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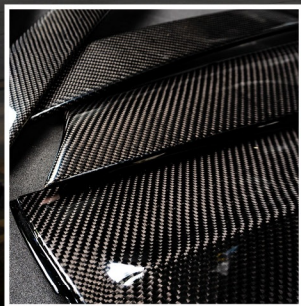
CompositesWorld

**TOP
SHOPS**

2020

CUSTOM REPORT

Benchmarking your
operations to improve
facility performance



PREPARED FOR

JANICKI INDUSTRIES



TOP SHOPS BENCHMARK RESULTS

BUILD YOUR COMPOSITES BUSINESS

You are holding in your hands the results of the second *CompositesWorld* Top Shops survey. We launched the *CompositesWorld* Top Shops program last year in an effort to help composites manufacturing operations like yours measure and assess how well they compare to other composites manufacturers.

We asked composites fabricators to provide a host of data surrounding several metrics — or, benchmarks — including order lead time, machine uptime, capacity utilization, wages, customer retention, sales growth, labor turnover, scrap rate and much more. We received more than 100 responses this year.

This report aggregates all of those responses, which came from composites fabricators from around the world representing every major end market, including aerospace, automotive, marine, energy, consumer and industrial. Your facility's overall rank is derived from comparison to these responses.

You will find, first, a Performance Summary that identifies your facility's overall percentile and overall rank. You will then find three lists of benchmarks. These include areas of strength for your facility, areas where your facility is on track, and areas where your facility can improve (i.e., opportunities).

Next, you will find your facility's relative rank against each benchmark from the survey, followed by information on survey methodology and then facility profile data — resins used, fibers used, fabrication processes used, curing processes used, ownership model, certifications, QC practices, marketing practices, etc.

Facilities are divided into one of two groups, based on relative performance. The highest ranked facilities earn the coveted Top Shops label. Facilities that do not crack that list fall into the Other Shops category.

As you read through your custom report, I hope you will use the data to gauge your facility against a variety of similar composites manufacturing operations. What you do with that information — possibly develop a plan to strengthen core areas and improve those that might fall below median ranges — could help you either solidify your Top Shop status, or help land you on next year's *CompositesWorld* Top Shops list.

Thank you for your participation in the *CompositesWorld* Top Shops survey and I hope that you find this report helpful and beneficial to your operations.

Jeff Sloan
Editor-In-Chief
CompositesWorld
jeff@compositesworld.com



TOP SHOPS BENCHMARK RESULTS

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Performance Summary

Your Overall Percentile: **77%**

Strengths	Your response for this metric is in the top 25% of all responses. Your company is a leader in this metric.
On Track	Your response for this metric is a typical response, between the 25th and 75th percentiles . Your company is comparable to the industry standard.
Opportunities	Your response for this metric is in the bottom 25% of all responses. Consider what can be done in this area to improve performance.

The number in parentheses after each measure is the page in this report on which that measure appears

Strengths

First Pass Finished Quality Yield (5)
On-Time Delivery (4)
Operation Hours (7)
Scrap as a Percentage of Parts (11)
Scrap as a Percentage of Sales (11)

On Track

Annual Sales Growth (8)
Capacity Utilization (3)
Customer Retention (6)
Estimated Sales Growth (8)
Inventory Size (12)
Machine Uptime (3)
Scrap Recycling Rate (12)

Opportunities

Order Lead Time (4)

HOW TO READ YOUR REPORT



TOP SHOPS BENCHMARK RESULTS

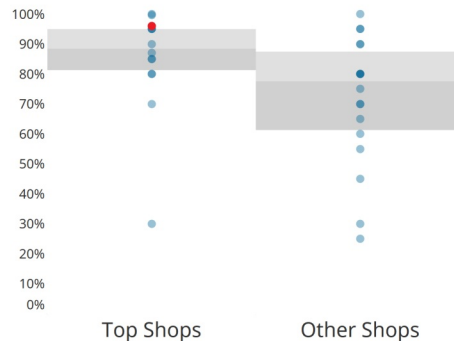
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Machine Uptime

The amount of time equipment is in use as a percent (%)

Your Shop's Value: **96.0**
Your Overall Percentile: **90%**

Why this is important: The higher your equipment usage, the less overhead cost you have to associate with each unit of output created.

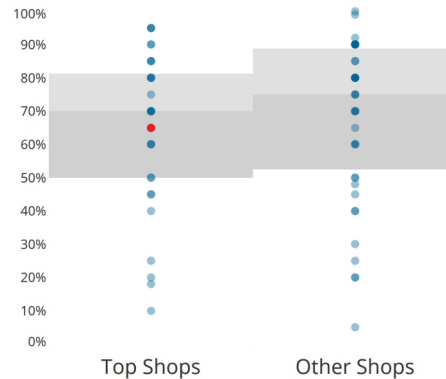


Capacity Utilization

Capacity being used as a percentage of total plant capacity (%)

Your Shop's Value: **65.0%**
Your Overall Percentile: **38%**

Why this is important: Capacity utilization quantifies how much of your facility's total available capacity is being used. Low capacity utilization indicates the investment in some equipment is not generating income, which can lead to reduced profits.



RED

The red dot and number indicate your response, and the overall percentile of that response, compared to all shops combined.

BLUE

Blue dots represent the responses of other shops — the darker the blue, the more responses that were close to that value.

GRAY

The shaded area marks the 75th and 25th percentiles, where higher percentiles are better. The break in the shading represents the median value.

Median

The median is the value 'in the middle' when all values are ordered from lowest to highest. Median values can better represent 'middle of the pack' than averages, which can be skewed by even one extreme data point.

Missing a red dot or number?

There are two possible reasons:

1. You did not provide an answer to this question.
2. You provided an answer, but it was an outlier.



TOP SHOPS BENCHMARK RESULTS

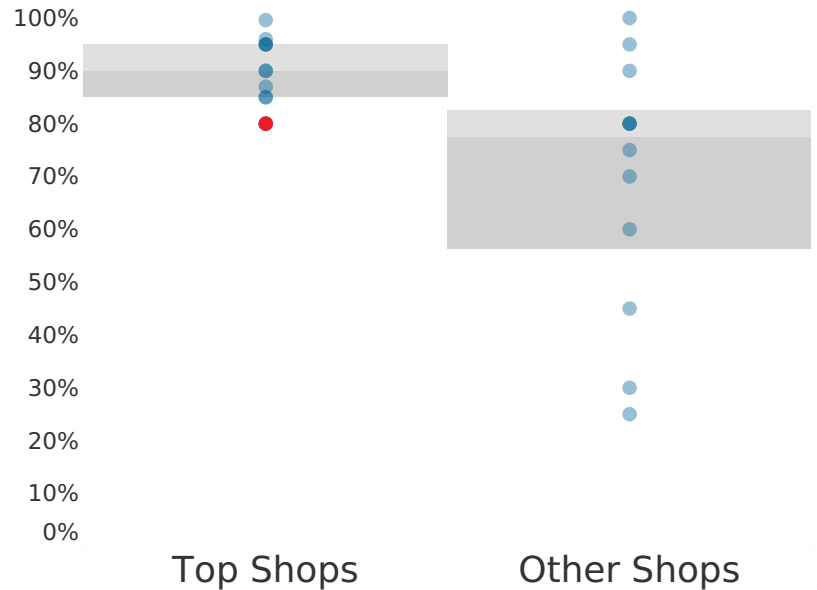
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Machine Uptime

The amount of time equipment is in use as a percent (%)

Your Shop's Value: **80.0%**
Your Overall Percentile: **52%**

Why this is important: The higher your equipment usage, the less overhead cost you have to associate with each unit of output created.

