



## Products Finishing Top Shops 2021: Plating & Anodizing

Thank you for participating in the *Products Finishing* Top Shops Benchmarking Survey for plating and anodizing, 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 plating and anodizing, in particular. There is a separate survey for shops that perform liquid and powder coating. **Please proceed only if your shop does plating and/or anodizing.**

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

- 1. 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.
- 2. 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, 2020**, for a chance to be profiled in an upcoming issue of *Products Finishing*.
- 4. 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* later in the year, you must submit your completed survey by April 30, 2021.

Click here to download a PDF of the survey if you want to review questions before answering 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](mailto:jschafer@gardnerweb.com).

\* 1. Which types of finishing does your shop offer on your premises? *Select ALL that apply.*

- Plating
- Anodizing
- Other
- No finishing offered



## Company & Contact Information

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

Your Name:

Job Title/Position:

Company Name:

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.**



## Shop Profile

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
- Low 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



## Shop Profile

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, about how many years will your shop have 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. Switching gears a bit and now thinking about your shop's finishing lines, **how many lines** of each type were in production in 2020?

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

Plating

Anodizing



## Shop Profile

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

- |   |   |
|---|---|
| <input type="checkbox"/> Aerospace                          | <input type="checkbox"/> Hardware/tools                         |
| <input type="checkbox"/> Agriculture/construction equipment | <input type="checkbox"/> Machinery/industrial                   |
| <input type="checkbox"/> Appliances                         | <input type="checkbox"/> Medical                                |
| <input type="checkbox"/> Automotive                         | <input type="checkbox"/> Military/government                    |
| <input type="checkbox"/> Architectural construction         | <input type="checkbox"/> Oil & gas mining                       |
| <input type="checkbox"/> Electronics, computers             | <input type="checkbox"/> Power generation (turbines, batteries) |
| <input type="checkbox"/> Fasteners                          | <input type="checkbox"/> Pumps, valves & plumbing               |
| <input type="checkbox"/> Firearms & ammunition              | <input type="checkbox"/> Wire goods/pipes                       |
| <input type="checkbox"/> Furniture manufacturing            |   |
| <input type="checkbox"/> Other (please specify)             |   |



## Shop Profile

15. 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
- Architectural construction
- Electronics, computers
- Fasteners
- Firearms & ammunition
- 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

16. Which **certifications**, if any, does your finishing shop have currently? *Select ALL that apply.*

- |   |  |
|---|--|
| <input type="checkbox"/> ISO 9001:2015  | <input type="checkbox"/> AS9100D       |
| <input type="checkbox"/> ISO 13485:2016 | <input type="checkbox"/> Nadcap        |
| <input type="checkbox"/> ISO 16949:2016 | <input type="checkbox"/> None of these |

17. Which of the following applied to your shop in 2020? *Select ALL that apply.*

- |  |  |
|--|--|
| <input type="checkbox"/> ITAR registered               | <input type="checkbox"/> CMMC (Cybersecurity Maturity Model Certification) |
| <input type="checkbox"/> RoHS compliant                | <input type="checkbox"/> FFL (Federal Firearms License)                    |
| <input type="checkbox"/> FDA registered                | <input type="checkbox"/> None of these                                     |
| <input type="checkbox"/> Conflict Materials Disclosure |  |

18. Of which **trade associations** was your shop a member in 2020? *Select ALL that apply.*

- Aluminum Anodizers Council (AAC)
- National Association for Surface Finishers (NASF)
- Not a member of these trade associations

Other (please specify)





