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Paperless Parts

Company Overview

PRESENTED BY **JASON RAY, CEO**

About Jason Ray

Grew up in CT

US Navy OCS

Contracting Officer

Additive Manufacturing and Innovation Officer

Series B Funding OpenView

Trinity College Economics/ History

Trinity College
HARTFORD CONNECTICUT

Minesweeper USS Warrior (MCM 10)

Babson College MBA

BABSON

Started Paperless Parts 2017

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100+% Y/Y Growth with 150 Employees

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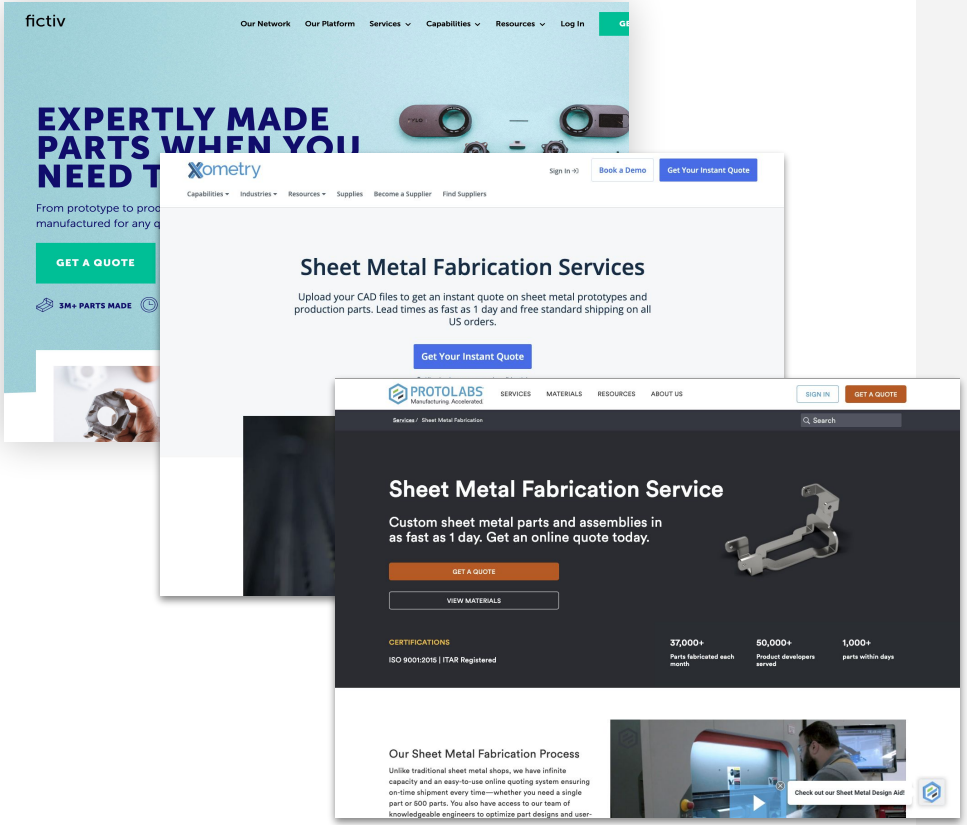
Enter Paperless Parts

ABOUT PAPERLESS PARTS

Paperless Parts is a secure, ITAR registered and compliant cloud-based software platform that automates and streamlines the quoting process for custom part manufacturers.

WE STARTED IN A JOB SHOP

Our team has spent time in hundreds of manufacturing operations: from the smallest one-person job shop, to high-volume production operations doing $100M contracts. We've spoken with thousands of owners and operators, analyzed millions of parts files, and supported hundreds of millions of dollars in orders.



Part buyers are being trained to **expect a fast digital quoting and buying experience.**

QUOTES IN HOURS

Customers get digital quotes in hours, and can instantly check out online

PARTS IN DAYS

Quickturn prototype and short run production jobs turned around in 3-5 days

24/7 LIVE CUSTOMER SUPPORT

Customers can speak with a sales engineer any time of day

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Manufacturing Today

SKILLS GAP

Only a few people have the expertise and memory of past jobs.

MATERIAL AVAILABILITY AND PRICING

Causes bottlenecks and inconsistency in profitability.

TECHNOLOGY GAP

No digital thread and all parties reading off different sheets of music.

OVER-ENGINEERED

Increasingly complex parts are pressurizing an overly challenged supply chain.