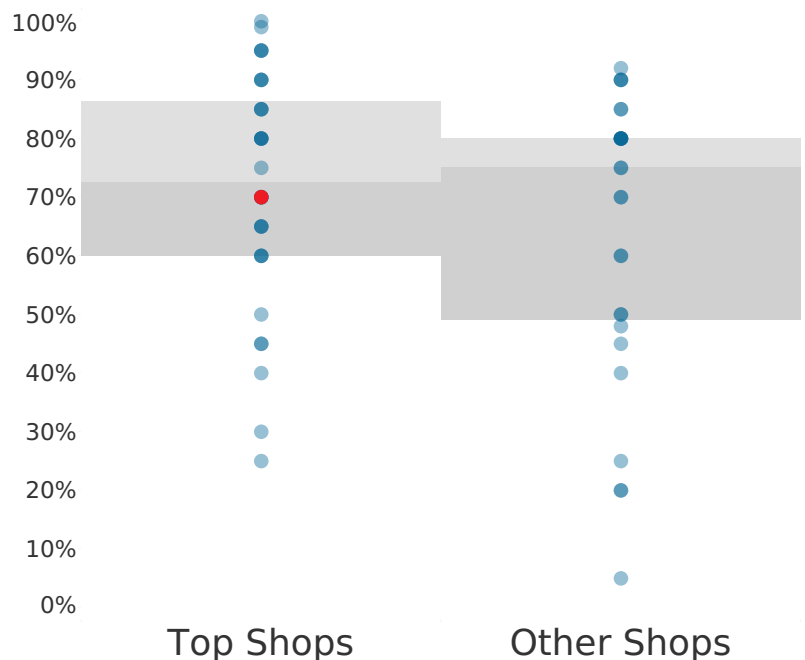


Capacity Utilization

Capacity being used as a percentage of total plant capacity (%)

Your Shop's Value: **70.0%**
Your Overall Percentile: **51%**

Why this is important: Capacity utilization quantifies how much of your facility's total available capacity is being used. Low capacity utilization indicates the investment in some equipment is not generating income, which can lead to reduced profits.





TOP SHOPS BENCHMARK RESULTS

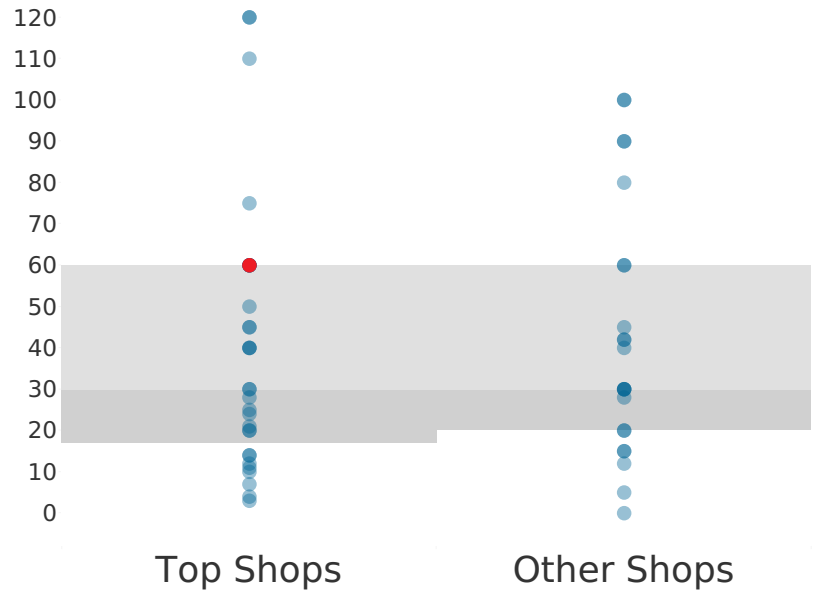
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Order Lead Time

Time between receipt of order and delivery to customer (days, lower is better)

Your Shop's Value: **60.0**
Your Overall Percentile: **25%**

Why this is important: Shorter lead times allow customers faster access to products and the ability to work within tight deadlines.

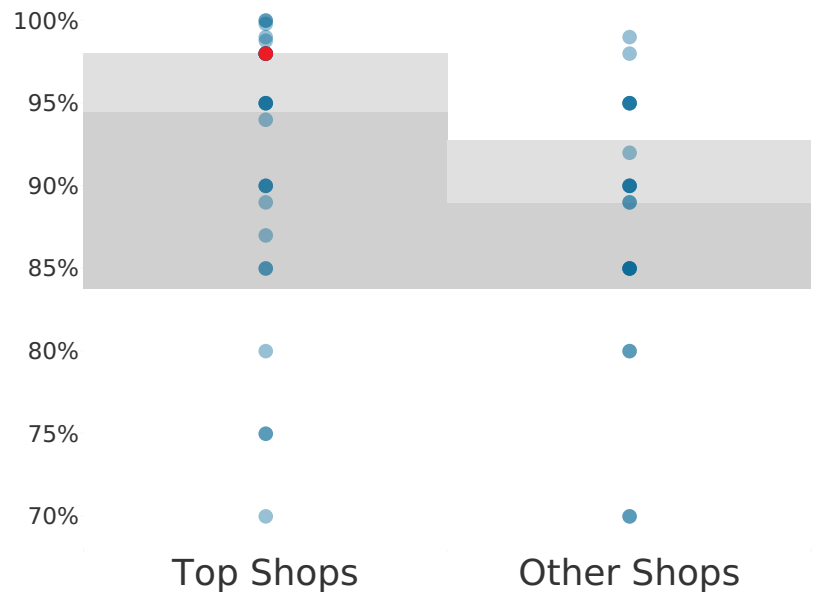


On-Time Delivery

Percentage of product delivered on the timing committed (%)

Your Shop's Value: **98.0%**
Your Overall Percentile: **86%**

Why this is important: Customers expect products delivered on time so they can meet their own deadlines. On-time delivery protects and builds your reputation and supports repeat business.





TOP SHOPS BENCHMARK RESULTS

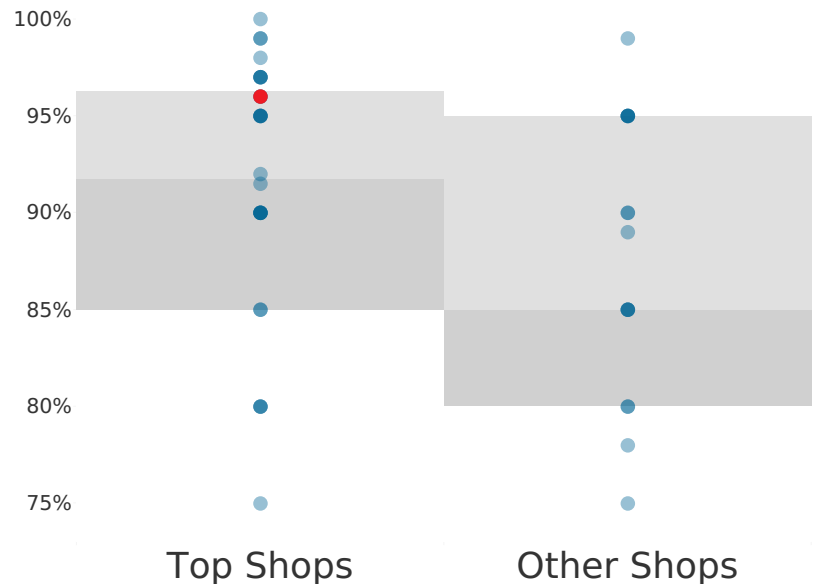
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Finished Product First Pass Quality Yield

Percentage of product that passes final inspection on the first attempt (%)

Your Shop's Value: **96.0%**
Your Overall Percentile: **81%**

Why this is important: Low finished product first-pass quality increases costs as a result of rework and scrap. This can cause a facility to fail to meet a customer's delivery expectations.