## Shop Profile

19. Which **approvals** did your finishing shop hold in 2020? *Select ALL that apply.*

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Aerojet          | <input type="checkbox"/> GM                          | <input type="checkbox"/> MOOG                |
| <input type="checkbox"/> Airbus           | <input type="checkbox"/> Goddard Space Flight (NASA) | <input type="checkbox"/> Motorola            |
| <input type="checkbox"/> BAE Systems      | <input type="checkbox"/> Honda                       | <input type="checkbox"/> Nissan              |
| <input type="checkbox"/> Bell             | <input type="checkbox"/> Honeywell                   | <input type="checkbox"/> Northrop Grumman    |
| <input type="checkbox"/> BMW              | <input type="checkbox"/> Hyundai                     | <input type="checkbox"/> Raytheon            |
| <input type="checkbox"/> Boeing           | <input type="checkbox"/> IBM                         | <input type="checkbox"/> Rolls Royce Corp.   |
| <input type="checkbox"/> Caterpillar      | <input type="checkbox"/> John Deere                  | <input type="checkbox"/> Sikorsky Aircraft   |
| <input type="checkbox"/> Cessna Aircraft  | <input type="checkbox"/> Kia                         | <input type="checkbox"/> Subaru              |
| <input type="checkbox"/> Chrysler         | <input type="checkbox"/> Lockheed Martin             | <input type="checkbox"/> Tacom               |
| <input type="checkbox"/> Eaton Aerospace  | <input type="checkbox"/> Lycoming/Textron            | <input type="checkbox"/> Tesla               |
| <input type="checkbox"/> Ford             | <input type="checkbox"/> Martin Marietta             | <input type="checkbox"/> Toyota              |
| <input type="checkbox"/> GE               | <input type="checkbox"/> MD Helicopters              | <input type="checkbox"/> United Technologies |
| <input type="checkbox"/> General Dynamics | <input type="checkbox"/> Mercury Marine              | <input type="checkbox"/> None of these       |

Other (please specify)



## Finishing Practices & Technology

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

20. Which of the following practices and improvement methodologies did your business utilize in 2020?

Select ALL that apply.

- |   |   |
|---|---|
| <input type="checkbox"/> 5S workplace organization          | <input type="checkbox"/> Overall Equipment Effectiveness (OEE)  |
| <input type="checkbox"/> Agile manufacturing                | <input type="checkbox"/> Poka yoke (error prevention)           |
| <input type="checkbox"/> Benchmarking                       | <input type="checkbox"/> Quality certs (i.e. ISO, NADCAP, etc.) |
| <input type="checkbox"/> Cellular manufacturing             | <input type="checkbox"/> Six Sigma                              |
| <input type="checkbox"/> Continuous improvement program     | <input type="checkbox"/> Theory of constraints                  |
| <input type="checkbox"/> Customer surveys                   | <input type="checkbox"/> Total productive maintenance           |
| <input type="checkbox"/> Just-in-time movement of materials | <input type="checkbox"/> Total quality management               |
| <input type="checkbox"/> Kaizen events/blitzes              | <input type="checkbox"/> Value-stream mapping                   |
| <input type="checkbox"/> Kanban and pull systems            | <input type="checkbox"/> None of these                          |



## Finishing Practices & Technology

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

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

22. What was your shop's **on-time delivery rate** in 2020, defined as the percentage of goods delivered on the timing committed? Enter your number without a % sign.

*Example: For 80%, you would enter 80 without a decimal or % sign. For 80.5%, you would enter 80.5 without the %.*

23. What was your shop's **finished product first-pass quality yield** in 2020, defined as the percentage of products passing inspection on the first attempt; i.e. no re-work was required? Enter your number without a % sign.

*Example: For 80%, you would enter 80 without a decimal or % sign. For 80.5%, you would enter 80.5 without the %.*

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



## Finishing Practices & Technology

25. 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.*

26. 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

27. Please select the rating that best describes your 2020 business practice in each of the areas listed below.

Select ONE rating for EACH row.