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The future of manufacturing is here.
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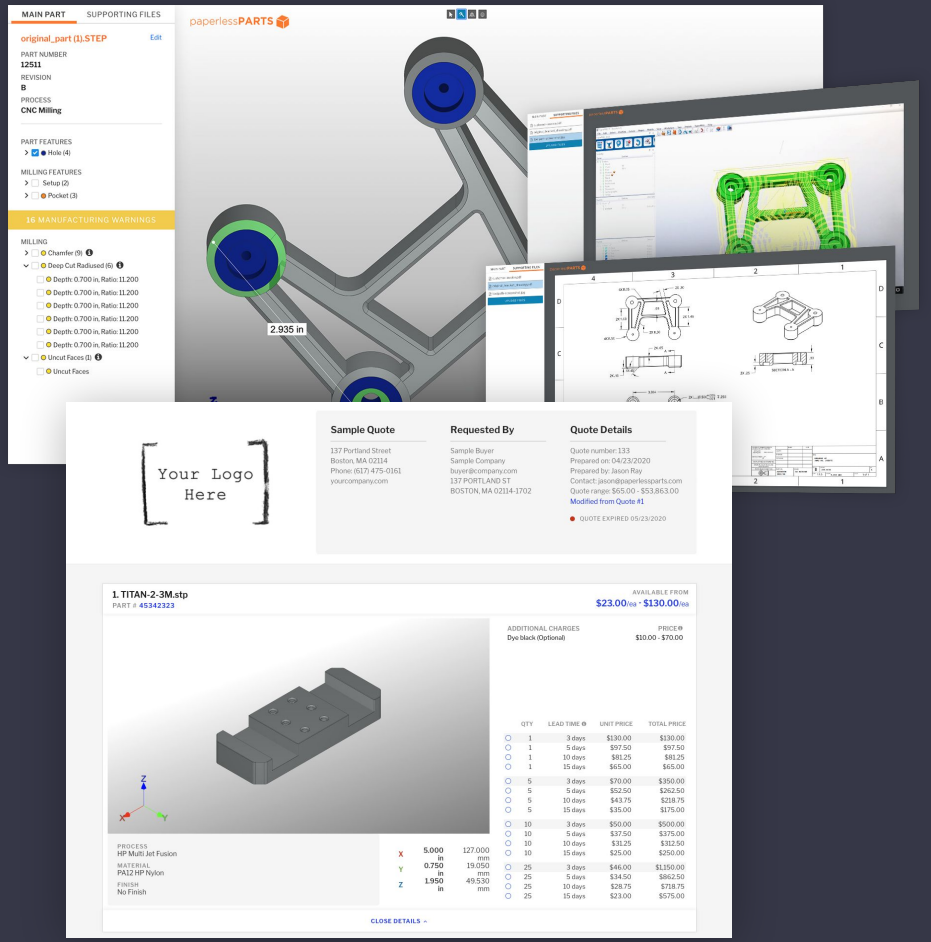

Paperless Parts is a secure, cloud-based quoting platform that helps manufacturers:

- Quote faster and more accurately
- Communicate securely and effectively
- Capture and analyze sales and quoting data

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ITAR
REGISTERED
& COMPLIANT

Shops that quote faster **will win more jobs.**

On top of winning more work, you'll spend more time being productive.

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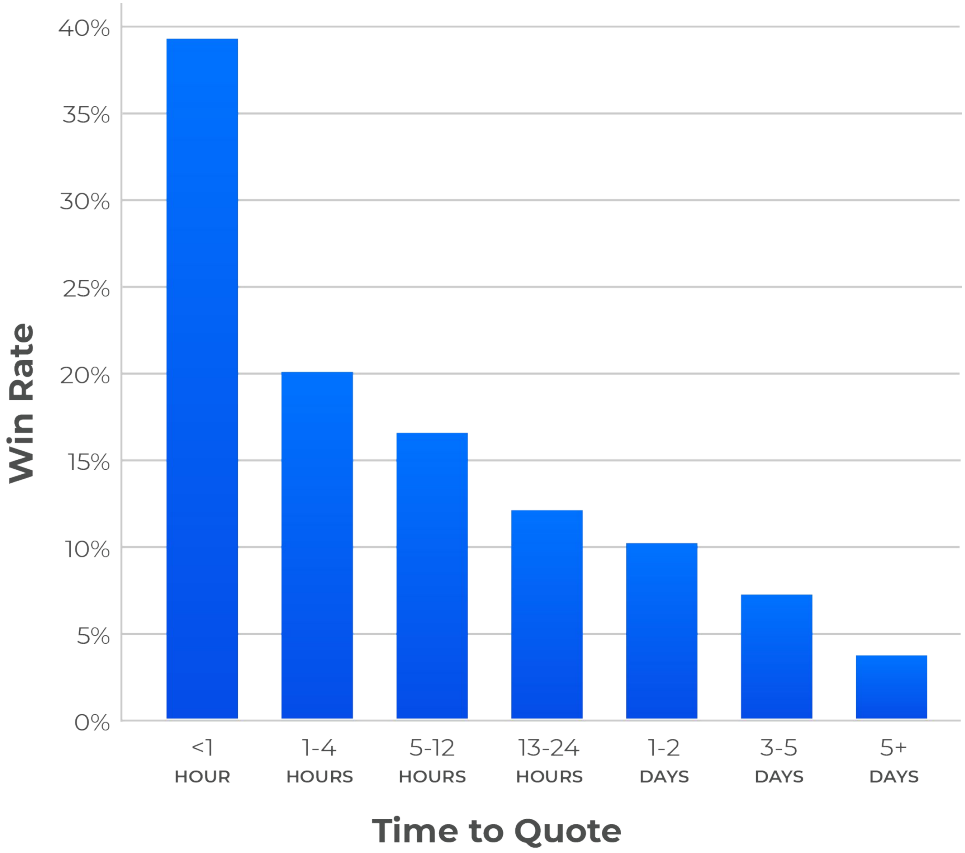

