

Products Finishing Top Shops 2021: Liquid, Powder & Electrocoating

Thank you for participating in the *Products Finishing* Top Shops Benchmarking Survey for liquid, powder and electrocoating, which highlights the attributes shared by leading finishing operations. By fully completing this survey, you will receive a benchmarking report customized for your shop. This survey pertains to liquid, powder and electrocoating, in particular. There is a separate survey for shops that perform plating and anodizing. **Please proceed only if your shop does liquid, powder or electrocoating.**

To take advantage of the many benefits of participating in Top Shops, all you have to do is:

Fully complete the survey for maximum value. It's in your best interest for benchmarking and scoring. It may take time to get some data - it's worth it. You may have reservations about answering certain questions. Don't worry, all responses will remain confidential.
 Provide your email address to receive a report customized for your shop, showing where your shop is strong, on track, and has opportunities.

3. Enter your contact info and submit your completed survey by April 30 if you want a chance to be profiled in an upcoming issue of *Products Finishing*.

5. Select 'Submit Responses' on the final page once you do not intend to return to the survey again. If you get interrupted while completing the survey, you may close and return to it using the same device as many times as you like until you select 'Submit Responses.'

Note this is the first time *Products Finishing's* Top Shops benchmarking survey can be completed one time, any time throughout the current year. That means if, for example, your accounting data are not available until March, no problem. You may complete the survey in April. The sooner you complete it, though, the sooner you'll be able to act on the results.

Please note, if you want your shop to be considered for a Top Shops profile article in *Products Finishing* magazine later in the year, you must submit your completed survey by **April 30, 2021**.

<u>Click here</u> to download a PDF of the survey if you want to review the questions before entering them online. If you want to keep a record of your responses, we suggest you print a copy of each page with your responses before selecting 'next' to advance to the next page/question.

If you have questions, please contact Jan Schafer, Director of Market Research, Gardner Intelligence, at jschafer@gardnerweb.com.

* 1. Which types of finishing does your shop currently perform on your premises?

Liquid coating

Powder coating

Electrocoating

Other

No finishing offered



Company & Contact Information

2. Please provide the following information to receive your report and for us to contact Top Shops:

Name:	
Job Title/Function:	
Company:	
Address:	
City/Town:	
State/Province:	
ZIP/Postal Code:	
Country:	
Company Website:	
Company Phone Number:	

3. Please provide the email address to which you want your custom report sent:

4. Who is your top company official?

Top Official's Name:	
Top Official's Title:	
Top Official's Email:	



Before we get started...

Most questions refer to 'your shop,' and here's how we'd like you to think about it...

If your company has more than one location, please answer all survey questions in terms of the scope for which you have the most access to operations and performance data. In some cases, that is multiple locations combined. In other cases, it is just one location.

If you have equal access to data for more than one location, please answer the survey based on the one location that is most representative, or considered most typical, of your business overall.

If you are a captive shop, answer survey questions in the terms your shop uses to report metrics to the broader company. You may have different considerations or use tweaked formulas, but you should be able to provide the information requested.

Most important is that you be consistent throughout the survey as far as the location(s) to which your responses apply.

Please also note that questions pertain to 2020 unless indicated otherwise.



- 5. Which category best describes your business' relation to its customer base? Select ONE only.
 - Captive shop (component of a larger company)
 - Contract shop (independent shop with 50% or more contract work)
 - Job shop (independent shop with less than 50% contract work)

6. Which of the following best describes your shop's business? Select ONE only.

- High mix/low volume
- High mix/high volume
- Low mix/low volume
- Cow mix/high volume

7. Which statement best describes your shop's pricing strategy relative to competition? Select ONE only.

- Among the highest priced
- Higher priced than average, but not among the highest
- Priced about average
- Lower priced than average, but not among the lowest
- Among the lowest priced

8. Which of the following, if any, describe your shop's ownership? Select ALL that apply.

- Family owned
- Minority owned
- Veteran owned
- Woman owned
- None of these



Please read the instructions at each question for the accepted format for responses. If you receive an error message and your format is correct, your value is likely an exception outside of the reasonable range, and won't be accepted.

9. As of the end of 2020, how many years has your company been in business?

Please round to the nearest whole number.