	<u>Do not have</u> written procedures	Have written procedures, but <u>need updating</u>	Have written procedures, and they are <u>current</u>
Plating/finishing procedures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bath quality/performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preventative maintenance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Waste treatment equipment operation/maintenance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hazardous waste management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hazardous material handling/spill response	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



## Finishing Practices & Technology

28. Please select the rating that best describes your shop's 2020 business practice in each of the areas listed below.

*Select ONE rating for EACH row.*

	<u>No records are kept</u>	Records are kept, <u>but not analyzed</u>	Records are kept <u>and analyzed</u>
Bath chemistry (analytical)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bath chemical additions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bath temperature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rectifier use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preventative maintenance logs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
City water chemistry (e.g. hardness)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electricity use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Treatment sludge generation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Waste treatment chemical reagent use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



## Finishing Practices & Technology

29. Which of the following **finishing processes** did your shop perform in 2020? *Select ALL that apply.*

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Anodizing Hardcoat   | <input type="checkbox"/> Chromic Acid Anodizing    | <input type="checkbox"/> Rhodium       |
| <input type="checkbox"/> Anodizing Sulfuric   | <input type="checkbox"/> Copper                    | <input type="checkbox"/> Silver        |
| <input type="checkbox"/> Black Chrome         | <input type="checkbox"/> Gold                      | <input type="checkbox"/> Tin           |
| <input type="checkbox"/> Blackening/Antiquing | <input type="checkbox"/> Nickel, Chrome            | <input type="checkbox"/> Tin-Lead      |
| <input type="checkbox"/> Black Nickel         | <input type="checkbox"/> Nickel, Decorative        | <input type="checkbox"/> Tin-Nickel    |
| <input type="checkbox"/> Black Oxide          | <input type="checkbox"/> Nickel, Electroless       | <input type="checkbox"/> Zinc          |
| <input type="checkbox"/> Brass                | <input type="checkbox"/> Nickel, Industrial        | <input type="checkbox"/> Zinc/Cobalt   |
| <input type="checkbox"/> Bronze               | <input type="checkbox"/> Passivation               | <input type="checkbox"/> Zinc/Iron     |
| <input type="checkbox"/> Bronze, White        | <input type="checkbox"/> Phosphating               | <input type="checkbox"/> Zinc/Nickel   |
| <input type="checkbox"/> Cadmium              | <input type="checkbox"/> Phosphoric Acid Anodizing | <input type="checkbox"/> Zinc/Tin      |
| <input type="checkbox"/> Chromate             | <input type="checkbox"/> Pickling                  | <input type="checkbox"/> None of these |
| <input type="checkbox"/> Chrome, Decorative   | <input type="checkbox"/> Plating on Plastic        |  |
| <input type="checkbox"/> Chrome, Hard         | <input type="checkbox"/> PVD                       |  |



## Finishing Practices & Technology

30. Which finishing processes account for **most** of your shop's total processes? *Select up to 3.*

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Anodizing Hardcoat   | <input type="checkbox"/> Chrome, Hard              | <input type="checkbox"/> Plating on Plastic |
| <input type="checkbox"/> Anodizing Sulfuric   | <input type="checkbox"/> Chromic Acid Anodizing    | <input type="checkbox"/> PVD                |
| <input type="checkbox"/> Black Chrome         | <input type="checkbox"/> Copper                    | <input type="checkbox"/> Rhodium            |
| <input type="checkbox"/> Blackening/Antiquing | <input type="checkbox"/> Gold                      | <input type="checkbox"/> Silver             |
| <input type="checkbox"/> Black Nickel         | <input type="checkbox"/> Nickel, Chrome            | <input type="checkbox"/> Tin                |
| <input type="checkbox"/> Black Oxide          | <input type="checkbox"/> Nickel, Decorative        | <input type="checkbox"/> Tin-Lead           |
| <input type="checkbox"/> Brass                | <input type="checkbox"/> Nickel, Electroless       | <input type="checkbox"/> Tin-Nickel         |
| <input type="checkbox"/> Bronze               | <input type="checkbox"/> Nickel, Industrial        | <input type="checkbox"/> Zinc               |
| <input type="checkbox"/> Bronze, White        | <input type="checkbox"/> Passivation               | <input type="checkbox"/> Zinc/Cobalt        |
| <input type="checkbox"/> Cadmium              | <input type="checkbox"/> Phosphating               | <input type="checkbox"/> Zinc/Iron          |
| <input type="checkbox"/> Chromate             | <input type="checkbox"/> Phosphoric Acid Anodizing | <input type="checkbox"/> Zinc/Nickel        |
| <input type="checkbox"/> Chrome, Decorative   | <input type="checkbox"/> Pickling                  | <input type="checkbox"/> Zinc/Tin           |