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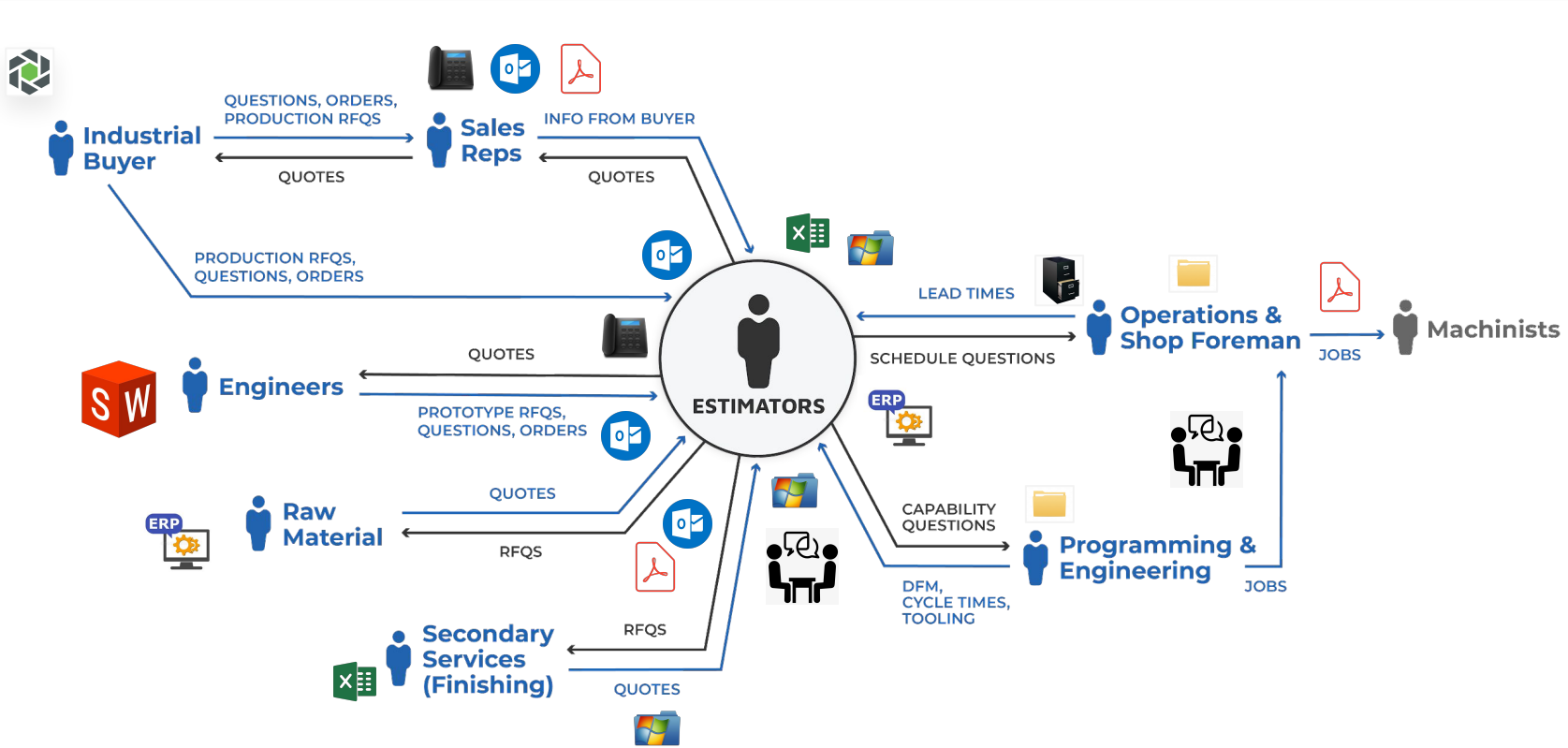
Chaos and **Fragmented Communication** in Estimating



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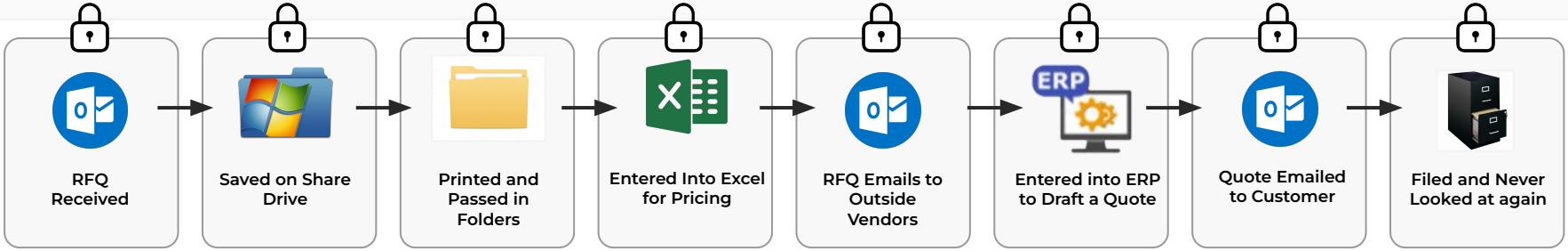
Silos of Information from RFQ to Cash



Each time you break the digital thread you are creating unnecessary risk and inefficiency in your shop.

- Lose track of a really important quote because files are printed and prioritized by stacks of paper
- Increased risk of quoting or making the wrong part that causes return merchandise authorization (RMAs)
- Miss an engineering revision because it was communicated in a silo and you lack a system that stores data in the same places

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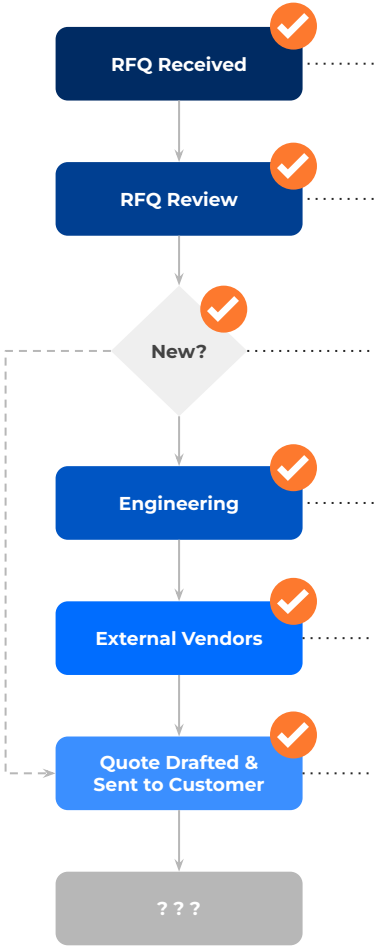
Paperless Parts Solves Problems at Every Step of Quote-to-Cash

We enable streamlined, secure, and searchable communication.