10. What is the **total square footage** of your entire building? Enter your best estimate if you do not have the measurements handy.

Please enter a whole number only; no decimals, commas or other symbols.

11. About how many total parts did your shop finish in 2020?

Please enter a whole number only; no decimals, commas or other symbols.

12. About how many different types of parts/SKU's did your shop finish in 2020?

Please enter a whole number only; no decimals, commas or other symbols.

13. What size parts did your shop finish in 2020? Select all ranges that apply.

less than 5 feet long

5 to 15 feet long

over 15 feet long



14. Switching gears a bit and now thinking about your shop's finishing lines, **how many lines** were in production for each coating process in 2020?

Liquid coating	
Powder coating	
Electrocoating	

15. Which of the following industries does your shop typically serve? Select ALL that apply.

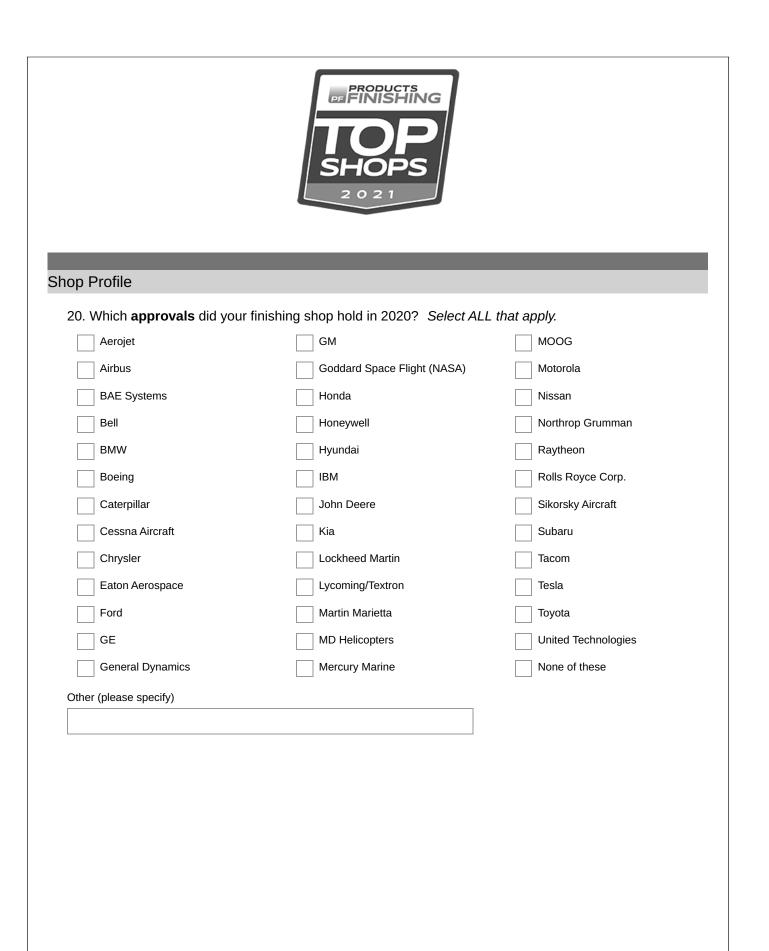
Aerospace	Hardware/tools
Agriculture/construction equipment	Machinery/industrial
Appliances	Medical
Automotive	Military/government
Building construction	Oil & gas mining
Electronics, computers	Power generation (turbines, batteries)
Fasteners	Pumps, valves & plumbing
Furniture manufacturing	Wire goods/pipes
Other (please specify)	
1	



16. Which of the industries served do you typically consider the **primary contributors** to your shop's business? *Select up to 5.*

Aerospace
Agriculture/construction equipment
Appliances
Automotive
Building construction
Electronics, computers
Fasteners
Furniture manufacturing
Hardware/tools
Machinery/industrial
Medical
Military/government
Oil & gas mining
Power generation (turbines, batteries)
Pumps, valves & plumbing
Wire goods/pipes
[Insert text from Other]

Shop Profile	PERFINISHING TOPS SHOPS 2 0 2 1
	hing shop hold in 2020? Select ALL that apply.
 AAMA 2604	PCI 3000/4000
AAMA 2505	None of these
ISO 9001:2015	
 FDA registered Conflict Materials Disclosure CMMC (Cybersecurity Maturity Model Centric None of these 	ertification)
19. Of which trade associations was	your shop a member in 2020? <i>Select ALL that apply.</i>
Electrocoat Association	
Powder Coating Institute (PCI)	
Not a member of these associations	
Other (please specify)	





This section of the survey includes questions pertaining to product quality, shop efficiency, and practices directly involved in finishing processes.