## Finishing Practices & Technology

31. Which **additional types of finishing processes** did your shop perform in 2020? *Select ALL that apply.*

- |  |   |
|--|---|
| <input type="checkbox"/> Abrasive blasting | <input type="checkbox"/> Mechanical plating     |
| <input type="checkbox"/> Brush plating     | <input type="checkbox"/> Polishing or buffing   |
| <input type="checkbox"/> Chemical milling  | <input type="checkbox"/> Powder coating         |
| <input type="checkbox"/> Electrocoating    | <input type="checkbox"/> Printed circuit boards |
| <input type="checkbox"/> Electroforming    | <input type="checkbox"/> Solid film lubricants  |
| <input type="checkbox"/> Electropolishing  | <input type="checkbox"/> Spray painting         |
| <input type="checkbox"/> Etching           | <input type="checkbox"/> PVD                    |
| <input type="checkbox"/> Lacquering        | <input type="checkbox"/> None of these          |
| <input type="checkbox"/> Mass finishing    |   |



## Finishing Practices & Technology

32. Which types of **inspection** processes did your shop perform in 2020? *Select ALL that apply.*

- |   |   |
|---|---|
| <input type="checkbox"/> Abrasion testing                 | <input type="checkbox"/> Porosity testing             |
| <input type="checkbox"/> Adhesion testing                 | <input type="checkbox"/> Quench testing               |
| <input type="checkbox"/> Analytical chemistry             | <input type="checkbox"/> Salt spray                   |
| <input type="checkbox"/> Atomic absorption analysis       | <input type="checkbox"/> Scanning electron microscope |
| <input type="checkbox"/> Coating weight thickness testing | <input type="checkbox"/> Solderability testing        |
| <input type="checkbox"/> Continuity testing               | <input type="checkbox"/> Solution analysis            |
| <input type="checkbox"/> Copper sulfate testing           | <input type="checkbox"/> Stress relief                |
| <input type="checkbox"/> Eddy current testing             | <input type="checkbox"/> Water immersion              |
| <input type="checkbox"/> Hardness testing                 | <input type="checkbox"/> X-ray thickness testing      |
| <input type="checkbox"/> Humidity testing                 | <input type="checkbox"/> XRF reading                  |
| <input type="checkbox"/> Hydrogen embrittlement           | <input type="checkbox"/> None of these                |
| <input type="checkbox"/> Plating thickness                |   |

33. Which types of **automation** did your shop use in 2020? *Select ALL that apply.*

- Automated process lines
- Process tank sensors
- Track product quality and defects
- Process monitoring
- None of these



34. Which types of **pretreatment** did your shop use in 2020? *Select ALL that apply.*

- |  |                                       |
|--|---------------------------------------|
| <input type="checkbox"/> Aqueous - zinc phosphate  | <input type="checkbox"/> Solvent wipe |
| <input type="checkbox"/> Aqueous - iron phosphate  | <input type="checkbox"/> Other        |
| <input type="checkbox"/> Aqueous - nano technology | <input type="checkbox"/> None         |
| <input type="checkbox"/> Blasting                  |                                       |

35. Which types of **racking** did your shop use in 2020? *Select ALL that apply.*

- |  |                                |
|--|--------------------------------|
| <input type="checkbox"/> Hook                    | <input type="checkbox"/> Other |
| <input type="checkbox"/> Custom - built in-house | <input type="checkbox"/> None  |
| <input type="checkbox"/> Custom - outsourced     |                                |