The Smart RFQ automatically drafts quotes from your website. The centralized quoting process means you never miss a quote.

> SMART RFQ FORM, QUOTING QUEUE

Paperless Viewer lets you review all file formats without native CAD software. Leverage configurable DFM feedback to determine if you should even start quoting a job.

> PART VIEWER WITH CONFIGURABLE DFM

Geometric search lets you know when you've made exact and similar parts in the past, and helps you catch customer mistakes in part numbering and revs.

> GEOMETRIC PART MATCHING

The geometric pricing engine reduces engineering time spent on quotes, and gets less experienced people involved in the quoting process (with guardrails for training).

> PAPERLESS PARTS PRICING LANGUAGE (P3L), GEOMETRIC PRICING ENGINE

Securely communicate with outside vendors, and dial in vendor pricing so you never have to request a quote again.

> SECURE COMMUNICATION AND FILE SHARING

Digital quote with a variety of purchase options to maximize price a buyer is willing to pay Track how and when your customers interact with your quotes

> DIGITAL QUOTE WITH MULTIPLE QUANTITIES AND EXPEDITES

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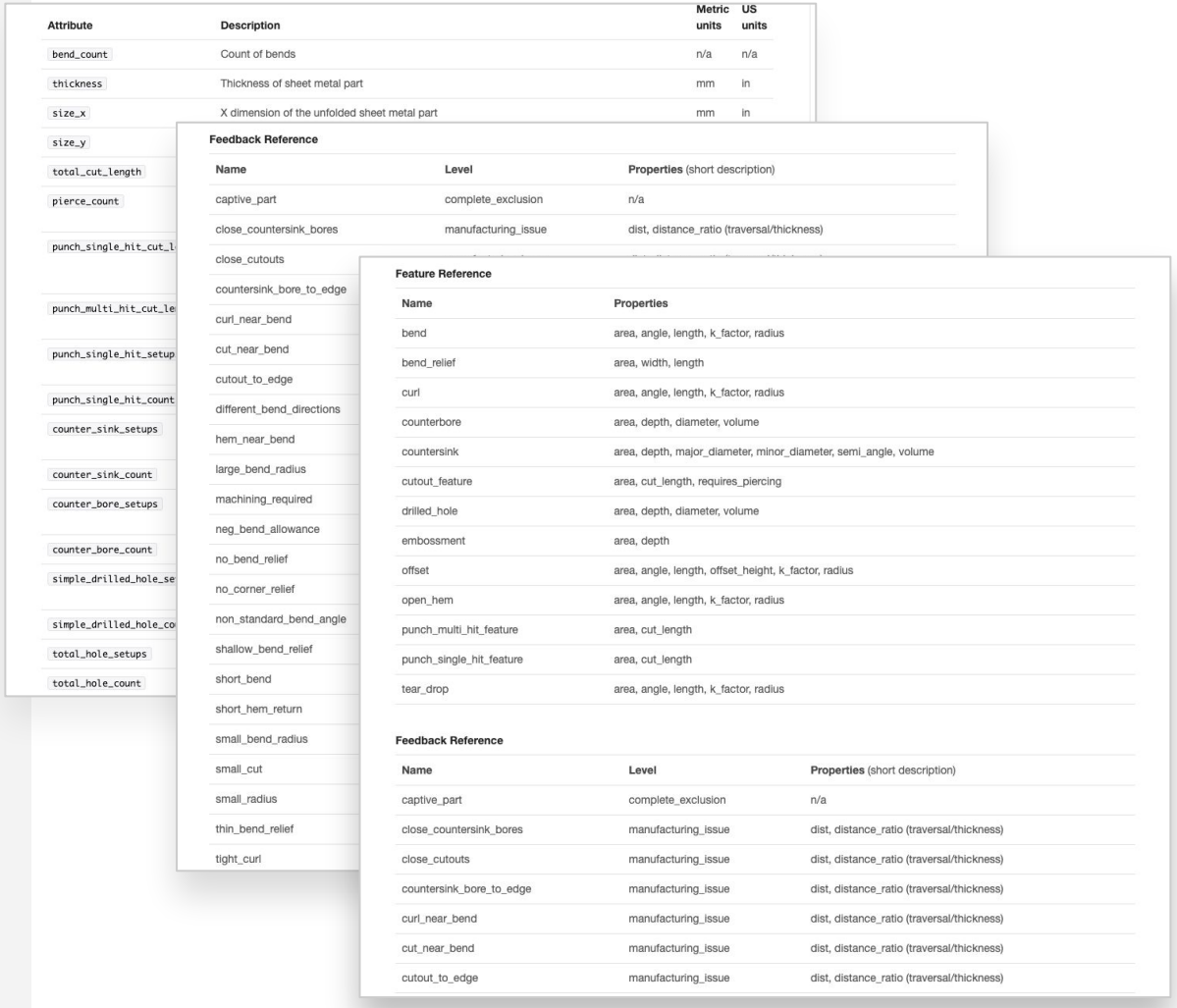
Geometric Attributes

Paperless Parts detects more than **62 different geometric attributes** in the 3D CAD model that can be used in the creation of your sheet metal pricing formulas.