Please read the instructions at each question for the accepted format for responses. If you receive an error message and your format is correct, your value is likely an exception outside of the reasonable range, and won't be accepted.

21. Which of the following practices and improvement methodologies did your business utilize in 2020? *Select ALL that apply.*

5S workplace organization	Overall Equipment Effectiveness (OEE)
Benchmarking	PCI Certification
Continuous improvement program	Six Sigma
Customer surveys	Total quality management
Just-in-Time movement of materials	Value-stream mapping
Kaizen events/blitzes	None of these
Kanban and pull systems	

Finishing Practices & Technology	2 0 2 1
22. Which powder coating strategies/techno apply.	plogies did your shop have in place in 2020? Select ALL that
Quick Color Change	Fluidized Bed
Automatic (reciprocators)	IoT / Industry 4.0
Robotic	None of these
Handheld	
 Air or Airless Spraying, electrostatic Air or Airless Spraying, not electrostatic Liquid Spraying, Low Pressure Liquid Spraying, High Pressure Liquid Spraying, Gravity 	ogies did your shop have in place in 2020? Select ALL that apply. Rotary disks or bells Robotic IoT / Industry 4.0 None of these
24. Which electrocoating strategies/technole Manual Hoist Programmable Hoist Monorail	ogies did your shop have in place in 2020? <i>Select ALL that apply.</i>
Conveyor	
None of these	



25. What was your shop's average **order lead time** in 2020, defined as the average <u>number of days</u> from receipt of order to delivery to customer?

You may enter a decimal, but no other signs or symbols.

Example: For 6 days, you would enter 6. For 6 1/2 days, you would enter 6.5.

26. What was your shop's **on-time delivery rate** in 2020, defined as the <u>percentage</u> of goods delivered on the timing committed?

You may enter a decimal, but no other signs or symbols. Example: For 80%, you would enter 80. For 80.5%, you would enter 80.5.

27. What was your shop's **finished product first-pass quality yield** in 2020, defined as the <u>percentage</u> of products passing inspection on the first attempt; i.e. no re-work was required?

You may enter a decimal, but no other signs or symbols. Example: For 80%, you would enter 80. For 80.5%, you would enter 80.5.

28. What was your shop's **finishing usage** in 2020, defined as the average <u>number of hours</u> finishing equipment is in production in a 24 hour day?

You may enter a decimal, but no other signs or symbols. Your answer should be between 1 and 24. Example: For 8 hours, you would enter 8. For 8 1/2 hours, you would enter 8.5.



29. Please provide your shops **capacity utilization** for 2020.

There is no single formula that fits how every shop figures capacity utilization. For this question, think about what you consider to be at full capacity for your shop. Then enter as a percentage the degree to which your shop's total capacity was typically in use in 2020.

Example: if 85% of your shop's total capacity was typically in use in 2020, meaning you typically had 15% capacity to spare, you would enter 85 for capacity utilization. You may enter decimals but no other signs or symbols.

30. Please estimate the average **number of labor-hours** your shop as a whole spent in total each week on each of the following tasks in 2020.

Please round to the nearest whole number. Enter '0' if your shop does not perform the task.

Environmental management	
Parts inspection	
Analytical testing	
Hazardous waste management	
Training	

31. Please select the rating that best describes your 2020 shop practice in each of the areas listed below. *Select ONE rating per row.*

	<u>Do not have</u> written procedures	Have written procedures, but need updating	Have written procedures, and <u>they are current</u>
Application procedures (liquid and/or powder coating)	\bigcirc	\bigcirc	\bigcirc
Washer quality/performance	\bigcirc	\bigcirc	\bigcirc
Testing procedures	\bigcirc	\bigcirc	\bigcirc



32. What was your shop's average transfer efficiency for each process in 2020?

Please round each percentage to a whole number and enter without a % sign.