36. Which **stripping** practices did your shop use in 2020? *Select ALL that apply.*

- |   |                                      |
|---|--------------------------------------|
| <input type="checkbox"/> Burn off – oven          | <input type="checkbox"/> Water blast |
| <input type="checkbox"/> Chemical stripping       | <input type="checkbox"/> Other       |
| <input type="checkbox"/> Fluidized sand stripping | <input type="checkbox"/> None        |
| <input type="checkbox"/> Grinding                 |                                      |

37. Which **curing** methods did your shop use in 2020? *Select ALL that apply.*

- |  |   |
|--|---|
| <input type="checkbox"/> Convection    | <input type="checkbox"/> Natural gas heat |
| <input type="checkbox"/> Electric heat | <input type="checkbox"/> Other            |
| <input type="checkbox"/> Infrared      | <input type="checkbox"/> None             |



## Finishing Practices & Technology

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

	Weekly or more	Monthly	Quarterly	Every 6 months	Once
Gauges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inspection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ovens	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

39. 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 this software
Order management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preventative maintenance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality assurance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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

- Yes
- No



## Business Strategy

**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.*



## Business Strategy

41. Please provide your shop's 2020 **gross sales per finishing line** in US dollars.

*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.*

42. Please provide your shop's 2020 **gross sales per employee** in US dollars.

*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.*

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

- Yes
- No
- Not sure



## Business Strategy

44. 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 =  $[(2020 \text{ cap equip exp} / 2020 \text{ gross sales}) * 100]$

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

45. 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 =  $[(2020 \text{ gross sales} - 2019 \text{ gross sales}) / 2019 \text{ gross sales}] * 100$

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

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

Formula =  $[(2020 \text{ net income} / 2020 \text{ gross sales}) * 100]$

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

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

Formula =  $[(2020 \text{ net income} / 2020 \text{ total assets}) * 100]$

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



## Business Strategy

48. 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.*

49. 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.*

% Plating

% Anodizing

50. What **percentage** of your shop's 2020 total revenue came from each type of finishing?

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

% Functional

% Decorative

51. Does your shop own or lease its manufacturing facility?

- Own  
 Lease  
 Both





## Business Strategy

52. Which of the following **supply chain practices** did your shop use in 2020? *Select ALL that apply.*

- |   |   |
|---|---|
| <input type="checkbox"/> Certification of major suppliers       | <input type="checkbox"/> Just-in-time deliveries to customers               |
| <input type="checkbox"/> Collaborative design with customers    | <input type="checkbox"/> Utilizing customer forecasts                       |
| <input type="checkbox"/> Collaborative design with suppliers    | <input type="checkbox"/> Vendor-managed or -owned inventories               |
| <input type="checkbox"/> Customer satisfaction surveys          | <input type="checkbox"/> Vendor-managed or -owned inventories for customers |
| <input type="checkbox"/> Just-in-time deliveries from suppliers | <input type="checkbox"/> None of these                                      |

53. Which of the following **marketing tools** did your business use in 2020? *Select ALL that apply.*

- |   |   |
|---|---|
| <input type="checkbox"/> Blogs                    | <input type="checkbox"/> Print advertising (i.e. magazines)         |
| <input type="checkbox"/> Brochures/catalogs       | <input type="checkbox"/> Sales personnel                            |
| <input type="checkbox"/> Customer tours of shop   | <input type="checkbox"/> Social media (Facebook, Twitter, LinkedIn) |
| <input type="checkbox"/> Email promotions         | <input type="checkbox"/> Trade shows/events                         |
| <input type="checkbox"/> Online - advertising     | <input type="checkbox"/> YouTube                                    |
| <input type="checkbox"/> Online - company website | <input type="checkbox"/> None of these                              |

54. Below are business practices that your shop may or may not apply. Please select all that you consider to have been in place at your shop in 2020.