Attribute	Description	Metric units	US units
bend_count	Count of bends	n/a	n/a
thickness	Thickness of sheet metal part	mm	in
size_x	X dimension of the unfolded sheet metal part	mm	in
size_y			
total_cut_length			
pierce_count			
punch_single_hit_cut_l			
punch_multi_hit_cut_le			
punch_single_hit_setup			
punch_single_hit_count			
counter_sink_setups			
counter_sink_count			
counter_bore_setups			
counter_bore_count			
simple_drilled_hole_se			
simple_drilled_hole_co			
total_hole_setups			
total_hole_count			

Feedback Reference

Name	Level	Properties (short description)
captive_part	complete_exclusion	n/a
close_countersink_bores	manufacturing_issue	dist, distance_ratio (traversal/thickness)
close_cutouts		
countersink_bore_to_edge		
curl_near_bend		
cut_near_bend		
cutout_to_edge		
different_bend_directions		
hem_near_bend		
large_bend_radius		
machining_required		
neg_bend_allowance		
no_bend_relief		
no_corner_relief		
non_standard_bend_angle		
shallow_bend_relief		
short_bend		
short_hem_return		
small_bend_radius		
small_cut		
small_radius		
thin_bend_relief		
tight_curl		

Feature Reference

Name	Properties
bend	area, angle, length, k_factor, radius
bend_relief	area, width, length
curl	area, angle, length, k_factor, radius
counterbore	area, depth, diameter, volume
countersink	area, depth, major_diameter, minor_diameter, semi_angle, volume
cutout_feature	area, cut_length, requires_piercing
drilled_hole	area, depth, diameter, volume
embossment	area, depth
offset	area, angle, length, offset_height, k_factor, radius
open_hem	area, angle, length, k_factor, radius
punch_multi_hit_feature	area, cut_length
punch_single_hit_feature	area, cut_length
tear_drop	area, angle, length, k_factor, radius

Feedback Reference

Name	Level	Properties (short description)
captive_part	complete_exclusion	n/a
close_countersink_bores	manufacturing_issue	dist, distance_ratio (traversal/thickness)
close_cutouts	manufacturing_issue	dist, distance_ratio (traversal/thickness)
countersink_bore_to_edge	manufacturing_issue	dist, distance_ratio (traversal/thickness)
curl_near_bend	manufacturing_issue	dist, distance_ratio (traversal/thickness)
cut_near_bend	manufacturing_issue	dist, distance_ratio (traversal/thickness)
cutout_to_edge	manufacturing_issue	dist, distance_ratio (traversal/thickness)

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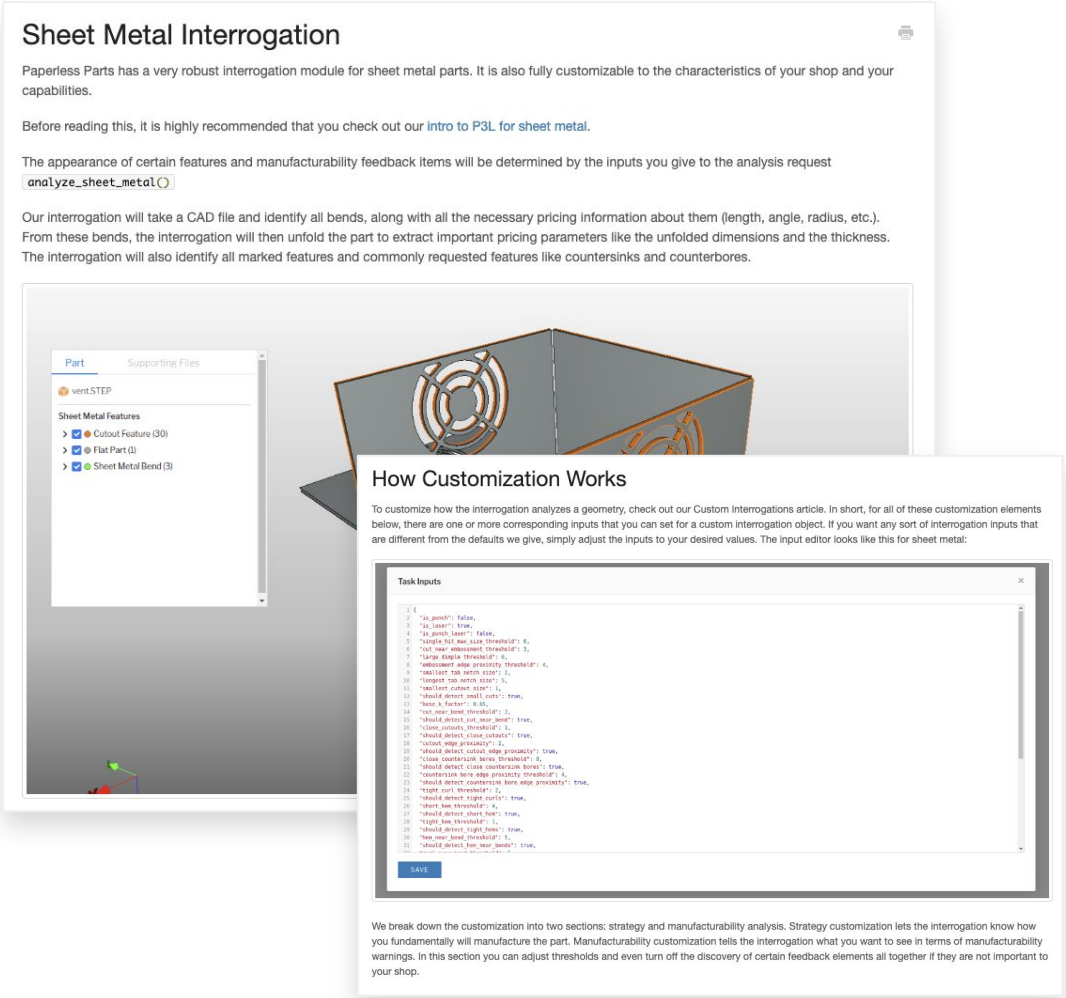
Configurable Manufacturability Warnings