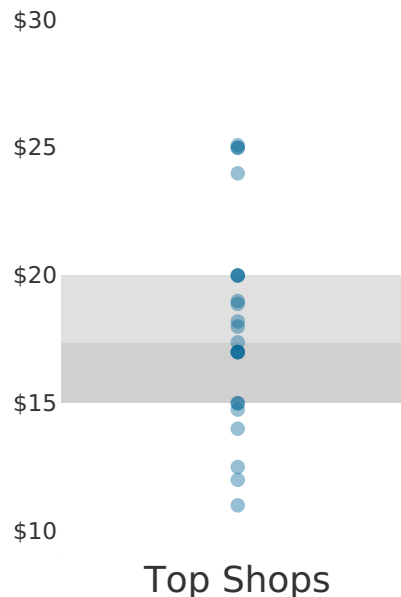


Shopfloor Wages

Average hourly wage for nonmanagement shopfloor employees (\$)

Your Shop's Value: **\$**
Your Overall Percentile: **\$**

Why this is important: Competitive compensation can help minimize turnover. Job training combined with competitive pay enables a facility to develop and maintain high-quality employees.



Response rates among other shops were too low to report

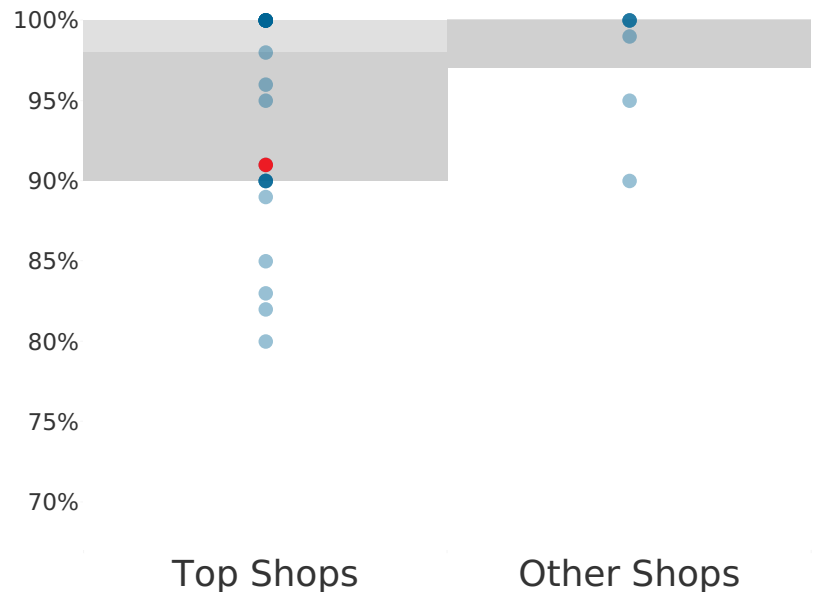


Customer Retention

Percent of customers retained from the previous year (%)

Your Shop's Value: **91%**
Your Overall Percentile: **40%**

Why this is important: Retaining customers indicates that your company is meeting customer needs and expectations. Facilities with low customer retention need to consider if the way they conduct business needs to change or the facility needs to reconsider the industries it serves.

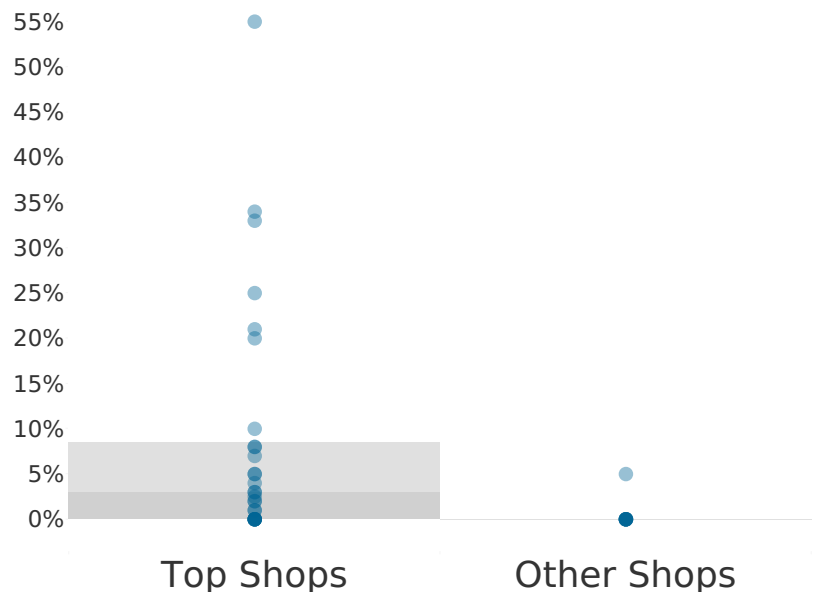


Capital Spending as a Percentage of Sales

Cost of total capital equipment purchases divided by gross sales (%)

Your Shop's Value:
Your Overall Percentile:

Why this is important: Capital equipment is constantly improving. Making regular investments in equipment can help your company stay technologically competitive.

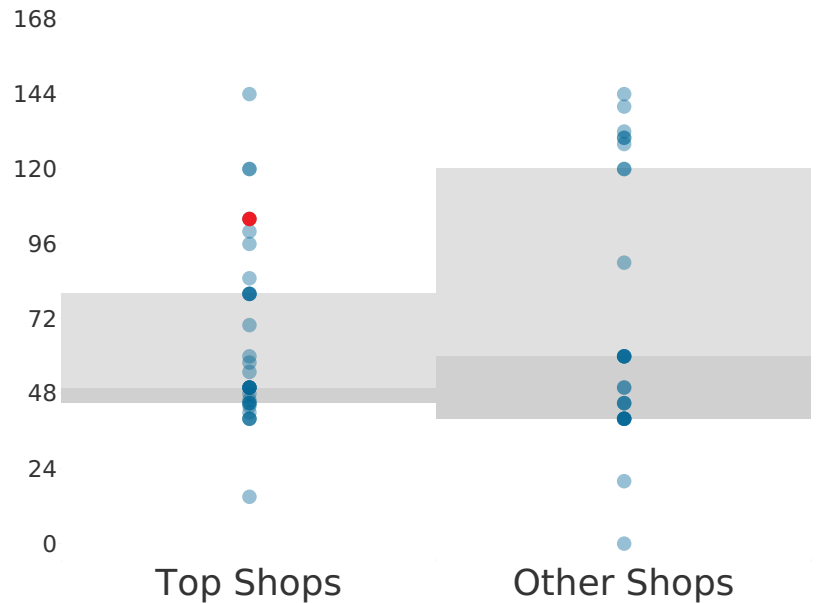




Operation Hours

Average weekly hours facility was operating in 2019 (hours)

Your Shop's Value: **104**
Your Overall Percentile: **85%**

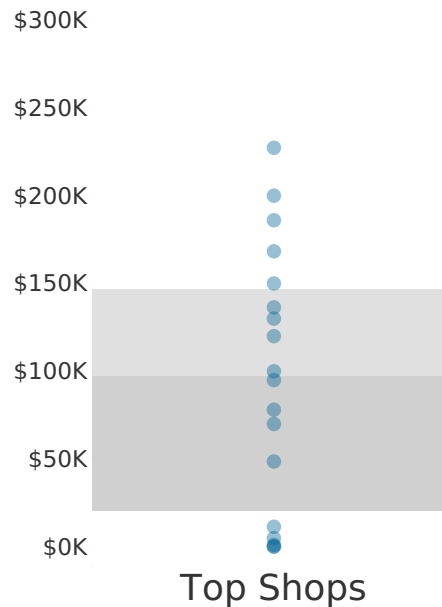


Gross Sales per Employee

Your Shop's Value:
Your Overall Percentile:

Why this is important: This metric tells you if your facility is using the right mix of labor and equipment to maximize the value of the employees that you have. A facility with low revenue per employee may want to consider using more equipment to boost the productivity (and therefore revenue) of the facility.