Liquid coating

Powder coating

Electrocoating

33. Thinking of 2020, what percentage of your shop's lines were **reclaim systems** rather than spray to waste? *Please round each percentage to a whole number and enter without a % sign.*

% of powder coating lines reclaim

% of electrocoating lines reclaim

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34. Which of the following substrates did	your shop finish in 2020? Select ALL that apply.
Aluminum	Magnesium
Aluminum Die Cast	Steel
Composites	Zinc Die Cast
Galvanized Metal	Zinc Plated Metal
Lead	3-D Printed Materials
Other (please specify)	
35. Which additional types of finishing of Abrasive Blasting	perations did your shop perform in 2020? Select ALL that app
Abrasive Blasting	
 Abrasive Blasting Mechanical/Mass Finishing Plating 36. Which types of inspection processes Adhesion Appearance Coating Thickness Color and Gloss Corrosion Resistance 	 Polishing or Buffing Vacuum Coating None of these s did your shop perform in 2020? Select ALL that apply. Hydrogen Embrittlement Non-Destructive Testing Salt Spray Torque Tension Water Immersion
 Abrasive Blasting Mechanical/Mass Finishing Plating 36. Which types of inspection processes Adhesion Appearance Coating Thickness Color and Gloss Corrosion Resistance Cure 	 Polishing or Buffing Vacuum Coating None of these s did your shop perform in 2020? Select ALL that apply. Hydrogen Embrittlement Non-Destructive Testing Salt Spray Torque Tension Water Immersion Wet Analysis
 Abrasive Blasting Mechanical/Mass Finishing Plating 36. Which types of inspection processes Adhesion Appearance Coating Thickness Color and Gloss Corrosion Resistance 	 Polishing or Buffing Vacuum Coating None of these s did your shop perform in 2020? Select ALL that apply. Hydrogen Embrittlement Non-Destructive Testing Salt Spray Torque Tension Water Immersion

37. V	/hich types of automation did your shop use in 2020? Select ALL that apply.
	Automated process lines
	Process monitoring
	Process tank sensors
	Track product quality and defects
	None of these

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nishing Practices & Technology	
38. Which types of pretreatment did your	r shop use in 2020? Select ALL that apply.
Aqueous - zinc phosphate	Solvent wipe
Aqueous - iron phosphate	Other
Aqueous - nano technology	None
Blasting	
Custom - built in-house	None
40. Which stripping practices did your sh	The property of the second sec
Chemical stripping	Other
Fluidized sand stripping	None
Grinding	
41. Which curing methods did your shop	use in 2020? Select ALL that apply.
Convection	Natural gas heat
Electric heat	Other
Infrared	None



42. About how often did your shop calibrate equipment in 2020? Select ONE per row.

	Weekly or more	Monthly	Quarterly	Every 6 months	Once
Guages	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Inspection	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Ovens	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

43. Did your shop have onsite an **environmental room** with temperature and humidity control in 2020?

- Yes
- 🔵 No

44. Please indicate how, if at all, your shop acquired **software** for the purposes listed below. *Select ONE per row.*

	Built in-house	Purchased	Do not have software
Order management	\bigcirc	\bigcirc	\bigcirc
Preventative maintenance	\bigcirc	\bigcirc	\bigcirc
Quality assurance	\bigcirc	\bigcirc	\bigcirc



The next section of the survey includes questions pertaining to financial, operational and customer information. Be assured that all responses will remain confidential.

In addition to these metrics being useful in benchmarking and scoring, *Products Finishing* is taking Top Shops analysis to the next level by identifying key drivers of revenue and profit to help you establish priorities. These analyses depend on having large base sizes. Please answers all questions so we can deliver actionable insights back to you.

Please read the instructions at each question for the accepted format for responses. If you receive an error message and your format is correct, your value is likely an exception outside of the reasonable range, and won't be accepted.



45. Please provide your shop's 2020 gross sales per finishing line in USD.

Example: if your gross sales were \$5000 and you have 2 lines, you would enter 2500. Please round to the nearest whole number and enter without any signs or symbols.

46. Please provide your shop's 2020 gross sales per employee in USD.

Example: if your gross sales were \$5000 and you have 20 employees, you would enter 250. Please round to the nearest whole number and enter without any signs or symbols.