- |  |  |
|--|--|
| <input type="checkbox"/> Regularly scheduled, formal review of the state of the business | <input type="checkbox"/> Regularly scheduled management/department head meetings |
| <input type="checkbox"/> Periodic, informal review of the state of the business          | <input type="checkbox"/> Occasional management/department head meetings          |
| <input type="checkbox"/> Business metric goal setting                                    | <input type="checkbox"/> Steering board/committee including outside membership   |
| <input type="checkbox"/> Business strategy development                                   | <input type="checkbox"/> None of these   |



## Business Strategy

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

56. 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.*

57. 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.*

58. How much did your shop spend, in US dollars, 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.*

Plating

Anodizing



## Business Strategy

59. In which categories do you expect your shop to **make purchases** in 2021? *Select ALL that apply.*

- |   |   |
|---|---|
| <input type="checkbox"/> Automated or Manual Plating Line | <input type="checkbox"/> Auxiliary equipment (pumps, ovens, power supplies, etc.) |
| <input type="checkbox"/> Poly Tanks/Liners                | <input type="checkbox"/> Plating chemistries                                      |
| <input type="checkbox"/> Steel Tanks/Liners               | <input type="checkbox"/> Pretreatment processes                                   |
| <input type="checkbox"/> Racking                          |   |
| <input type="checkbox"/> Barrels/Baskets                  |   |
| <input type="checkbox"/> Other (please specify)           |   |

- No purchases expected in 2021



## Business Strategy

60. What coating or services would you like to add to your shop in 2021? *Select ALL that apply.*

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Anodizing Hardcoat   | <input type="checkbox"/> Chrome, Hard              | <input type="checkbox"/> Plating on Plastic |
| <input type="checkbox"/> Anodizing Sulfuric   | <input type="checkbox"/> Chromic Acid Anodizing    | <input type="checkbox"/> PVD                |
| <input type="checkbox"/> Black Chrome         | <input type="checkbox"/> Copper                    | <input type="checkbox"/> Rhodium            |
| <input type="checkbox"/> Blackening/Antiquing | <input type="checkbox"/> Gold                      | <input type="checkbox"/> Silver             |
| <input type="checkbox"/> Black Nickel         | <input type="checkbox"/> Nickel, Chrome            | <input type="checkbox"/> Tin                |
| <input type="checkbox"/> Black Oxide          | <input type="checkbox"/> Nickel, Decorative        | <input type="checkbox"/> Tin-Lead           |
| <input type="checkbox"/> Brass                | <input type="checkbox"/> Nickel, Electroless       | <input type="checkbox"/> Tin-Nickel         |
| <input type="checkbox"/> Bronze               | <input type="checkbox"/> Nickel, Industrial        | <input type="checkbox"/> Zinc               |
| <input type="checkbox"/> Bronze, White        | <input type="checkbox"/> Passivation               | <input type="checkbox"/> Zinc/Cobalt        |
| <input type="checkbox"/> Cadmium              | <input type="checkbox"/> Phosphating               | <input type="checkbox"/> Zinc/Iron          |
| <input type="checkbox"/> Chromate             | <input type="checkbox"/> Phosphoric Acid Anodizing | <input type="checkbox"/> Zinc/Nickel        |
| <input type="checkbox"/> Chrome, Decorative   | <input type="checkbox"/> Pickling                  | <input type="checkbox"/> Zinc/Tin           |



## Training & Human Resources

61. How many **total people** did your shop employ in 2020 at the location(s) your answers pertain to?

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

63. How many employees at this location were **Certified Electroplater Finishers (CEF)** in 2020?



## Training & Human Resources

64. Thinking of the total number of employees at this location, do you plan to increase, decrease, or keep the same number of employees in 2021? *Select ONE only.*

- Increase
- Decrease
- Keep the same

65. 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.*

66. Did your shop have any **accident incidents** in 2020? *Select ONE only.*

- Yes
- No
- Not Sure



## Training & Human Resources

67. 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 typical number of shop floor staff. 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 shop floor staff typically totals 30, you would enter 6.67.*

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

- Safety manager
- Safety committee
- Neither of these

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

*You may enter decimals but no other signs or symbols.*



## Training & Human Resources

70. What was the **average hourly wage rate** in US dollars for hourly paid, non-management shop floor personnel in 2020 excluding overtime?

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

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

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

72. 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.