Sales per employee (\$)



Response rates among other shops were too low to report



TOP SHOPS BENCHMARK RESULTS

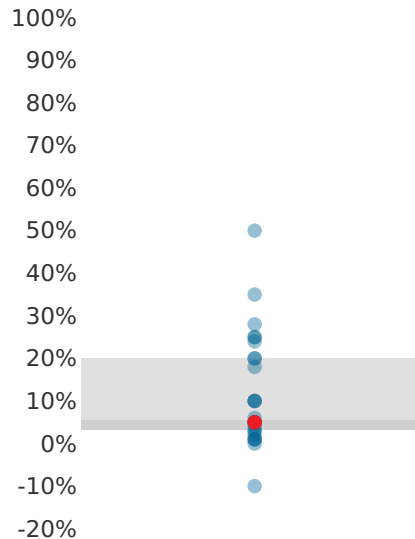
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Annual Sales Growth

Year-over-year 2019 to 2020 percent change (%)

Your Shop's Value: **5%**
Your Overall Percentile: **43%**

Why this is important: Positive annual sales growth means that you are growing your customer base, deepening relationships, or both. You may even be taking away market share from your competition. Positive sales growth can also indicate you are selling to healthy industries and keeping up with changes in customer needs and preferences.



Response rates among other shops were too low to report

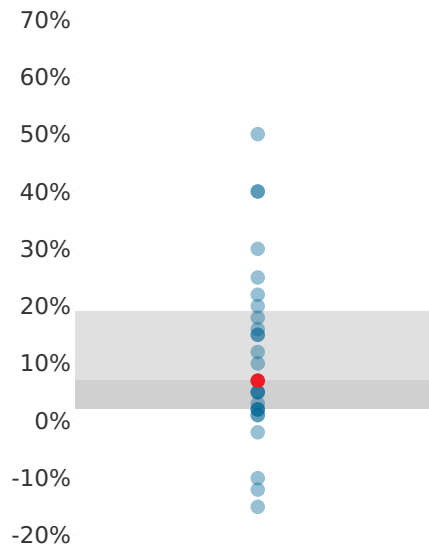
Top Shops

Estimated Annual Sales Growth

Year-over-year 2020-2021 estimated percent change (%)

Your Shop's Value: **7%**
Your Overall Percentile: **46%**

Why this is important: Having aggressive but reasonable sales expectations can encourage firms to avoid the status quo and complacency. Comparing your growth estimate against your peers helps managers know if they are setting the bar for their company too high or too low.



Response rates among other shops were too low to report

Top Shops

Other Shops



TOP SHOPS BENCHMARK RESULTS

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Profit Margin

Net income divided by gross sales (%)

Your Shop's Value:
Your Overall Percentile:

Why this is important: Solid profit margins allow businesses the ability to reinvest in their company for the longer-term. A company that can spend the time and capital today to invest for the long-run is more likely to outperform its competition over time.

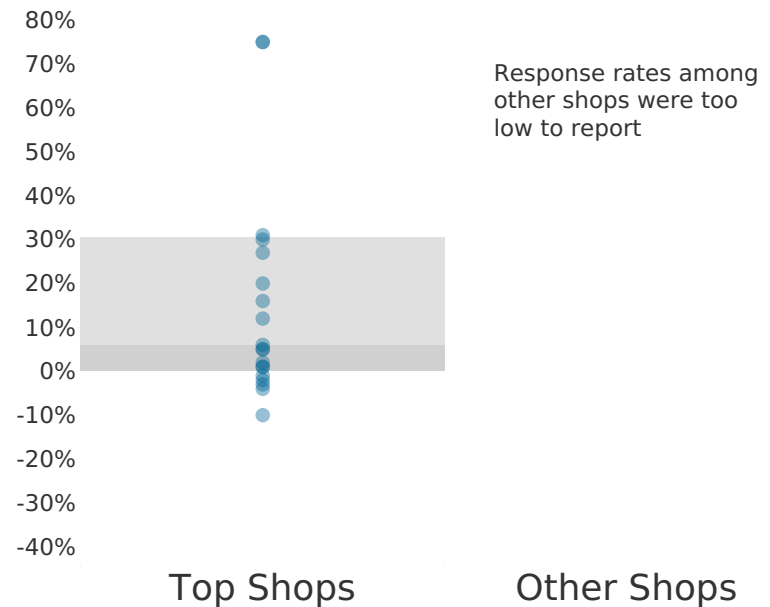


Return on Assets

Net income divided by total assets (%)

Your Shop's Value:
Your Overall Percentile:

Why this is important: Return on assets measure profit against the assets a company used to generate revenue. Companies that are best able to connect their business opportunities and their investments in machines, equipment and facilities will have a strong return on assets.



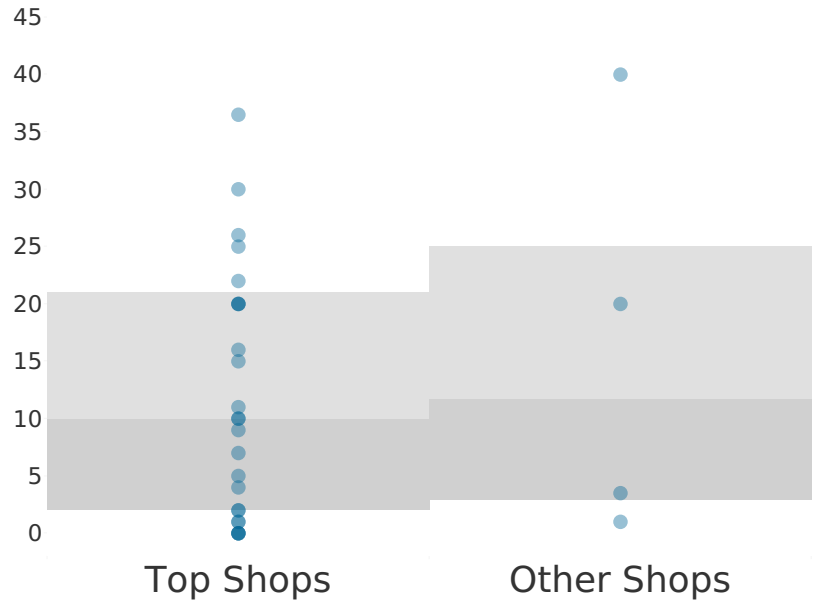


Labor Turnover Rate

Number of employees separated from the company as a percentage of the total (% , lower is better)

Your Shop's Value:
Your Overall Percentile:

Why this is important: Although some amount of turnover is inevitable, a facility can minimize it by providing effective training, a safe, clean, and efficient working environment, and opportunities for advancement to positions of higher stature. Minimizing turnover allows a facility to realize greater returns from investment in training.

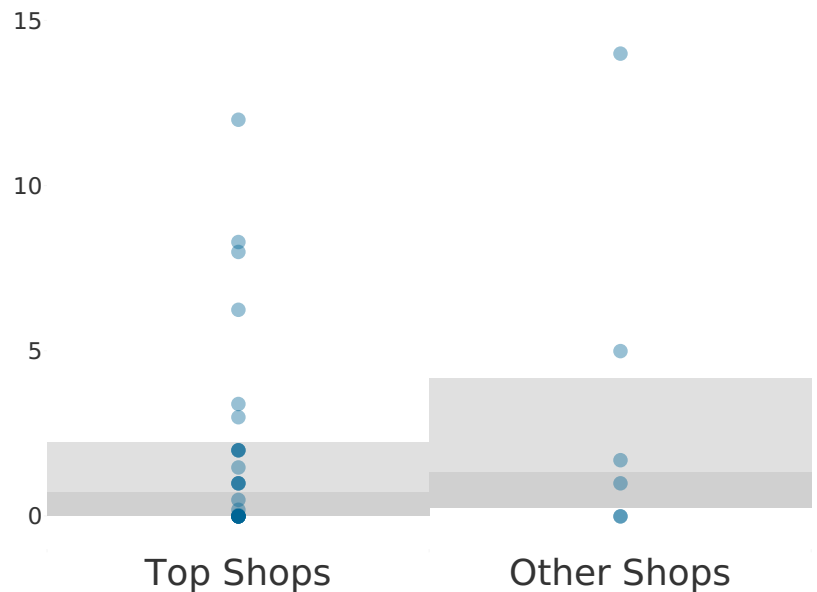


Incident Rate

Number of incidents as a percentage of the usual total floor staff (% , lower is better)

Your Shop's Value:
Your Overall Percentile:

Why this is important: A low incident rate demonstrates proper employee training and a safe working culture. High incident rates may indicate a shop is not using best practices, and also tend to result in unexpected costs. A dangerous working environment can also discourage employees from staying with the company.