47. Were any capital investments made in equipment for your shop in 2020? Select ONE only.

- 🔵 Yes
- 🔵 No

Not sure



48. Please provide your shop's 2020 **capital equipment expenditure as a percentage of gross sales**. Round to the nearest whole number and enter without a % sign.

Formula = [(2020 cap equip exp / 2020 gross sales) * 100]

Example: if your capital equipment expenditure was \$500 and your gross sales were \$5000, you would enter 10.

49. Please provide your shop's **percent change in annual sales** from 2019 to 2020 using the following formula. Round to the nearest whole number, using a minus sign if necessary.

Formula = [(2020 gross sales - 2019 gross sales) / 2019 gross sales] * 100

Example: if your 2020 sales were \$5000 and your 2019 sales were \$4000, you would enter 25.

50. Please provide your shop's 2020 **overall profit margin percentage**, defined as your shop's <u>net income</u> (after tax) relative to gross sales, rounded to the nearest whole number. Include a minus sign if your number is negative.

Formula = [(2020 net income / 2020 gross sales) * 100] Example: If your 2020 net income was negative \$300 and your gross sales were \$5000, you would enter -6.

51. Please provide your shop's 2020 **ROA**, defined as your shop's <u>net income (after tax) relative to total</u> <u>assets</u>, rounded to the nearest whole number. Include a minus sign if your number is negative.

Formula = [(2020 net income / 2020 total assets) * 100]

Example: If your 2020 net income was negative \$300 and your total assets were \$5000, you would enter -6.



52. Please provide your shop's **total revenue** for 2020 in US dollars. Providing your shop's revenue confidentially enables us to perform useful calculations on your behalf.

Round to the nearest whole number and enter without any signs or symbols.

53. For each process, please provide your shop's 2020 **revenue per employee hour** in USD. Consider only employee hours spent <u>directly on each process</u>.

Example: if your revenue from liquid coating is \$5000 and employees worked a total of 100 hours on liquid coating, you would enter 50. Please round to the nearest whole number and enter without any signs or symbols.

Liquid coating	
Powder coating	
Electrocoating	

54. What percentage of your shop's 2020 total revenue came from each process?

Please round each percentage to a whole number and enter without a % sign. Your percentages must sum to 100.

% Liquid coating	
% Powder coating	
% Electrocoating	

55. What percentage of your shop's 2020 total revenue came from each of the following types of lines?

Please round each percentage to a whole number and enter without a % sign. Your percentages must sum to 100.

% Indexing	
% Conveyor	
% Batch	

	POPS PS 2 1
siness Strategy	
56. Which of the following supply chain practices	did your business use in 2020? Select ALL that apply
Certification of major suppliers	Just-in-time deliveries to customers
Collaborative design with customers	Utilizing customer forecasts
Collaborative design with suppliers	Vendor-managed or -owned inventories
Customer satisfaction surveys	Vendor-managed or -owned inventories for customers
Just-in-time deliveries from suppliers	None of these
 Brochure/catalogs Customer tours of shop Email promotions Online - advertising Online - company website 	 Sales personnel Social media (Facebook, Twitter, LinkedIn) Trade shows/events YouTube None of these
have been in place at your shop in 2020.	y or may not apply. Please select all that you conside
Regularly scheduled, formal review of the state of the business	Regularly scheduled management/department head meetings
Periodic, informal review of the state of the business	Occasional management/department head meetings
Business metric goal setting	Steering board/committee including outside members
Business strategy development	None of these



59. How many active customers did your business have in 2020?

60. What was your **customer retention rate** for 2020? This is the number of customers in 2020 who were also customers in 2019, as a percentage of your 2019 total customer base. Enter your number without a % sign.

Example: If you had 50 customers in 2020 who were also customers in 2019, and a total of 60 customers in 2019, your customer retention rate would be 83%, and you would enter 83. You may enter decimals but no other signs or symbols.

61. What percentage of **new business quoted in 2020 was actually booked**? Enter your number without a % sign.

Example: if you quoted 80 new jobs in 2020 and booked 40, you would enter 50. You may enter decimals but no other signs or symbols.