Paperless Parts offers **25 configurable manufacturability** checks driven from the 3D CAD model to make sure you never miss a design issue.



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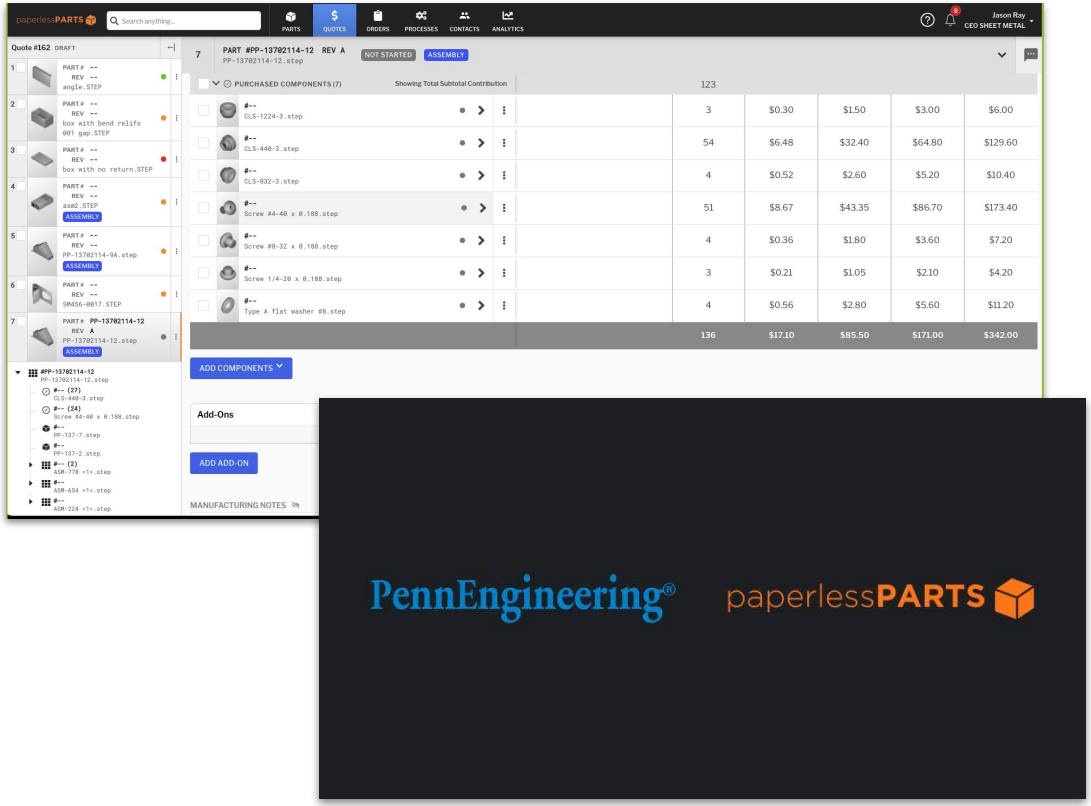
Automate Purchased Component Pricing

Paperless Parts automatically identifies and pulls in purchased component pricing from your vendors or historical information.