TOP SHOPS BENCHMARK RESULTS

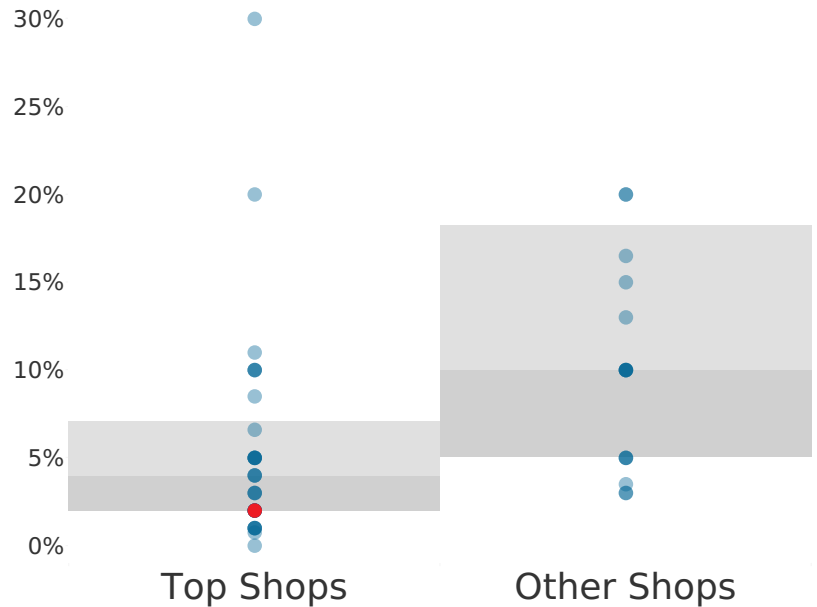
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Scrap Rate (Parts)

Number of scrapped or reworked parts as a percentage of total parts produced (% , lower is better)

Your Shop's Value: **2.0%**
Your Overall Percentile: **86%**

Why this is important: A low value means shops have established consistently reliable and predictable processes to minimize the number of bad parts.

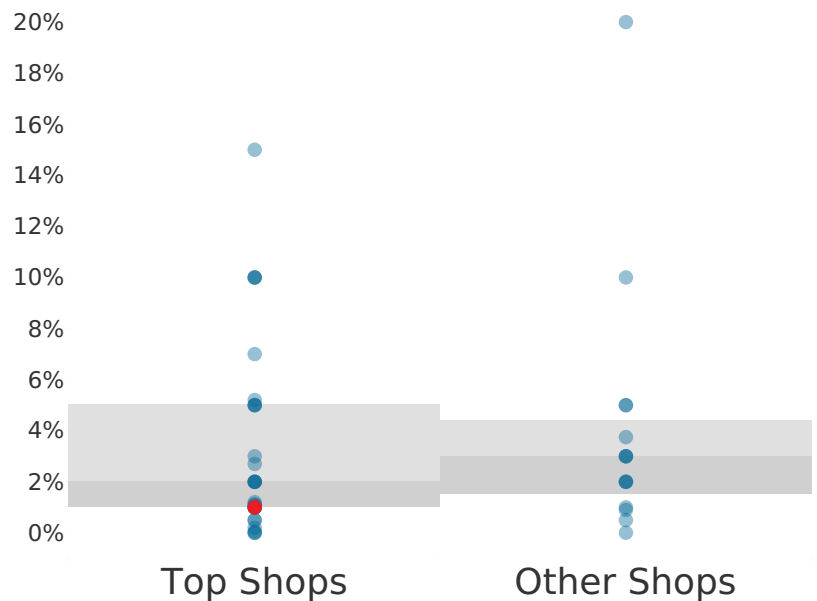


Scrap Rate (Sales)

Cost of scrap and rework as a percentage of shop sales (% , lower is better)

Your Shop's Value: **1.0%**
Your Overall Percentile: **80%**

Why this is important: Operations that generate large amounts of scrap and rework adversely impact a company's bottom line. Profitable shops apply technologies and strategies for effective process control to minimize wasted time and materials.



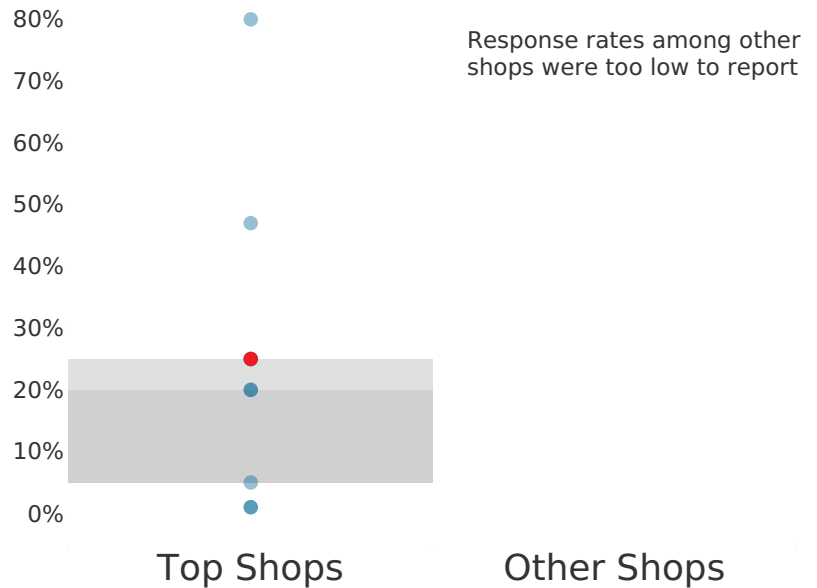


Scrap Recycling Rate

Portion of scrap material, by volume, reused or diverted from landfills (%)

Your Shop's Value: **25%**
Your Overall Percentile: **64%**

Why this is important: The ability of a facility to re-use or repurpose scrap material can help it reduce the overall scrap rate and avoid sending material to the landfill. This can help contribute to profitability and reduce the facility's carbon footprint.

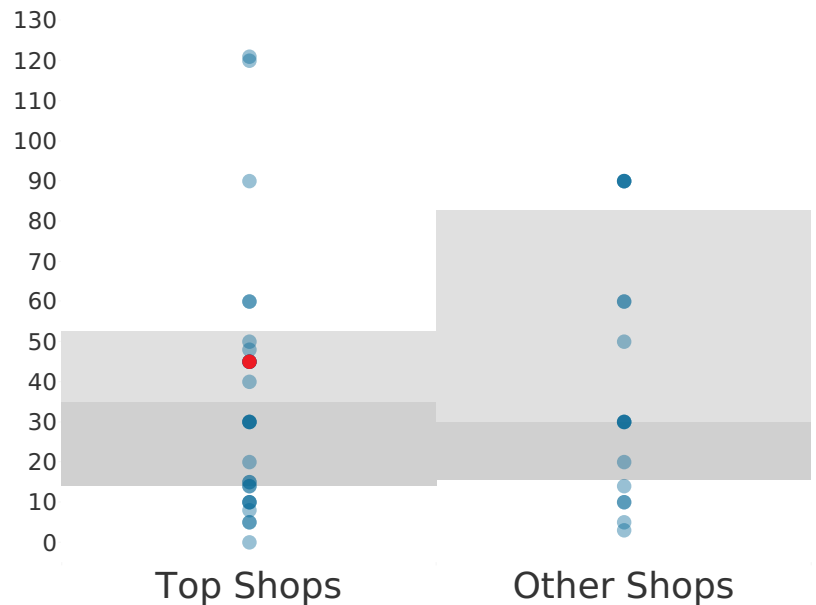


Inventory Size

Average number of days of inventory that facility has on hand (days)

Your Shop's Value: **45**
Your Overall Percentile: **67%**

Why this is important: Raw material stored in inventory represents a burden on the balance sheet. Because of this, the size of inventory and how quickly it can be turned is an important measure of manufacturing efficiency.