62. How much did your shop spend, in USD, on materials for each of these processes in 2020?

Please enter numbers only, rounding to the nearest whole number; decimals, symbols and words are not accepted.

Liquid coating	
Powder coating	
Electrocoating	
Electrocouting	



63. How much do you <u>estimate</u> your shop will spend, in USD, to make purchases in these categories <u>in 2021</u>? Enter '0' if you expect to make no investment in a category in 2020. Please enter numbers only, rounding to the nearest whole number; decimals, symbols and words are not accepted.

Liquid Application Equipment	
Powder Application Equipment	
Racking Equipment	
Testing Equipment	
Spray Booths (liquid/powder)	
Washers	
Full Turnkey Systems	
Chemicals	
Ovens	
Other	
64. What coatings or services	would you like to add to your shop in 2020? Select ALL that apply.
Custom masking	Physical Vapor Deposition
Electrocoat	Powder Coatings
Electroplating	Vacuum Coating
Liquid Coatings	
Other (please specify)	
None	

65. How many **peer group audits** did your shop conduct in 2020?

Please enter whole numbers only; decimals, symbols and words are not accepted.

66. How many formal customer audits did your shop host in 2020?

Please enter whole numbers only; decimals, symbols and words are not accepted.



67. How many total people did your shop employ in 2020 at the location(s) you're answering for?

68. How many employees at this location were shop floor employees in 2020?

69. Do you plan to increase, decrease or keep the same the number of employees in 2021? *Select ONE response.*

- Increase
- Decrease
- Keep the same

70. What was your shop's **annual labor turnover rate of shop floor employees** in 2020? This is the number of voluntary plus involuntary separations of shop floor employees as a percentage of the usual total number of shop floor employees. Enter your number between 0 and 100 without a % sign.

You may enter decimals but no other signs or symbols.

Example: If 6 shop floor employees left in 2020 and your usual shop floor staff totals 30, you would enter 20.



71. Thinking of all the <u>sprayers</u> working for your shop in 2020, about what percentage came from **other positions in your shop** and what percentage came from **outside your shop**?

Please round each percentage to a whole number and enter without a % sign. Your percentages must sum to 100.

% within shop	
% external	

72. Thinking of all the <u>training conducted for your sprayers</u> in 2020, what percentage was conducted by **inhouse resources** and what percentage was conducted by an **outside vendor**?

Please round each percentage to a whole number and enter without a % sign. Your percentages must sum to 100.

% in-house ______

73. Thinking of all the sprayers working for your shop in 2020, about how many **years experience** do they have, on average?

74. Did your shop have any accident incidents in 2020?

Yes

🔵 No

Not sure



75. What was your shop's **annual accident incident rate for shop floor employees** in 2020? This is the number of shop floor accident incidents as a percentage of the total usual number of shop floor staff. Please enter your number between 0 and 100 without a % sign.

You may enter decimals but no other signs or symbols.

Example: if you had 2 accident incidents in 2020 and your usual shop floor staff totals 30, you would enter 6.67.

76. Which of the following designated safety roles did your shop have in place in 2020?

Safety manager

Safety committee

None of these

77. What was your shop's insurance Experience Modification Rate (EMR) for 2020?

You may enter decimals but no other signs or symbols.



78. What was the **average hourly wage rate** in USD for <u>hourly paid, non-management shop floor personnel</u> in 2020, excluding overtime?

Please enter a number. You may enter decimals but no other signs or symbols.

79. Which human resource practices/programs did your business use in 2020? Select ALL that apply.

401(k) plan	Formal safety/health program
Annual review and raise program	Leader/supervisor development
Apprenticeship program	Paid medical benefits
Bonus plan	Profit- or revenue-sharing plan
Education reimbursements	Teaming/team-building practices
Employee ownership options (ESOP)	None of these
Formal employee training programs	

80. Were any of your shop's employees part of a union in 2020?

- ____Yes
- 🔵 No



Almost Finished!

This is the final page of the survey. Please double-check your responses for accuracy and completeness before you continue.

You may close and return to the survey on this device to make changes as many times as you like until you click Submit Responses. Once you click **Submit Responses** on this page, you will be taken to the *Products Finishing* website. Your survey will be locked and submitted and you will not be able to change any of your answers.