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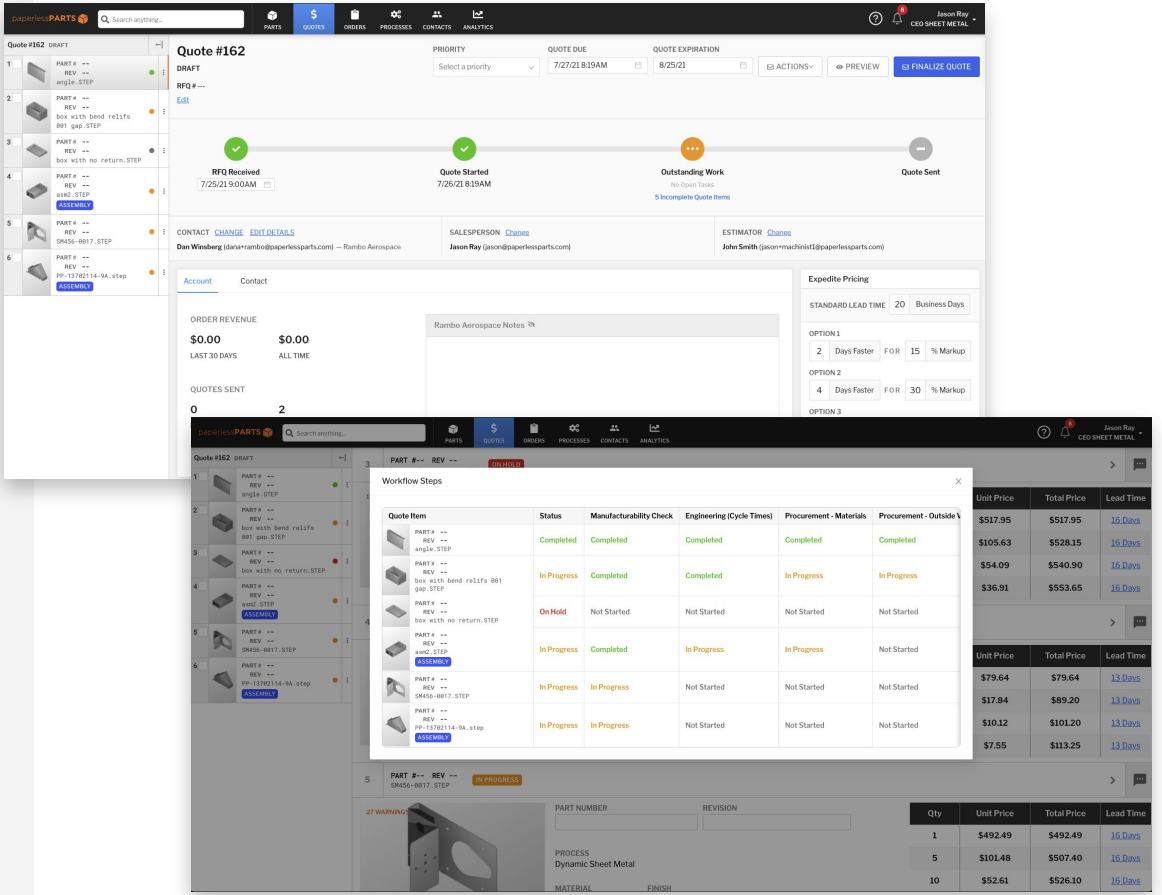
Customizable Workflow Management

Paperless Parts offers teams the ability to create custom workflows for their estimating process to **ensure that no steps are missed**.



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Why Automate?

The benefits are **simple.**

There is a new generation of part buyers with different demands and expectations.

- Faster Quotes = Higher Win Rates
- Reduced Quoting Costs = Higher Profitability
- Higher Quote Volume = More Revenue
- Consistent Pricing = Stability
- Reduced human Error = Predictability

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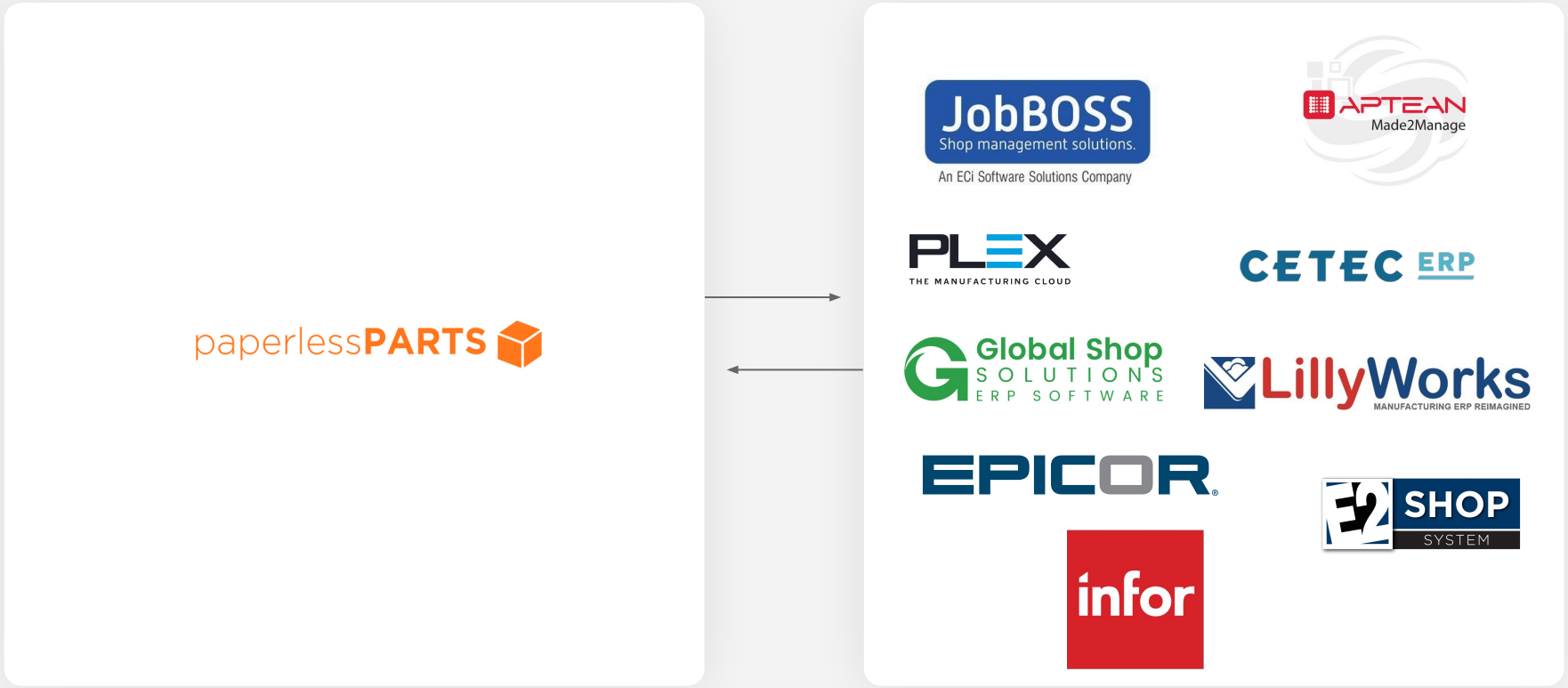
The Perfect Compliment For Your ERP System



SALES **OPERATIONS**

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Quote Faster. Win More.