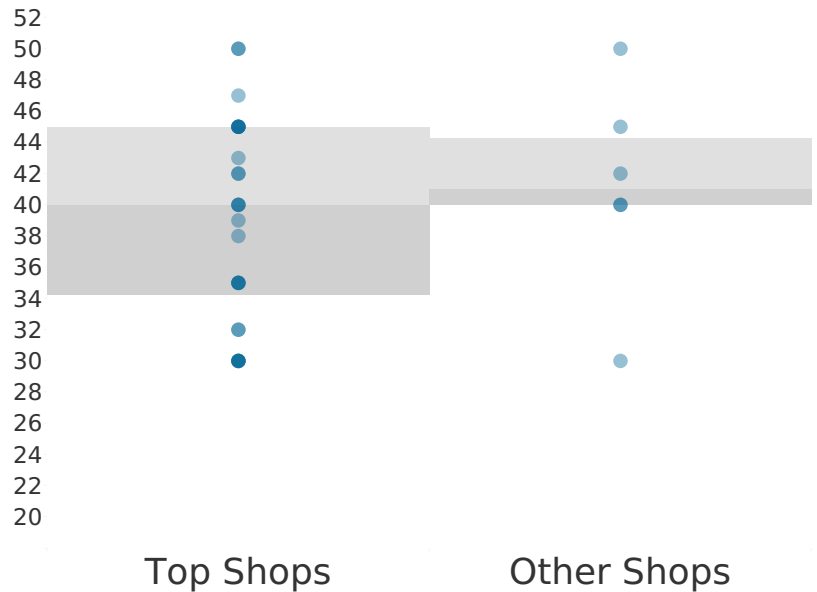


Employee Age

Average age of employees (years)

Your Shop's Value:
Your Overall Percentile:

Why this is important: Older employees have greater experience and institutional knowledge, often making them a valuable company asset. Conversely, having employees with new skill sets and recent training can help facilities use the latest technologies.

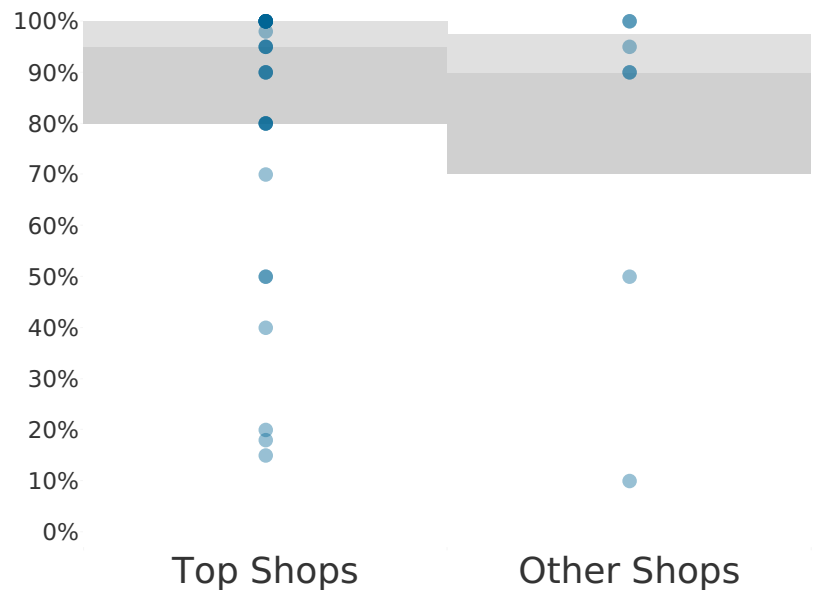


Composites Revenue Ratio

Percentage of facility revenue derived from composites manufacturing (%)

Your Shop's Value:
Your Overall Percentile:

Why this is important: Some composites manufacturing facilities also produce parts made with non-composite materials. This benchmark reveals how much of your facility's revenue is derived directly from composites-related activities.





TOP SHOPS BENCHMARK RESULTS

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Methodology

Top Shops

Select measures are scored and tallied for each survey participant to identify a subset that rises to the top. This subset is the benchmarking group designated 'Top Shops' in this report.

General

Sample: CompositesWorld magazine subscribers and visitors to relevant websites, blogs, etc. for broad exposure and participation

Field period: February 6 to March 9, 2020

Base Size: 82 reportable returns

Survey

Distribution: Sent via email with online link and posted to relevant websites, blogs, etc.

Question Areas: Technology, practices and performance, business strategies and performance, and human resources

Response options: Formats 'normalized' to reduce bias associated with shop characteristics like size, making comparisons and competition fair and reasonable across shops

Data

Tabulation: Data tabulated for Top Shops and Other Shops

Cleaning: Outlier values are removed from numbers-based questions using a databased approach and logic

Respondent Base

It can be useful to see the composition of the respondent base when reviewing and using aggregate data. Key profiling metrics are provided on the right of this page.

Business Attributes

2019 Median Value

	Top Shops	Other Shops
SKUs Produced	178.0	200.0
Number of Customers	35.0	9.0
Shop Age	23.0	30.0
Floor Employee Count	55.0	130.0

Shop Type

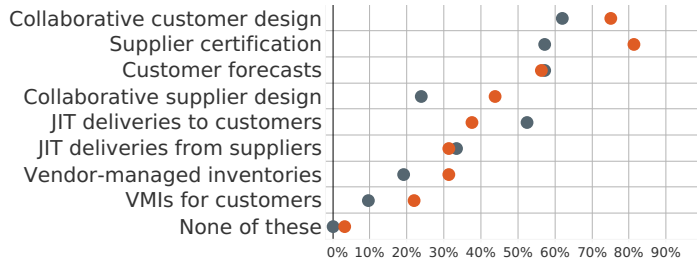
	Top Shops	Other Shops
Contract Manufacturer	33%	40%
Design/Engineering	3%	20%
Moldmaker	3%	0%
OEM	30%	14%
Sub-tier supplier	3%	11%
Tier supplier to OEMS	27%	14%

Industries Served

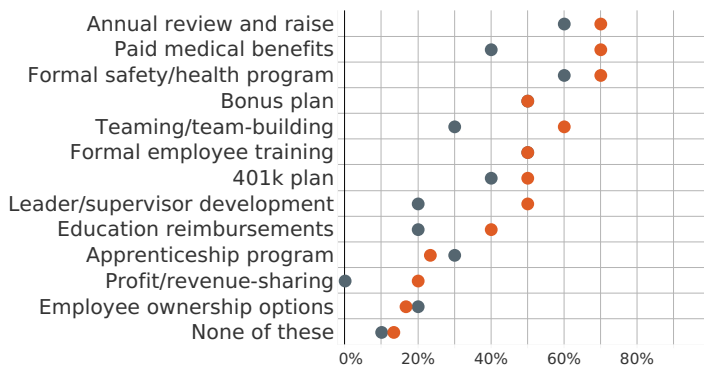
Aerospace, Commercial	44%	53%
Aerospace, General	28%	37%
Agriculture	16%	3%
Automotive	22%	16%
Construction/Infrastructure	38%	21%
Consumer	22%	13%
Defense/Military	53%	39%
Industrial/Corrosion resistance	22%	21%
Marine	34%	24%
Mass Transit	19%	3%
Medical	13%	11%
Oil and Gas	28%	8%
Sports and Recreation	28%	26%
Wind Energy	22%	11%

