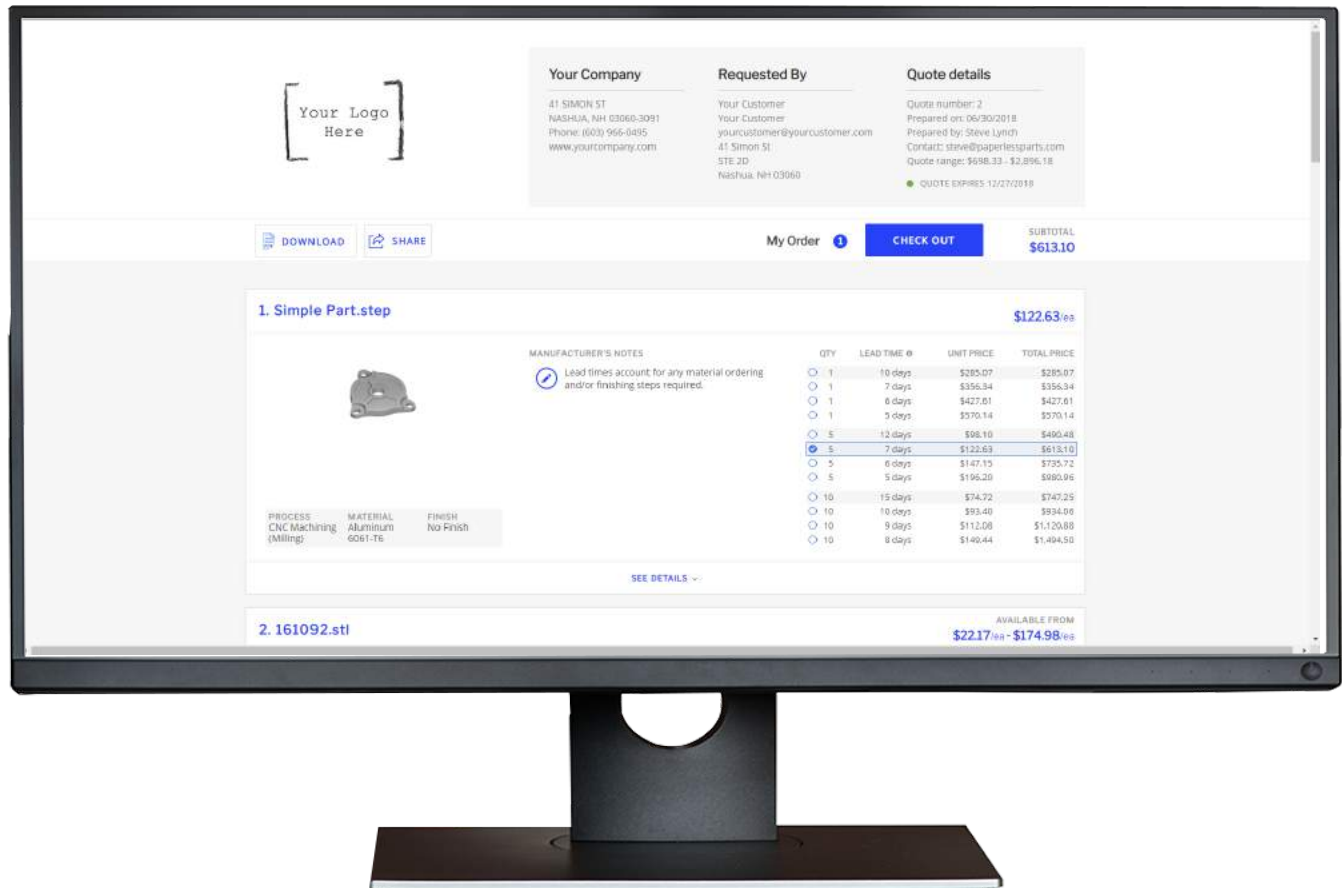
China

THANK YOU FOR READING!

To learn more about how your shop can be competitive,
please visit our website:

www.paperlessparts.com/jobshops

How your quotes could look using Paperless Parts!



**DIGITAL
QUOTES**



**SMART RFQ
FORM**



**CAPTURE
EXPEDITE REVENUE**



**CREDIT CARD/PO
PROCESSING**