HUNDREDS OF FABRICATORS ACROSS THE COUNTRY TRUST PAPERLESS PARTS.

> "Trust in the Paperless Parts quoting software has been transformative, the more information we have up front, the more we can speed up the process – and when you wear a lot of hats, it makes the biggest difference for your business."

PETER MARCOUX
Estimating and Sales Manager
Century Ty-Wood Manufacturing

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AMF
AURORA MACHINE
MADE IN USA
BLACK MOUNTAIN MANUFACTURING
SWEENEY METAL FABRICATORS, INC.
PRECISION METAL MFG
FABTECH INC. Precision Metal Products
TRUPART
METCAM
ATHENA MANUFACTURING
CENTURY-TyWOOD MANUFACTURING

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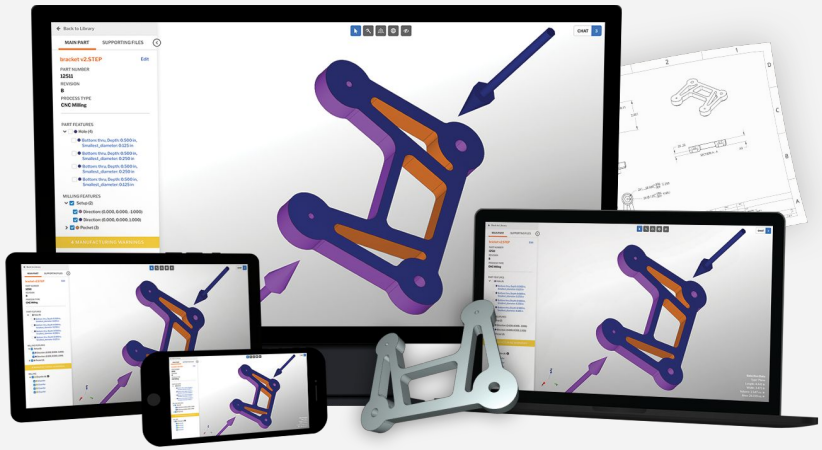
Do More With Modern Software.

SHEET METAL FABRICATION SHOPS SWEAR BY IT.



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CENTRALIZED QUOTING PROCESS
Never miss an opportunity

MANUFACTURABILITY WARNINGS
Reduce human errors

GEOMETRY DRIVEN QUOTING
Fast and accurate quotes

SMART RFQ FORM
Reduce friction for your customers

ONLINE COLLABORATION
Chat with your team, vendors and customers

DIGITAL QUOTE & PAYMENTS
Create a seamless customer experience

CAD VIEWING
View all CAD formats

ITAR COMPLIANT SECURITY
Ensure data is secure

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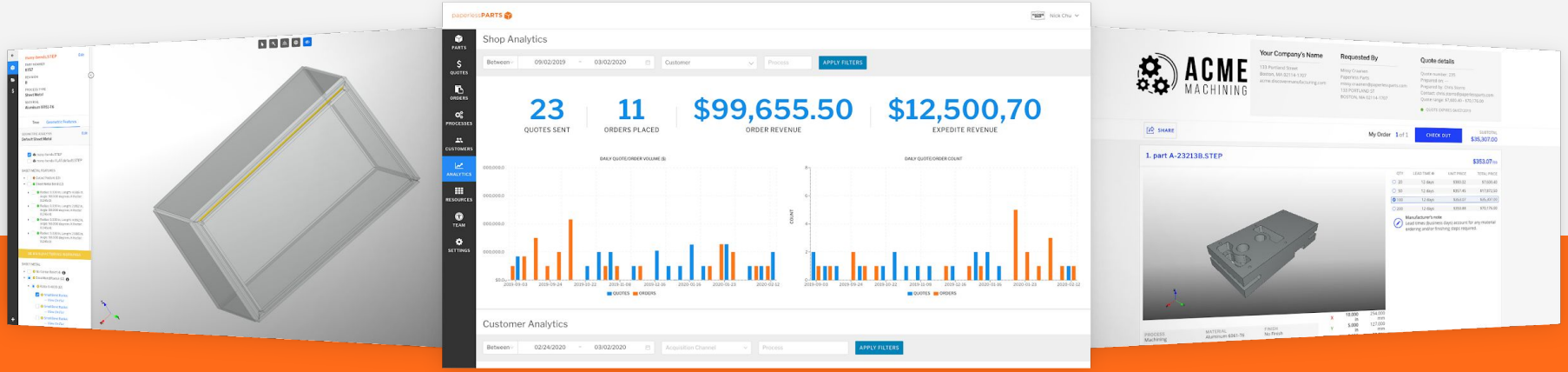
Modernize Your Shop. Grow Your Business.

Streamline the quoting process, amplify your digital presence, and manage customer communication with the secure platform build to help you grow your business.

Learn more at **paperlessparts.com**
Contact me directly **jason@paperlessparts.com**



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