■ Top Shops ■ Other Shops

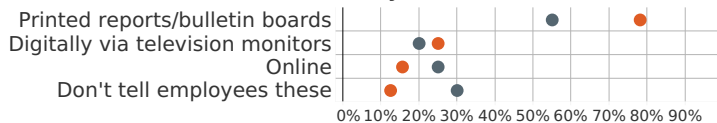
Supply Chain Practices



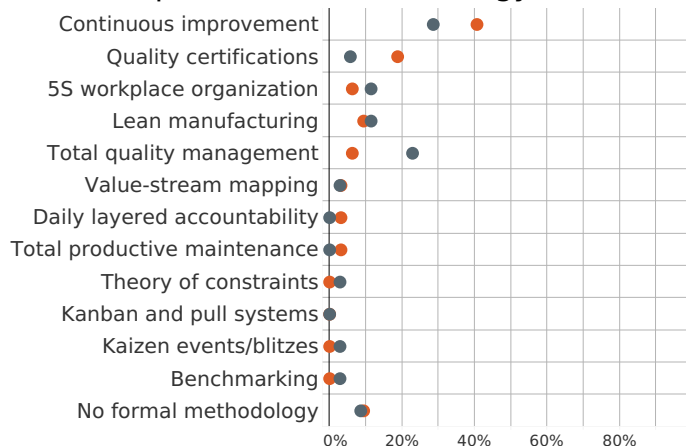
Human Resources



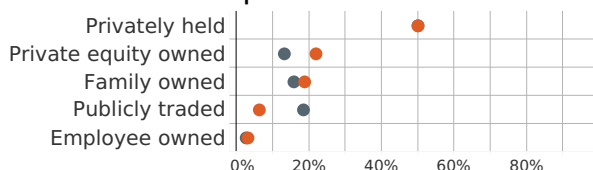
Communicating Operations Efficiency and Parts Quality



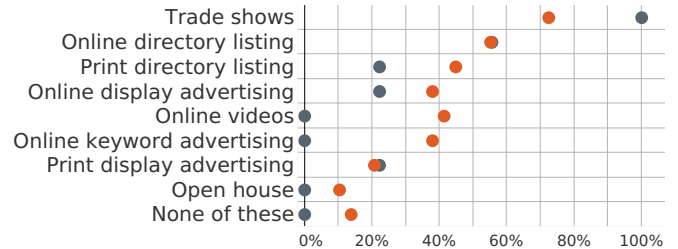
Improvement Methodology



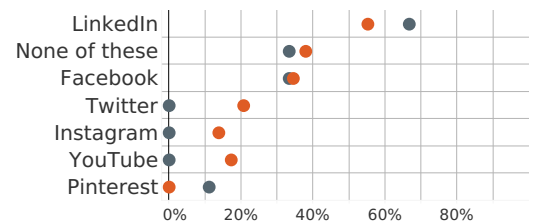
Ownership Model



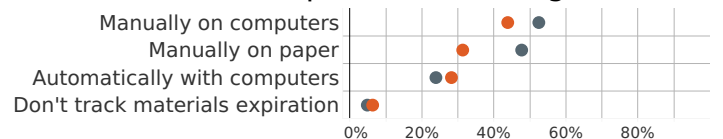
Marketing



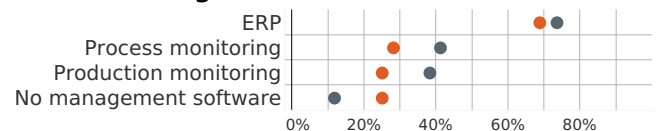
Social Media



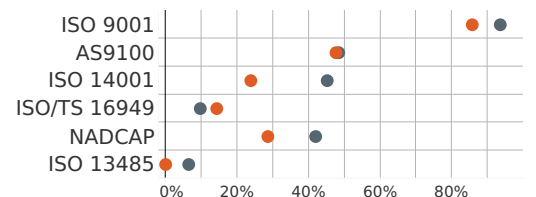
Materials Expiration Tracking



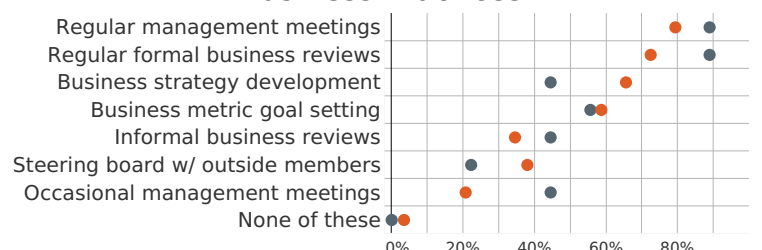
Management Software



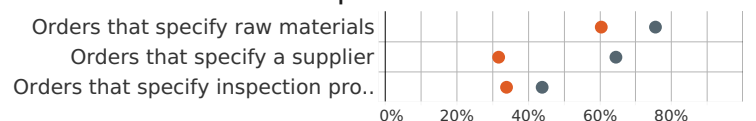
Certifications



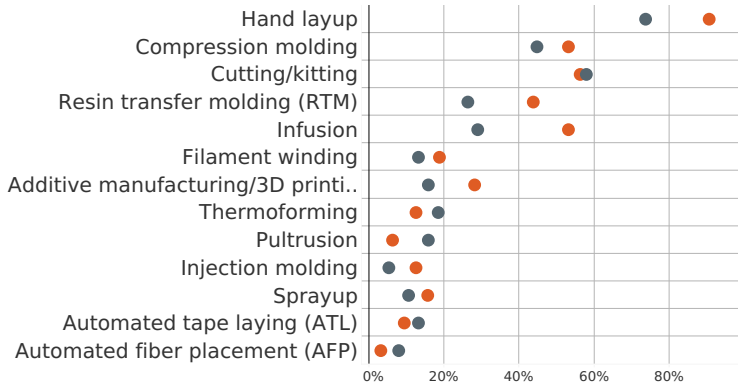
Business Practices



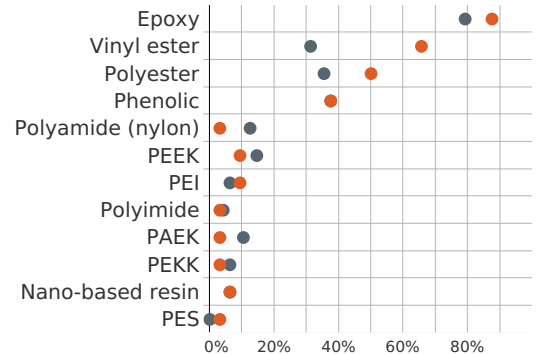
Order Specifications



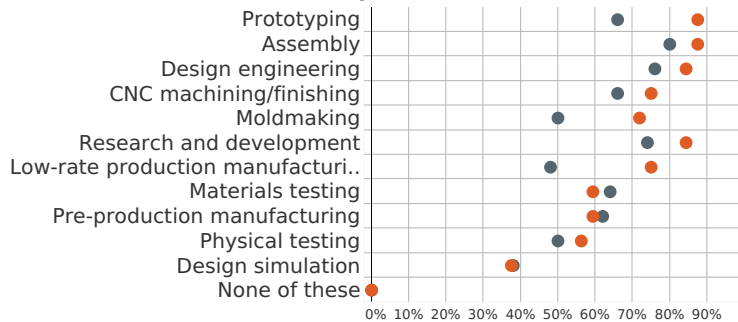
Composites Manufacturing Processes



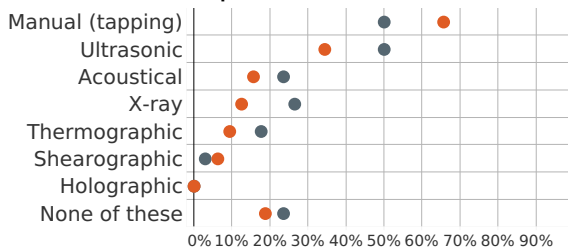
Resins Used



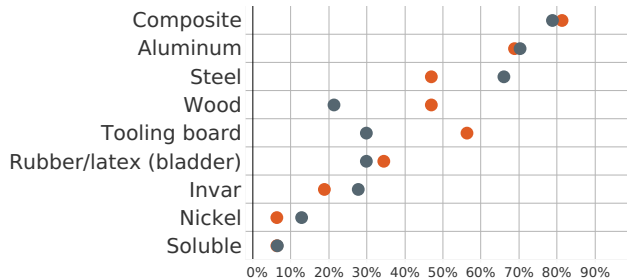
Secondary Processes



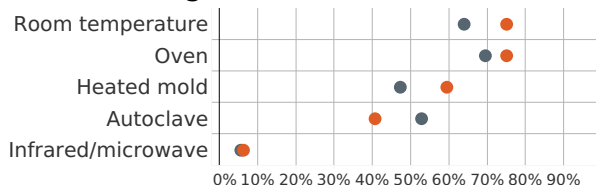
Non Destructive Inspection Processes



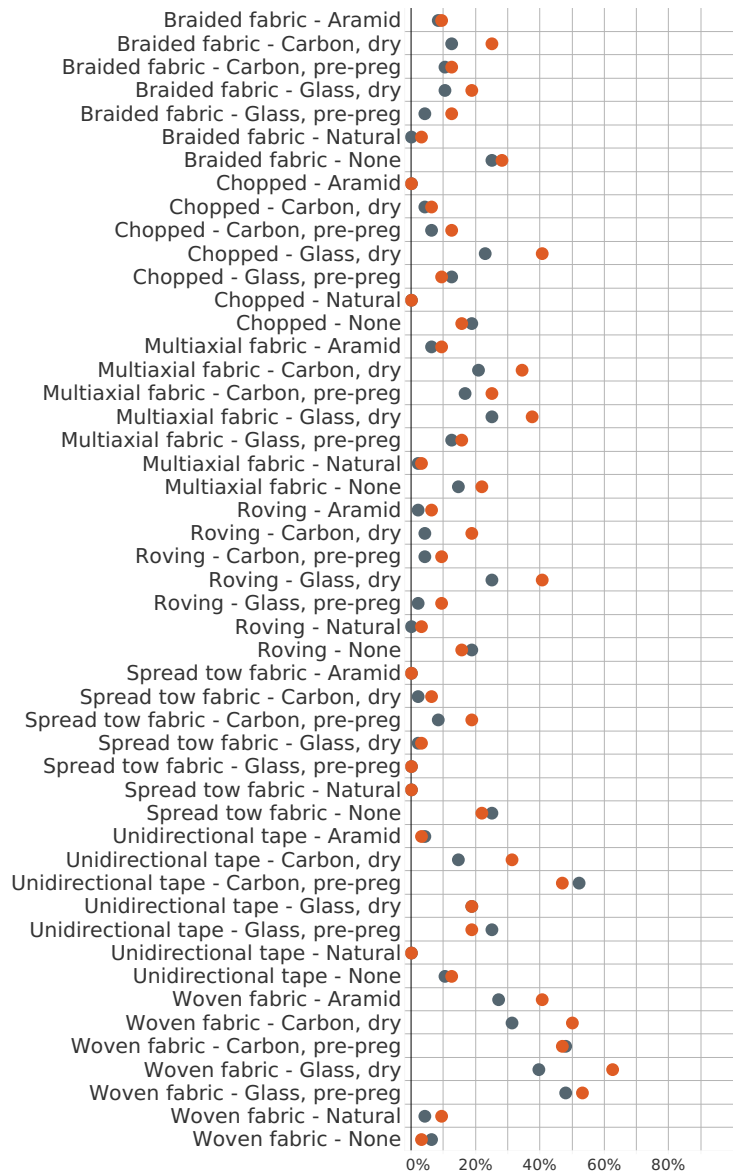
Tooling Materials



Curing Processes



Format/Fiber Combinations Used

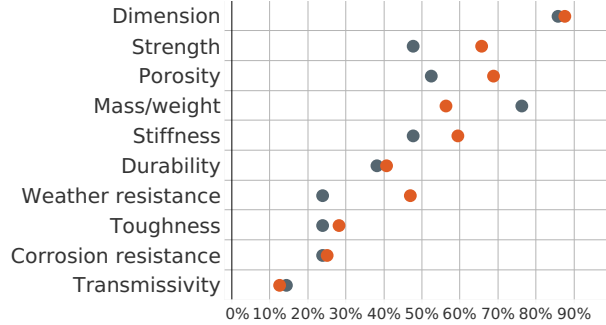




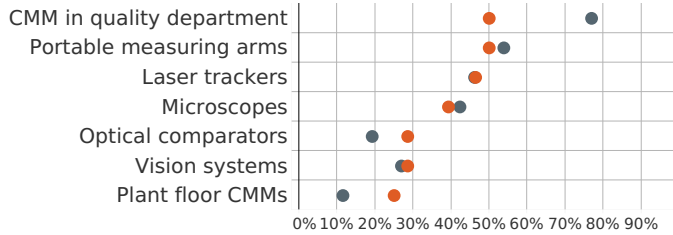
TOP SHOPS BENCHMARK RESULTS

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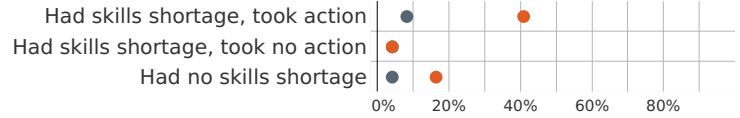
Critical Quality Parameters



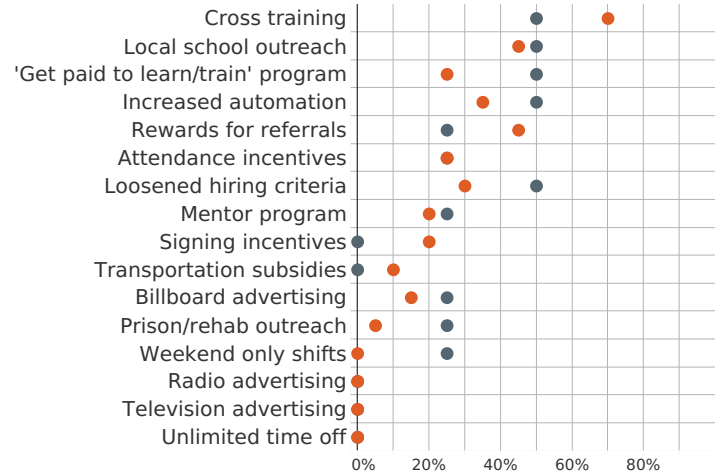
Inspection Equipment



Employee Shortage



Actions taken to address employee shortages



Custom Research & **ANALYSIS** **OFFERINGS**

Gardner Intelligence has developed new custom research capabilities that deliver a data-driven advantage for making informed, impactful business decisions related to sales, marketing, inventory and management.

For nearly 50 years, Gardner Intelligence has been delivering market intelligence to industrial manufacturing, offering a variety of resources to help you stay ahead of trends, giving you the edge for continued success.



TOP SHOPS CUSTOM REPORTS

Keep up to date on what's important with our proprietary reports and surveys.



GARDNER BUSINESS INDEX

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